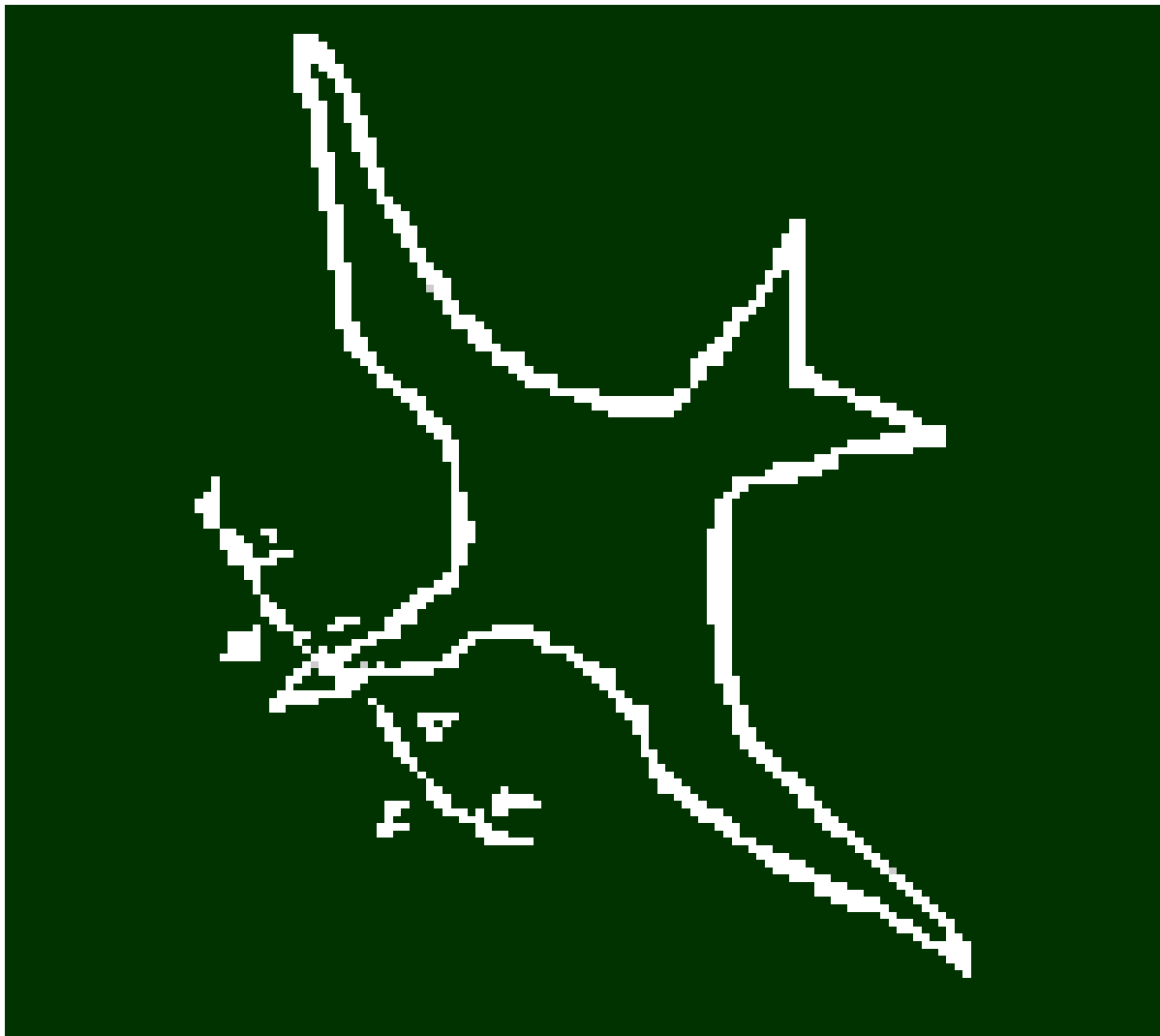


Juvenile Sexual Aggression: A Critical Review

Mark R. Weinrott



Center for the Study and Prevention of Violence

Juvenile Sexual Aggression: A Critical Review

Mark R. Weinrott
Portland, OR

June 1996

CSPV-005

Copyright © 1996

by the Institute of Behavioral Science, Regents of the University of Colorado

Center for the Study and Prevention of Violence

Institute of Behavioral Science

University of Colorado, Boulder

1877 Broadway, Suite 601

Boulder, CO 80802

Phone: (303) 492-1032 Fax: (303) 443-3297

E-mail: cspv@colorado.edu

www.colorado.edu/cspv

INTRODUCTION

In the past 15 years, sexual violence committed by juveniles has graduated from footnote to headline. Once a criminal anomaly, such behavior is now considered a bona fide social problem. As such, there has been a proliferation of media coverage, legislation, and professional training. The legal options and clinical resources for processing juvenile sex offenders (JSOs) have also been developing at an astounding rate. For example, in 1980 there was only one program for JSOs. Now there are approximately one thousand according to the Safer Society (Freeman-Longo, Bird, Stevenson, & Fisk, 1995). Details of this rapid mobilization are described elsewhere (Barbaree, Marshall, & Hudson, 1993; Knopp & Lane, 1991). The purpose of this paper is to summarize what we know about JSOs, what we don't know, how we're going to find out, and what we're going to do in the meantime.

This is a burgeoning field suffering from a lack of empirical research. The point is underscored in the revised report by the National Task Force on Juvenile Sexual Offending (National Council of Juvenile and Family Court Judges, 1993). Listed are 387 assumptions devoted largely to the legal processing and clinical treatment of JSOs. The key word here is "assumption," meaning that policy is based on prevailing practices and clinical intuition, not empirical findings. This is because there is nowhere near the number of studies as the number of assumptions made by the Task Force. In a recent literature search by Becker, Harris and Sales (1993), only 73 articles on JSOs appeared during the preceding ten years. Even more disconcerting is the minimal impact that these studies have had. In fact, there are some assumptions made by the Task Force that seem to fly in the face of what research has unearthed (Borduin, Henggeler, Blaske, & Stein, 1990; Emerick & Dutton, 1993; Rouleau, Abel, Mittelman, Becker, & Cunningham-Rathner, 1986; Weinrott & Riggan, 1991). Because certain practices (e.g., the need for specialized group therapy) are so well ingrained, their utility is beyond reproach or so it would seem. The result is an unusual degree of consensus despite a terribly weak empirical foundation.

Such a state of affairs is completely understandable given political pressure to protect society. Not long ago juvenile rapists were processed in the same manner as other violent juveniles. Child molesters were typically diverted or placed on probation. If treatment was ordered, it was generic, insight-oriented, and/or milieu therapy. Until 1980 there was little interest in JSOs, no sense that the problem was so widespread, no specialized treatment, and virtually no one conducting research. It was as if sex offenses committed by minors were less serious than the same acts perpetrated by adults, particularly those involving child victims or dates. Only when it became apparent that many adult sex offenders began their careers as teens (or earlier) did adolescents begin to receive attention (Abel, Mittelman, & Becker, 1985; Groth, Longo, & McFadin, 1982; Longo & McFadin, 1981). This attention came in the form of new statutes and programs, descriptive studies, self-proclaimed authorities, and a myriad of workshops for those charged with dealing with JSOs. Overwhelmed by the need to react quickly, experimental research took a back seat, a position it maintains to this day.

Lack of research was, and still is, attributable to several factors. First, sexual aggression and paraphilias have not been legitimized as "official" problems worthy of scrutiny by graduate students. Sociology students are taught very little about sexual violence. Even within the context of

delinquency there is precious little space or time devoted to the topic (c.f., Empey, 1982; Wilson & Herrnstein, 1985). Clinical psychology and psychiatry remain loyal to the traditional disorders of depression, anxiety, schizophrenia, phobias and so forth. Sexual aggression is typically covered in a single lecture, if at all.

Second, research pioneers in the adult domain—Gene Abel, Howard Barbaree, Kurt Freund, Raymond Knight, Richard Laws, Ron Longevin, Neil Malamuth, Janice Marques, William Marshall, William Prentky, and Vern Quinsey—have not gravitated toward juveniles, at least not on a regular basis. Only Judith Becker and William Murphy have crossed over consistently. With so few research pioneers, and not many disciples, there really exist only a handful of quality studies devoted to adolescents. Thankfully, this situation is improving at least with respect to offender characteristics and etiology.

Third, the National Adolescent Perpetrator Network (NAPN), a key professional association, has done little to promote empirical research. Unlike the Association for Treatment of Sexual Abusers (ATSA) which is dominated by clinicians who serve adults, NAPN has not made a sustained effort to embrace scientists or publicize their findings. The upshot is a professional organization devoted to clinical lore and judicial policy. ATSA appears to have achieved a happy marriage between researchers and clinicians; NAPN tends to view researchers as a fringe element. This attitude has discouraged some researchers in the adult from gravitating to research on juveniles. It may also be deterring bright young therapists working with JSOs from pursuing advanced training in methodology.

A fourth factor impeding sex offender research is a combination of political malaise and outright opposition. Sex offenders do not have a strong constituency to say the least. While women's groups and mainstream child advocates are opposed neither to offender research nor treatment, they have a greater investment in tougher laws, longer sentences, offender registration, and community notification. Since the perpetrators themselves are disinclined to call attention to their plight, there is really no political base. This translates into relatively little research funding. Furthermore, the Church of Scientology, cleverly concealed as the Council for Citizens Against Government Waste, has not only interfered with the conduct of offender research, but has lobbied Congress to eliminate federal sponsorship. While such a call typically falls on deaf ears, there has been enough disinformation to delay some worthwhile projects and cut short others. In addition, some investigators simply eschew certain experimental procedures to avoid being harassed (Breiling, 1995).

A fifth condition impeding *clinical* research is the treatment industry's immunity to market forces. There is not a great deal of competition among providers for the JSO clientele. In many communities there exists a monopoly. But even in locales where alternatives exist, most parents and government funding agencies will opt for a program that is relatively inexpensive. The typical program for JSOs will lose neither clients nor prestige for maintaining the status quo. This allows a program administrator to offer whatever treatment s/he chooses. To the extent that the program and its consumers are satisfied there is really no pressure to innovate as there is in medicine, for example,

where patients often seek the latest technology. Without demand for new methods, there is not much economic incentive to develop them.

Finally, there is relatively little research on juvenile sexual *violence* simply because most JSOs are not violent per se (Chappell, 1989). Manipulative - yes, coercive - without question, exploitive - definitely. Most could easily be labeled “aggressive.” But only a small fraction of JSOs commit sex crimes that result in physical injury (Finkelhor & Dziuba-Leatherman, 1994). Generally speaking, JSOs employ no more force or coercion than is necessary to complete a desired sex act. That hands-on offenses most often involve child victims suggests a distaste for violence among JSOs (Farrell & O’Brien, 1988). Accordingly, most study samples include a mix of sex offenders only a few of whom could be construed as violent. The implications for this paper are twofold. First, research on sexual violence is highlighted because there is so little. Second, because there is so little the topic must be broadened to include nonviolent forms of sexual aggression.

This paper is divided into five sections: Incidence, Prevalence and Apprehension Rates; Characteristics and Classification of JSOs; Etiology and Developmental Course; Recidivism; and a brief Conclusion. The first four sections contain a critical review of empirical research on JSOs. Studies of adult offenders reflecting on their adolescence have generally been excluded in the interest of time and space. For example, etiological research on pedophilia is not addressed in much detail since it is based almost exclusively on studies of adults. In each section of the paper, the critical review is followed by recommendations for improving methodology and addressing critical content areas in subsequent research.

Incidence, Prevalence and Apprehension Rates

In this section, the term “incidence” refers to the *actual number* of victimizations, arrests, or sex abuse reports that have occurred in the United States during the course of a year. “Prevalence” is a measure of the number of perpetrators or victims. Estimates of incidence, prevalence or both can theoretically be derived from four sources: victimization surveys, child welfare archives, perpetrator surveys, and law enforcement records. Because all four are imperfect measures of sex crime committed by juveniles, they are useful mainly in establishing relative amounts (e.g., compared to adults) and trends over time. Following is a summary of what each source reveals about sex crimes committed by persons under the age of 21.

Victimization Surveys

The National Crime Victimization Survey (NCVS) is an annual national assessment of criminal victimization that has been conducted by the Department of Justice since 1973. One-hundred thousand individuals in 50,000 households are interviewed at six month intervals. All respondents are at least twelve years old. Since most victims of JSOs are younger than this, any estimates based on NCVS data are biased downward. Nonetheless, these surveys yield much higher estimates of incidence and prevalence than do law enforcement records because (a) they tap both reported and unreported offenses, and (b) only a portion of reported sex offenses results in an arrest. For example, in 1993 there were an estimated 485,000 victimizations for rape (completed and attempted) and

sexual assault. Only 29% of these incidents were reported to the police and only about half of these were cleared by arrest.

Because NCVS respondents are asked to estimate the age of their perpetrator(s), it is possible to compute the proportion of rape victimizations that are attributable to juveniles. During the years 1973-1992, the percentage of rapists who appeared to be 17 years old or younger was only about 7%. Those who appeared to be age 20 and below accounted for 19% of rapes.

From 1978-1992 the average rape prevalence rate was about 125 rapists per 100,000 males ages 12-20. There was no clear trend indicating an increase over time. But during this period, respondents were never asked directly about rape or sexual assault. Only if a respondent described an act of sexual aggression were more specific questions asked. This has since changed. In fact, additional probes in the sexual domain have radically altered estimates of incidence, prevalence, and reporting to police. During 1992, when the sample was split so that both the old and new survey instruments were utilized simultaneously, two and one-half times as many rapes and attempted rapes were disclosed using the modified version. Unfortunately, breakdowns by perceived age of perpetrator are not yet available using the redesigned survey.

Still, it is possible to compute rough estimates of incidence for JSOs. Based on 1993 NCVS data, there were a total of 485,000 rapes, attempted rapes, and other forms of sexual assault (U.S. Department of Justice, 1995). If one assumes that between 7% (from prior NCVSs) and 18% (from the 1993 UCR) of all sex crimes were committed by youths under age 18, then their total for 1993 lies between 34,000 and 88,000. For males under age 21 the range is 92,000-130,000. These are very rough estimates which do not take into account sampling error in the NCVS. This is fairly substantial given that annual estimates of, say, rape have been based on as few as 62 actual reported victimizations and, prior to 1993, never more than 139. Also, because the NCVS does not encompass crimes against prepubescent children, even the maximums do not approximate the true rate of sexual aggression perpetrated by juveniles.

There is another feature of the NCVS that serves to artificially depress victimization rates. When data on assaults are gathered in the context of a "crime survey," fewer assaults are reported than when the interview also includes items about attitudes, lifestyle, and prosocial behavior (Mihalic & Elliott, 1995). These investigators surmise that many acts of domestic violence or aggression are not perceived by respondents as criminal. The same is probably true for sex offenses, particularly those that are confined to the family and do not include penetration. Based on results obtained by Mihalic and Elliott (1995), victimization rates for sexual assault are apt to be substantially higher, perhaps three to four times as high as those generated from the redesigned NCVS.

Nothing has been mentioned about the many victimization surveys conducted by independent investigators (c.f., Russell, 1982; Russell & Howell, 1983). However methodologically flawed or sophisticated they might be, only one included a breakdown by age of perpetrator. Hilliker, Kaufman and Daleiden (1995) surveyed nearly 500 JSOs regarding both their victimization and criminal histories. Of those who claim to have been victimized, over one-half of their perpetrators were 18 years old or younger. The study sample was hardly representative of the general adolescent

population, but the findings do suggest that juveniles are responsible for a very significant proportion of child molestations.

Child Welfare Records

The National Child Abuse Neglect (Data) System (NCANS), a division of the National Center on Child Abuse and Neglect, gathers maltreatment data from the child welfare division of each state. In 1994, for example, an estimated 345,400 reports of sexual abuse were received. Victims ranged in age from 0-18 years with approximately two-thirds age 12 and younger. Information on age of perpetrator was gathered in only seven states. Of 19,000 unduplicated perpetrators in these states, 13% were age 19 or younger. Applying this percentage to the nationwide total yields an estimate of 44,850 incidents attributable to JSOs under age 20. Inclusion of 20 year olds would likely raise the figure to about 50,000.

NCANS is the first source of prevalence data pertaining to child molesters. Unfortunately, it is not a particularly good source for several reasons. First, while technically feasible, there has been no accommodation for the age differential between victim and offender. The incidents compiled by NCANS include both abuse of young children, rape of peers, incest among siblings whose ages are similar, and so forth. Second, there are serious problems with estimates based on child abuse reports. Most obvious is that not all incidents are reported, especially those involving sibling incest. Third, at least one-third of reported incidents are unsubstantiated. This is especially true of child molestation by JSOs, whose victims tend to be younger than those of adult perpetrators. Also, there is often no physical evidence and many victims of JSOs are too young or confused to provide a clear description of events. Fortunately, NCANS compiles data on both substantiated and unsubstantiated incidents. A fourth methodological concern involves variation among states in (a) mandatory reporting laws, (b) criteria for designating an event as maltreatment, (c) standards of proof required to substantiate allegations, and (d) extent of sex abuse awareness (i.e., prevention) education.

Self-Reported Sex Crime

The National Youth Survey consists of seven birth cohorts of 1,725 youths who were ages 12-18 when initially assessed in 1977. Asked to self-report delinquent acts during the preceding 12 months, much higher rates of both sex and non-sex crime were disclosed in confidential interviews than were reflected in official records. Prevalence rates given below are based on responses to the question, "Have you had or tried to have sexual relations with someone against their will?" During the early years of the survey (when most of the participants were still minors) the percentage of respondents admitting to sexual aggression ranged from 2.2% to 3.8%. Extrapolating to the entire population of teenagers yields an annual national estimate of 195,000 to 450,000 youth who commit a sex act involving force (Ageton, 1983). This translates into a mean prevalence rate of about 3,000 perpetrators per 100,000 male adolescents or about 3%. Even the revised NCVS will likely yield a prevalence rate below 1%, so it is obvious that far more sexual assault is perpetrated by juveniles than any source of government statistics indicates—at least with respect to crimes against peers and adults.

A recent reanalysis of the National Youth Survey data yielded an annual prevalence rate of sexual assault of about 3.2% for males ages 11-17. Consistent with the UCR arrest data (see below), age-specific self-reports reveal a monotonic increase in prevalence to age 17 and then a sharp decline thereafter. Interestingly, when the total number of self-reported sexual assaults was analyzed by perpetrator age (once the respondents were 24-30 years old), two-thirds of all rapes had been committed by youths 11-17 years old as opposed to only a third by young adults. The modal age was 17. Neither arrest records nor victimization surveys attribute anywhere near this proportion of forcible rapes to juveniles.

It is important to note that estimates generated from the NYS are based on a small number of reported sexual assaults, only about 100 in the first two annual waves when the entire sample was below the age of majority. However, even the relatively high prevalence rates generated from this survey are apt to be gross underestimates because many JSOs deny sexual intent, use of force, and victim resistance. Neither do the majority of sex offenses committed against small children involve penetration or attempted penetration. Even if a respondent was completely candid with regard to sexual motivation and use of force, the NYS probably did not tap offenses limited to fondling, mutual masturbation, or even oral-genital contact.

In another large self-report study of sexual perpetration Koss and Dinero (1988) surveyed 3,000 randomly-selected students from 32 different colleges. Many of the respondents were in their early twenties at the time of the survey. Asked whether they had engaged in any form of sexual aggression since age 14, 24.5% responded affirmatively. 4.6% disclosed an act of rape and another 3.2% an attempted rape. The remainder admitted to coercive acts not involving intercourse. Non-random surveys of college males have yielded fairly similar rates of reported and attempted rape, but most of these do not differentiate offenses committed prior to age 18 from those occurring later. One sample of college freshman, yielded an endorsement percentage of 25.6% when students were asked about sexual aggression since age 14 (Humphrey & White, 1992). Rape and attempted rape accounted for about 1/3 of the exploitive acts. Farber, Showers, Johnson, Joseph and Oshins (1984), estimated that 15% to 25% of female victims were molested by a juvenile. Showers, Farber, Joseph, Oshins and Johnson (1984), and Rogers and Tremaine (1984), found that teenagers were responsible for slightly over half of cases in which male children were sexually abused. In studies of known adult offenders, anywhere from 20% (Farrell & O'Brien, 1988) to 56% (Groth & Lored, 1981) acknowledge committing a sex crime by the age of 18. The principal problem with studies of this type is the non-representativeness of the samples.

Law Enforcement Records

The FBI Uniform Crime Reports are devoted almost exclusively to arrests. Because measures extracted from arrest records are a dynamic blend of deviant behavior, social policy, and law enforcement practices, their use in JSO research has been, and should be, very limited. Only as criterion measures in intervention studies have they contributed anything worthwhile and even that is arguable. Sex offenses, as classified by the FBI, are divided into only three categories: (a) forcible rape (including attempts), (b) "other (except prostitution)," and (c) prostitution. Prostitution is irrelevant for present purposes and will not be discussed. The "forcible rape" category encompasses

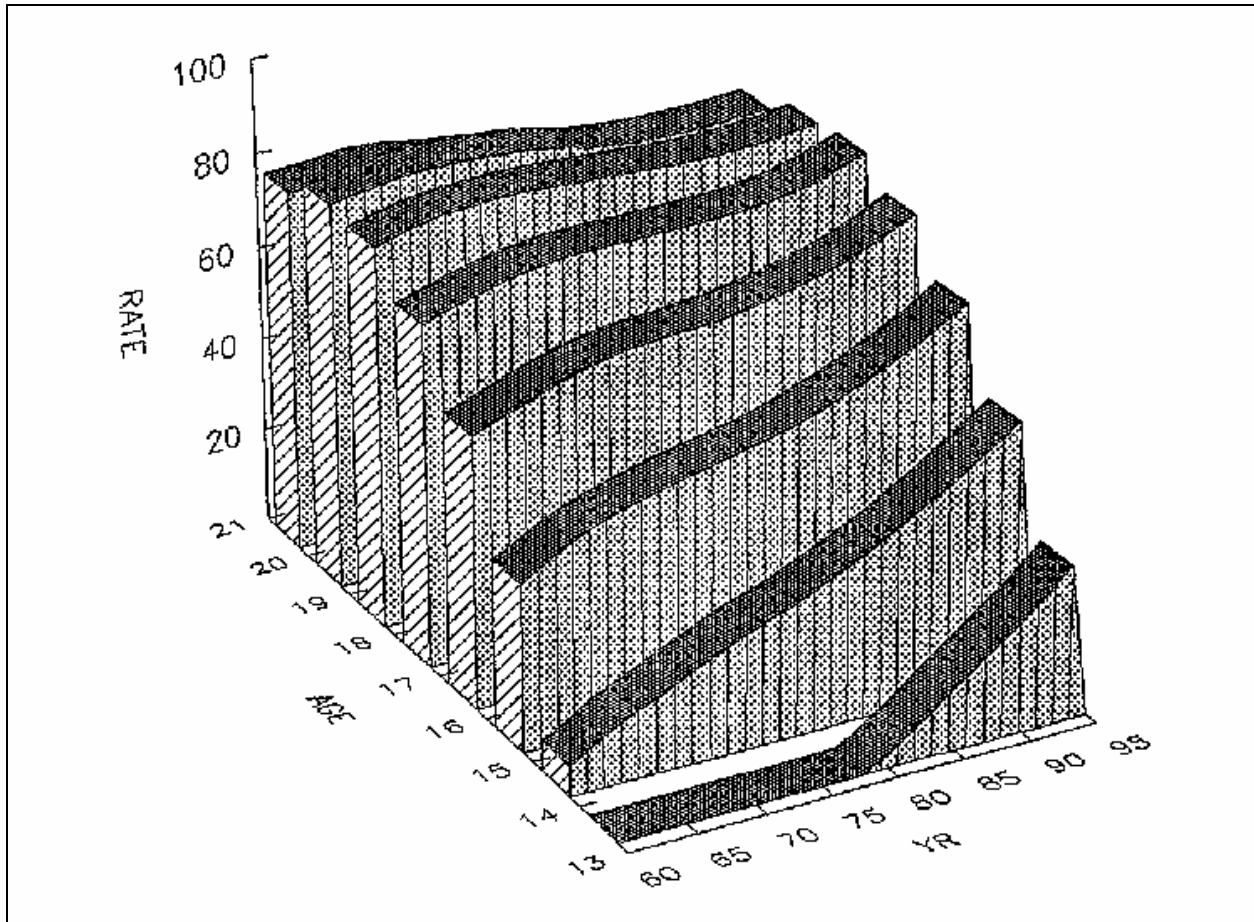
only crimes against females, an unknown but small proportion of whom are girls under twelve years of age. The “other” category includes sodomy, child molestation, statutory rape, communicated with a minor for immoral purposes, pornography-related offenses, and various nuisance sex crimes. From the years 1984-93, 15.4% of all arrests for forcible rape were accounted for by minors (i.e., under age 18). The corresponding figure for other sex offenses was 17%. Males accounted for 98% of rape arrests and 91% of arrests for other sex offenses. During the same period the mean annual arrest rate for rape was 58 per 100,000 males ages 13-21. This figure has been relatively stable ranging from a high of 62 to a low of 52. For other sex crimes, the rate averaged 120 arrests per 100,000.

Arrest rates for rape show an interesting trend. Figure 1 depicts the rates per 100,000 males in each of eight age categories. It appears that over the course of the past 27 years, arrests for rape have increased dramatically for youths age 16 and under, whereas the corresponding rate for older teenagers has remained stable. Increased rates of sexual violence among younger adolescents is one possible explanation for this trend. But because the same pattern did not emerge from victimization data, the higher arrest rates for young offenders may have resulted from changes in law enforcement practices and/or increased reporting of crimes. It is noteworthy that over the ten-year period from 1983 to 1992, arrest rates for the Violent Crime Index offenses increased about 60% for juveniles. In contrast, forcible rape rates for juveniles grew by a relatively small 20% (Federal Bureau of Investigation, 1994).

Since no one really knows how much rape is actually perpetrated by juveniles (or adults for that matter), it is impossible to say with any certainty what the odds are of being arrested. The ratio of arrests to reported victimizations for 1993 is 16 rape arrests per 100 reported rape victimizations. For sexual assault it is less than 10 per 100 reported victimizations. Even more discouraging than this is the estimate derived from the National Youth Survey, where only one per 100 self-reported rapes resulted in an arrest. Corresponding estimates for child molestation cannot be computed since none of the aforementioned sources yields a dependable measure of this behavior or an official response to it.

Regardless of the source, it is apparent that a great deal of sex crime is perpetrated by juveniles. Knowing how much, at least in a relative sense, is important in establishing trends and in evaluating the effects of widespread interventions, including sex abuse prevention programs, changes in law enforcement and judicial policy, and new legislation.

**Figure 1. Arrests for Forcible Rape
By Age: 1967-1992**



Methodological Concerns

Despite estimates obtained from crime statistics, victim surveys, and probability samples using self-reported measures, we still have very little sense of how many JSOs there are, how frequently they offend, what the likelihood is of their being apprehended (especially for child molestation), and whether they progress to more serious forms of sexual aggression. Almost nothing is known about the incidence of sex offenses committed by youths under age 13, although it is clear that arrests in this age group are increasing. Given the available data, it should come as no surprise that evaluating trends over time has been difficult. No one has determined whether there are more sex offenses committed by youths (and at a decreasing age) than there were, say, ten years ago. Is the apparent increase in sex crime among young teenagers due to heightened sexual aggression, better reporting, changes in offense definitions, or the advent of clinical services for youths who qualify only if adjudicated?

One of the most serious drawbacks of crime statistics and victimization surveys is the emphasis on forcible rape. Since it has been confirmed that most sex crimes perpetrated by JSOs involve child molestation (Ryan & Lane, 1991), then far greater emphasis needs to be placed on this category of offense. Also, it is impossible to ascertain from UCR data the contribution of “nuisance” offenses (e.g., voyeurism, exposing) and soliciting to the “other” total. On the basis of self-report data, nuisance offenses are far more common than sexual assault (Abel, Becker, Mittelman, Cunningham-Rathner, Rouleau, & Murphy, 1987), although they are far less likely to result in an arrest (Weinrott & Saylor, 1991).

Whatever the data source, there is probably an underrepresentation of the total amount of crime. This is more of a problem with sex crime than with other classes of illegal activity. Arrest data are affected by a myriad of community and cultural factors in addition to variation in law enforcement practices, resources, and policies. Crime victims are more reluctant to report sexual abuse than many other forms of exploitation (Brownmiller, 1975; Koss, 1990; Prentky, Knight, & Quinsey, 1990). Similarly, members of probability samples are less likely to report sexual offending, especially child molestation, than other kinds of crime (Dunford & Elliott, 1984). In other words, the ratio of arrests to self-reported crime estimates is lower for sex offenses than it is for other crimes. Finally, sex offenders are notoriously reluctant to disclose undetected offenses unless elaborate precautions are taken to assure confidentiality (Abel et al., 1987). Even then, there may be underestimation of both the frequency and seriousness of sex crimes. For example, JSOs who were subjected to a confirmation polygraph examination admitted to an average of one more victim and three times as many illicit acts than they had in a prior confidential interview (Emerick & Dutton, 1993). Similar results were obtained by Chambers (1993) in a study of 36 JSOs whose known prior victims totaled 111. A pre-polygraph interview elicited disclosure of another 77 victims, and a post-polygraph interview yielded an additional 22. Over 50% of the JSOs had at least one undisclosed victim. The additional 99 victims were subjected to an estimated 502 illicit sexual contacts.

Without question, underreporting is the biggest concern regardless of data source. As noted both victims and offenders are more reluctant to divulge sexual aggression than other forms of crime. Explanations have been proffered elsewhere and need only be listed here, they include shame, embarrassment, psychological denial, fear of reprisals, repressed memory, cognitive distortions, discomfort of interviewers, and wording of items. Variability in definitions of sex crimes, sampling and methodology contribute to the problem of estimating both incidence and prevalence. Virtually every victim survey utilizes different items for estimating these rates. Samples used to obtain these estimates range from national probability samples (excluding children) to college students to small clinical groups of mixed sex offenders to readers of feminist magazines. Terms such as “force,” “rape,” “molestation” and even “sexual contact” are either undefined or their definitions vary from survey to survey or, even worse, for different waves within a survey. Surveys also differ with respect to instructional set, demand characteristics, and administration format. A face-to-face interview with a rape victim is very different from a paper and pencil measure administered to a lecture hall filled with college students. Whether individuals are asked to report on events in the recent past, say one year, or over the course of one’s lifetime will yield very different prevalence rates. This is true even when repeated interviews cover the same time period as one long-range retrospective estimate (Menard & Elliott, 1993).

While the victimization survey is the best way to even approximate the true incidence of child molestation, it yields no reliable information about the prevalence of child molesting or the distribution of offenses among perpetrators. We can learn little about perpetrators and their offending careers from victimization surveys. Theoretically, one's criminal records should provide such information, but realistically, law enforcement files are woefully incomplete. It is well known that many juveniles are handled within the purview of child welfare agencies rather than the court. This is very often the case when a perpetrator is under the age of 13. Many JSOs are processed informally even within the juvenile justice system. Counseling contracts and deferred adjudication are particularly common in cases of sibling incest or where the victim is unwilling or incompetent to testify, or has recanted. Perpetrators who are retarded and unable to assist in their own defense are seldom adjudicated. Despite biased sampling, descriptive studies of known offenders will remain the main source of data about perpetrators of sexual offenses, particularly where child molestation is concerned.

Recommendations

1. With respect to sexual assault of peers or adults, estimates of prevalence should be obtained exclusively from youth self-reports of offending. There are no good data sources for estimating the prevalence and offending rates for the perpetration of child molestation. And until victimization surveys include child molestation, the best prevalence estimates for this type of victimization are those derived from social welfare records of unduplicated perpetrators.
2. To further refine victimization surveys, experimental studies need to address the following: (a) how different definitions and labels of various events and conditions affect the reporting of events; (b) which categories of victimization should qualify as sexual victimization; (c) the method of data collection that maximizes reporting of qualifying events; and (d) improving victims' age-estimation of offenders.
3. Since many victims of JSOs are prepubescent children, new sampling techniques need to be tested to better tap molestation. Recommended is a semi-annual, Kinsey-type victimization survey to be conducted on a national probability sample which includes caretakers of small children. Based on the Mihalic and Elliott (1995) findings, this survey should not be confined to criminal sex acts but tap aspects of child rearing, family dynamics, and sexual practices.
4. Studies of special populations (e.g., college students) need to utilize standard formats and administration methods corresponding to those adopted as part of the National Crime Survey or the suggested Kinsey-type survey. Items may be added as necessary to test specific hypotheses. But to the extent that a special survey overlaps constructs tapped by existing measures, items and procedures should be duplicated. It would also be helpful to obtain age-specific reports of events, since the population of college students includes both older adolescents and young adults. Surveys of date rape among high school students are needed and must include estimated age of perpetrator.
5. All state child welfare agencies need to gather and provide NCANS with child maltreatment data that include breakdowns by age of victim and perpetrator. In addition, NCANS should augment its

analysis of child welfare data by cross-tabulating age of perpetrator and age of victim. Then, child molestation could be differentiated from sexual assaults of peers and incest among similar-age siblings.

6. Surveys of sexual perpetrators or general population samples need to rely more on computer or paper and pencil administration. There are indications that higher rates of both appropriate and inappropriate sexual behaviors are derived from automated administration than in face-to-face interviews (Erdman, Klein, & Greist, 1985; Ochs, Meana, Pare, Mah, & Binik, 1994; Weinrott & Saylor, 1991).

7. Use of either bogus pipeline methods or actual polygraph examinations should be used in a sample of future surveys involving known JSOs. It may then be possible to adjust rates derived from conventional survey methods to better represent the true incidence of target events.

8. The FBI should require law enforcement agencies to (a) differentiate forcible rape of adults, adolescents, and children, and (b) provide more fidelity in the “other sex offense” category. At the very least, “other” offenses need to be categorized as hands-on or nuisance crimes. Also, the age and sex of the victim should be provided. This would enable one to differentiate arrests for crimes against children from those against adults. Relationship of the offender to the victim for “other” sex crimes should also be specified as it already is for forcible rape.

Characteristics and Classification of JSOs

One of the clearest conclusions about JSOs is that they are heterogeneous. There is great variation in victim characteristics, degree of force, chronicity, variety of sexual outlets (i.e., other paraphilias), arousal profiles, and motivation/intent. Other factors thought relevant to sexual aggression include intelligence, social competence, cultural values, attachment bonds, personal victimization, substance abuse, presence of conduct disorder, observation of sexual violence, and use of pornography. Classification schemes for JSOs have tapped only a handful of these variables in part because some fail to discriminate JSOs from either non-sexual delinquents or normal adolescents. Other variables do not appear to be correlated with treatment amenability, recidivism, or other criteria.

As mentioned earlier, there are very few studies of *violent* juvenile sex offenders, yet it is unlikely that these youth will prove to be substantially different from non-sexual delinquents in personality, intelligence, drug addiction, testosterone levels, social competence, and general attitudes about women. This is because adult rapists do not differ from non-sexual felons on these dimensions (Quinsey, 1984). Where the two populations of adults do diverge—on measures of alcohol abuse and attitudes toward forced sex—there are no data for juveniles. Because so little is known about violent JSOs the following synopsis of offender characteristics pertains to the wider range of hands-on perpetrators.

The largest number of JSOs to have been described in a single study is 1600. In the mid-1980s, NAPN requested that its member agencies complete a standard data collection instrument devoted to basic offense and offender characteristics. Decisions as to which youth to include were apparently

left to individual program administrators or clinicians. Consequently, there is no way to establish the representativeness of the sample. Sampling concerns notwithstanding, the demographic breakdowns were as follows: over 90% males, ranging in age from 5-19 with the median age of 14 1/2; socioeconomic status and race distributions mirrored those for the general population. The vast majority of offenses involved child victims (median age = 7), three-fourths of which were girls. Sixty percent of crimes included acts of penetration, and 1/3 involved physical force. Virtually all of the victims were either related to or known by the perpetrator (National Council on Juvenile and Family Court Judges, 1993).

The best narrative reviews of offender characteristics are credited to Barbaree, Hudson, and Seto (1993), and Murphy, Haynes and Page (1992). More recently, a meta-analysis of 140 samples comprising over 16,000 JSOs was performed by Graves (1993)¹. He coded literally hundreds of variables in eight separate domains: demographics, medical/psychiatric, family, academic, interpersonal relationship, offender victimization, sexual history, and criminal history². The following sections represent a synopsis of the aforementioned reviews. They are supplemented by findings from individual studies that have since been completed and by commentary regarding methodology and generalizability. All of the findings pertain to male perpetrators since most samples are exclusively male; those that are not contain only a few females.

History of Abuse and Neglect

Estimates of childhood victimization vary dramatically from sample to sample, particularly with respect to sex abuse. As few as 20% of sibling incest perpetrators (Becker, Kaplan & Tenke, 1992) and as many as 47% of mixed JSOs (Longo, 1982) claim to have been sexual abuse victims as well as perpetrators. In an ongoing study of adolescent child molesters conducted by the author, 51 of 93 (55%) boys assessed to date reported a history of sexual victimization; 20 reported more than one perpetrator.

There is some evidence that juvenile child molesters are more likely to have been molested themselves than are peer rapists or non-sexual delinquents (Awad & Saunders, 1991; Ford & Linney, 1995). They are also more likely to have been sexually abused than adult-onset child molesters (Knight & Prentky, 1993). Offenders against younger siblings were more often victims of childhood sexual abuse than boys who molested children outside the household (Worling, 1995). JSOs who sexually assaulted peers were no more likely to have been molested than either non-JSO delinquents (Awad & Saunders, 1991) or adult-onset offenders (Knight & Prentky, 1993).

¹ Actually, many of the samples were comprised of adult sex offenders who were reporting retrospectively about their experiences in childhood and adolescence.

² Despite the exhaustive nature of the search, there were often fewer than ten samples for which a specific variable could be coded.

Rates of prior physical abuse and neglect are also relatively high among JSOs. Fifty-four percent of a mixed sample evaluated by Becker et al. (1992) reported prior physical abuse. Indeed the prevalence was much higher than that of sex abuse (20%). Awad and Saunders (1989) found that 27% of child molesters and 33% of peer sexual assaulters reported physical abuse, both of which were higher than the incidence among non-sexual delinquents (12%). Fagan and Wexler (1988) also found more severe forms of physical abuse in families of sexually assaultive youth than in those of non-sex offenders. The Graves (1993) meta-analysis yielded a sample average of 45% reporting physical abuse, although this figure was halved when poorly designed studies were eliminated from analysis.

With respect to child neglect, JSOs who commit rape are far more likely to have been exposed to this condition than are juvenile child molesters or adult onset sex offenders (Knight & Prentky, 1993). An average of 24% of boys drawn from four separate samples of mixed JSOs reported being or having been neglected (Graves, 1993).

However flawed the measures of personal victimization, it seems pretty clear that JSOs are likely to have encountered some form of abuse or parental neglect. Interestingly, JSOs who were sexually victimized are more likely to demonstrate deviant sexual arousal (measured phallometrically) than JSOs who were not (Becker, Hunter, Stein, & Kaplan, 1989). This is noteworthy because deviant arousal has been associated with recidivism among JSOs (Schram, Milloy, & Rowe, 1991) and psychopathy in adult sex offenders (Serin, Malcolm, Kahna, & Barbaree, 1994).

Being a victim of some form of abuse or neglect definitely increases the likelihood of sexual offending, particularly in adolescence. But contrary to popular opinion, most JSOs do not appear to have been sex abuse victims and obviously most victims do not become perpetrators.

Family Dysfunction

Given the prevalence of abuse and neglect experienced by JSOs a high degree of family problems would be anticipated including psychopathology, criminality, chemical dependency, marital discord and divorce. Surprisingly, there is little empirical evidence of these conditions, in part because they are seldom assessed, in part because most measures are idiosyncratic, and in part because even standardized measures have failed to discriminate families of JSOs from those of either nonoffenders or garden variety delinquents. There are samples in which family instability, violence, and disorganization are quite high (Awad, Saunders, & Levene, 1984; Blaske, Borduin, Henggeler, & Mann, 1989; Deisher, Wenet, Paperny, Clark, & Fehrenbach, 1982; Lewis, Shankok, & Pincus, 1979; Longo, 1982; Smith, 1988). But where there has been some sort of comparison group, differences in family functioning have not emerged on a consistent basis. There are two notable exceptions. Bischof, Stith, & Wilson (1992) found that JSOs rated their families as more cohesive than did delinquents but still less supportive than those of nonoffenders. Using the Conflict Tactics Scale, Ford and Linney (1995) discovered that child molesters experienced significantly higher levels of family violence than rapists or violent non-sex offenders.

No one has identified a pattern of family dysfunction unique to JSOs or a subset of them. Representative of recent efforts is a investigation by Bischof, Stith, and Whitney (1995), who administered the Family Environments Scale to JSOs who had molested children, violent non-sex offenders and nonviolent delinquents. On scales measuring cohesion, expressiveness and independence, there were no differences among the three groups with all scoring below a normative sample. Scores for JSOs were in the normal range on the seven remaining scales. In general JSOs perceived their families to be less impaired than did non-sex offenders, but the differences were rather trivial. Indeed there was nothing that truly differentiated families of teenage child molesters from either violent or non-violent delinquents. While measures such as the Conflict Tactics Scale, Family Adaptability and Cohesion Evaluation Scales (FACES) and the Family Environment Scale may be useful in clinical practice, they have contributed little to our understanding of JSOs or at least those samples dominated by child molesters. Interestingly, in only one study of family characteristics has a sample of JSOs been partitioned into sibling incest perpetrators and nonfamilial offenders. Worling (1995) used a variety of standardized measures to establish relatively high levels of marital discord, parental rejection, physical discipline, negativism and overall family dissatisfaction among adolescent sibling incest offenders. This is a classic example of how partitioning or screening to form more homogeneous subgroups can generate clear findings.

Social Competence, Confidence, and Isolation

Generally believed to be the most common deficit among JSOs, they appear to be no more socially isolated nor inept than delinquent or psychiatric populations (Murphy et al., 1992). This is not to imply that JSOs have adequate social ties. On the contrary, 92% of child molesters in seven different clinical samples reported feeling isolated from peers (Graves, 1993). The corresponding figure for sexual assault offenders (i.e., rapists) was only 23%. JSOs with both child and peer age victims fell in between (65%). Taken together, it is apparent that the majority of JSOs feels isolated from both female and male peers.

With respect to social skills per se, about three-fourths of juvenile child molesters report or were rated as lacking heterosocial (dating) confidence, experience, and skills (Graves, 1993). Ties with males were inadequate in about half of child molesters. Youths whose only victims were peer age or older are about half as likely to be skill deficient with females or males. It is noteworthy that measures of social isolation and social skills tend to be very subjective. Where standardized measures of peer interactions are utilized (Blaske et al., 1989), JSOs tend to appear less socially impaired than they do in studies relying on global ratings. Still it is apparent that many JSOs, particularly those who prey on children, operate outside the social mainstream. It is rather surprising that peer socialization and dating skills are not emphasized in many treatment programs. It is also curious that standardized measures of social relations have been largely ignored, because they have played an important role in delinquency research (Elliott, Huizinga, & Ageton, 1985).

Delinquency

From study to study there is so much variation in non-sexual delinquency that sampling more or less dictates the amount. As would be expected, peer sexual assaulters engage in as much or more antisocial behavior than non-sexual delinquents. This holds true whether the delinquency measures are derived from official records or from self-report (Awad & Saunders, 1991; Elliott, 1994; Fagan & Wexler, 1988). What is less intuitively obvious is that samples of child molesters are characterized by high (albeit variable) rates of non-sex crime. The Graves (1993) meta-analysis showed that 52% of pedophilic JSOs had criminal histories compared to 45% for JSOs who had peer or adult victims. The reverse was recently found by Ford and Linney (1995). Sixty percent of the child molesters in their sample were adjudicated on a first offense; two-thirds of a comparison group of rapists had three or more prior offenses.

Alcohol and Drug Use

Despite the disinhibiting effects of alcohol and drugs, there is very little evidence that substance abuse plays a prominent role in teenage molestation of small children (Lightfoot & Barbaree, 1993). Even JSOs with an acknowledged history of alcohol and drug use tend to disavow any direct influence on molestation (Becker & Stein, 1991). The data on peer assaulters are more consistent with the well established link between alcohol and violence. Most samples of JSOs that are exclusively or largely composed of rapists show prevalence rates of substance abuse exceeding 50%, with a large proportion of these youths under the influence while offending (Lightfoot & Barbaree, 1993). It is quite clear that alcohol in particular plays a role in many instances of date rape, both among high school and college students (Lundberg-Love & Geffner, 1989). Interestingly, the percentage of juvenile rapists who claim to have been under the influence of drugs or alcohol at the time of their offense was the lowest of nine groups incarcerated for other serious offenses (Bureau of Justice Statistics, 1989).

Variation in the prevalence rates of drug and alcohol use vary not only on the basis of victim characteristics but also by assessment method and definition. Standardized screening instruments have traditionally taken a back seat to clinical interviews. Generally speaking, criteria for designating a youth as a chronic substance abuser or “under the influence” do not appear in research reports. Consequently, there exists no reliable estimate of the proportion of JSOs who have serious substance abuse problems or, more importantly, the prevalence of alcohol/drug intoxication during the commission of sex crimes.

Scholastic Performance

There exists only a smattering of data on academic problems and progress. Across samples of undifferentiated JSOs, 59% had been retained, 41% were learning disabled, and 53% qualified for special education or another form of remediation (Graves 1993). No separate breakdowns were given for peer assaulters or child molesters, and virtually nothing has been reported regarding attendance, drop-out rates, or achievement levels. One exception is the 30% drop-out rate reported by Fagan and Wexler (1988), which is about average for inner-city samples. In contrast to

delinquency research, which often contains information of this type, the JSO literature fares poorly. This is especially problematic since Schram et al. (1991) identified truancy as a correlate of sexual recidivism in a large retrospective outcome study.

Intelligence

The Graves meta-analysis yielded a relatively normal distribution of IQ's with a sample mean of nearly 100. There was a higher proportion of JSOs with IQ's below 85 (26%) than exists in the general population (approximately 15%), a difference the author dismisses (perhaps prematurely) as trivial. The only study that has shown an unusually low mean IQ (of 83) involved a small sample of violent JSOs (Lewis, Shankok, & Pincus, 1981). But even this group did not differ from a comparison group of violent non-sexual offenders. It is not known whether IQ is related to offense characteristics (e.g., use of force; age of victim). There is really not much evidence implicating intellectual deficits as a specific causal factor in sex crime. More likely there is a relationship to violence in general.

Psychiatric Symptoms and Disorders

The only two diagnostic categories for which even sparse data exist are conduct disorder and depression. Once again the variation from sample to sample is striking. Fagan and Wexler (1988) studied 34 JSOs, the majority of whom offended against other adolescents or adults. Nearly 80% were adjudicated for forcible rape. The investigators discovered few characteristics typically associated with an antisocial lifestyle. Indeed, these JSOs resembled "normal" youth on measures of family composition, work experience, official and self-reported crimes, and attitudes toward the law. Attachment to school and work were relatively strong. Peer networks were essentially prosocial. In contrast, Kavoussi, Kaplan, and Becker (1988) diagnosed about half of its outpatient child molesters as conduct disordered. Across three samples Graves (1993) found that an average of 49% of JSOs who offended against both children and either peers or adults carried a diagnosis of conduct disorder. No figures were available for JSOs who had only one type of victim.

Using teacher ratings on the Child Behavior Checklist (Achenbach & Edelbrock, 1986), Kempton and Forehand (1992) found that a group of exclusive JSOs showed fewer symptoms of anxiety, inattentiveness, aggression, and social withdrawal, than either non-sexual delinquents or JSOs who also committed other types of crime. This is consistent with the prevailing clinical opinion that exclusive JSOs have fewer behavioral and emotional difficulties than other serious delinquents. With respect to personality structure, Graves (1993) found that borderline and antisocial traits were identified in 40% of JSOs respectively across studies and JSO types. Boys who were rather indiscriminate in their choice of victims were much more likely to be designated as one or the other than were exclusive child molesters or exclusive peer assaulters. In short, the more circumscribed one's sexual offense pattern, the less likely he is to be afflicted with an incipient personality disorder.

With respect to depression, there has really been only one large study. Becker, Kaplan, Tenke, and Tartaglino (1991) used the Beck Depression Inventory to assess 246 JSOs and found evidence of significant symptoms in 42% of cases. This compared to only 9% in a general high school sample.

Since low self-esteem and social isolation are fairly prevalent among JSOs this result is not terribly surprising. However, because youths completed the Beck Inventory prior to treatment and shortly after they had been adjudicated, some of the symptoms may have been situational and transient. Ford and Linney (1995) found a much lower incidence of deflated self-concept in both child molesters and rapists. There were also no differences between JSOs and delinquents.

Most studies in which a symptom checklist or personality inventory has been utilized show some evidence of psychopathology in samples of mixed JSOs, but a significant percentage of youths—often the majority—score within normal limits. Those who do not, vary dramatically in their symptoms and profiles.³ However, when more homogeneous subgroups are selected, then reliable patterns may emerge. For example, Carpenter, Peed and Eastman (1995) compared personality profiles of teenage child molesters to those of peer group sex offenders. The former scored much higher on scales tapping schizoid, avoidant and dependent traits, although only the mean level for dependency was clinically significant. Elevated scores on a measure of narcissism were typical of peer group offenders. Both groups evinced antisocial characteristics (e.g., impulsivity, anger, conduct problems) well in excess of normative samples. This study illustrates the value of purifying or partitioning samples of JSOs. Further delineation of subgroups would likely yield even better crystallized profiles. Until this occurs, there remains no firm constellation of traits or symptoms that is representative of child molesters or peer group offenders. Despite group differences, there is considerable overlap in the group distributions of all scale scores.

Sexual Experience and Knowledge

While it is often assumed that JSOs lack sexual knowledge and experience, there is little evidence of this. On the contrary, in an inner city sample of mixed JSOs, 82% of youths reported prior consensual sexual contact (without intercourse) and 58% reported consensual intercourse prior to a first offense (Becker, Cunningham-Rathner, & Kaplan, 1986). On the other hand, Fagan and Wexler (1988) reported less sexual interest and involvement among JSOs than among violent non-sexual offenders. Still the vast majority of JSOs (76%) claim to have had a girlfriend during the preceding six months. By and large these relationships were sexual. In the majority of studies, it appears that nondeviant, consensual experiences occurred prior to the occurrence of deviant sexual behaviors, excluding, of course, instances of personal victimization during childhood (Murphy, Haynes, & Page, 1992).

Many JSOs are sexually naive and inhibited. But the notion that sexual exploitation—particularly of children—is merely exploratory does not ring true. Indeed, when sexual histories are taken prior to a confirmation polygraph examination, the range and frequency of sexual experiences disclosed is often extensive. It is also noteworthy that at least two studies showed that far more sex offenders

³ That standard personality measures are used to predict treatment amenability, dangerousness, or reoffending has no empirical basis. The lone exception is the Hare Psychopathy Checklist which has recently been modified for use with adolescents. Unlike conventional personality inventories, this instrument incorporates records of prior conduct problems and criminal activity as well as information on family background.

(e.g., 30% of rapists) reported having viewed explicit pornography before age 10, than did non-offender controls, only 2% of whom reported early exposure (Goldstein, Kant, & Hartman, 1973; Walker, 1970).

Pornography

There have been only four studies that have addressed the association between pornography use and sexual aggression among teens. The first study by Becker and Stein (1991) consisted of 160 teenage males, three-fourths of whom were child molesters. Eighty-nine percent reported having used pornographic magazines, videos or books at least once. Two-thirds of the sample reported an increase in sexual arousal due to pornography, but there was no relationship between amount of exposure and number of victims. Neither was there a relationship between amount of exposure and type of victim. Finally, 20 subjects were interviewed regarding the causal relationship between sexually explicit material and commission of an offense. Seventy percent reported that pornography was not a contributing factor.

This study raises more than a few methodological concerns. First the scaling of the exposure variable(s) was not described. Second, the distribution of victims was highly skewed and attenuated which makes the use of parametric tests (in this case ANOVA) questionable. Third, self-report of pornography use is susceptible to social desirability responding, meaning that it yields gross underestimates of frequency and explicitness (Emerick & Dutton, 1993). Fourth, only a small fraction of the total sample (12.5%) was surveyed with respect to the perceived role of pornography on actual offending.

Emerick and Dutton (1993) evaluated the effects of polygraph examinations on self-reported pornography use. Seventy-six mixed JSOs, 53 of whom molested younger girls, participated in a clinical interview preceding a confirmation polygraph examination. Youths typically underreported the amount and type of exposure to pornography in the clinical interview. Similarly, use of pornography as a masturbatory enhancement was disclosed much more often during the polygraph examination than before it. Using polygraph-elicited self-reports, no relationship was found between number of child victims and explicitness of pornography. However, JSOs with a history of viewing X-rated videos while masturbating had significantly more victims than those who had no access to such videos. This was true regardless of sex and age preference. Because the sample was dominated by heterosexual child molesters, it is impossible to generalize the findings to any other subgroup (e.g., peer rapists). Overall it appears that greater explicitness coupled with masturbation is related to increased sexual misconduct, at least with respect to child molesters. It is, however, not clear that such masturbatory practices are the cause or effect of deviant sexual contact since no conditional probabilities, cross-lagged correlations, or path coefficients were computed.

There has been only one study of pornography use among sexually violent teens (Graves, 1993). Youth with peer-age or older victims reported more widespread use of pornography than those whose victims were far younger or whose offenses were of the nuisance (hands-off) variety. It is noteworthy that among adult sex offenders, those targeting adults were somewhat more likely to use erotica than those whose victims were younger (Abel, Mittleman, & Becker, 1985). So it is quite

possible that teenage rapists also engage in relatively extensive use of pornography, or are especially attracted to or affected by R-rated “slasher” films (Linz, Wilson, & Donnerstein, 1992).

Ford and Linney (1995) obtained estimates of pornography exposure from 14 juvenile rapists, 21 juvenile child molesters, 26 violent (non-sex) delinquents, and 21 status offenders. Most boys in all four groups acknowledged familiarity with soft-core magazines and other media depicting nudity. Forty-two percent of the JSOs had seen magazines portraying sex acts compared to 29% of the (combined) delinquents and status offenders. JSOs were also more likely to begin viewing this hard-core material at a younger age (usually 5-8 years old). The child molesters began earlier and gained more frequent access than the rapists. Although no statistically reliable group differences emerged with respect to videotapes or movies, child molesters again reported the highest frequency of exposure. Parenthetically, child molesters were also the most likely to have learned about sex by observing others.

Taken together, it appears that persons who engage in exploitive sex, particularly with children, have had more exposure to hard core pornography than those whose exposure is confined largely to mainstream erotica. However, any conclusions are tentative due to poor validity of exposure measures. Without question, the biggest threat is underreporting the amount, degree of explicitness, and role of pornography in masturbation. Most JSOs, and perhaps just as many non-offenders, simply will not disclose the truth about prior exposure to erotica. Laden with so much error variance, exposure scores simply cannot function adequately as either predictors or criterion measures. Until measurement (i.e., disclosure) problems can be overcome, then pornography use will be omitted from developmental models. That has certainly been the case in prior etiology research.

Sexual Arousal

Only a handful of studies have been devoted to measuring or changing deviant arousal in JSOs. Yet the reduction of sexual arousal to either children and/or forced sex is considered an objective of over 90% of treatment programs (Knopp & Stevenson, 1989). Moreover, deviant arousal is one of only four correlates of recidivism extracted by Schram et al., 1991, and is the most frequently endorsed (by youths) causal factor in sexual offending (O'Brien, 1994). Abel et al. (1987) found that 58% of 400 adult sex offenders reported arousal to deviant themes prior to age 18. In a sample of 129 adult child molesters, 29% reported the onset of deviant fantasies prior to age 20. And the majority of these claimed such fantasies preceded their first illicit contact. Interestingly, three-fourths of nonfamilial, heterosexual child molesters with high arousal to children committed their first offense before age 20. Overall, early offending was associated with higher deviant arousal. Also, men who admitted to a minimum of four victims were more likely to have entertained deviant fantasies prior to age 20 and prior to their first offense than offenders with fewer victims. In short, arousal to deviant themes appears to be associated with adolescent onset of sexual offending.

There are four ways to measure deviant arousal all of which are fallible: (a) youth self-report, (b) therapist impression, (c) phallometric assessment, and (d) use of the Abel Screen. The last is a measure based largely on the relative amount of time a client elects to view to particular visual stimulus or class of stimuli (e.g., female children). No research using the Abel Screen with JSOs has

been published although some preliminary psychometric studies are underway. The Schram et al. (1991) study utilized retrospective therapist ratings to assess deviant arousal, a method replete with problems. Still, individuals who reoffended were rated as having exhibited greater deviant arousal than those who did not reoffend. In most cases therapists were unaware that an individual reoffended. Ratings by youths themselves have been gathered most systematically using the Adolescent Sexual Interest Cardsort (Becker & Kaplan, 1988). This 64-item measure of sexual preferences contains scales of satisfactory internal consistency, some of which are sensitive to treatment effects (Weinrott, Riggan, & Frothingham, 1995).

Phallometric assessment of JSOs has yielded relatively high levels of deviant arousal in JSOs who were themselves sexually victimized (Becker, Kaplan, & Tenke, 1992). Significant correlations were found between erectile responses and number of victims for youths who molested young boys, but not for those who molested young girls (Becker, Stein, Kaplan, & Cunningham-Rathner, 1988). Deviant arousal measured phallometrically has been reduced by behavior therapy (Emerick, in press; Hunter & Goodwin, 1992; Hunter & Santos, 1990; Weinrott et al., 1995). While no normative phallometric data exist for adolescents, intervention studies suggest that JSOs who have molested children are likely to be aroused to both visual and auditory stimuli depicting them. There are no phallometric data on adolescents who have sexually assaulted peers, but analog studies conducted by Malamuth and his colleagues, show that undergraduate males who admit to having engaged in forced sex are more likely to be aroused to scenarios portraying rape than are men who have not (Malamuth, 1986).⁴

While erection measures may not be sufficiently dependable to classify JSO according to sexual preference (Hunter, Goodwin, & Becker, 1994), it is likely that deviant arousal, fantasy, and masturbatory practices are more prevalent among them than among delinquents or nonoffenders. Partial support for this notion comes from a recent study in which JSOs and non-sex offenders were surveyed with respect to the nature and frequency of their fantasies (Daleiden, Kaufman, Hilliker, & O'Neil, 1995).

Cognitive Distortions

Distorted thinking about women, sexuality, rape, child readiness, and the effects of sex abuse have long been considered endemic to JSOs. Perhaps the *prima facie* evidence of “thinking errors” is so striking and uniform that empirical studies would only confirm the obvious. This is really the only acceptable explanation for the dearth of studies devoted to attitudes and criminal thought patterns of JSOs. These constructs lie at the root of most popular developmental and treatment models (Lakey, 1994), and are among the few to have been associated with recidivism (Schram et al., 1991).

The best work in this area has been contributed by investigators of date rape. Risk factors include adherence to sex-role stereotypes, adversarial attitudes toward women, and acceptance of violence toward women (Muehlenhard & Linton, 1987). Young adults who disclosed sexual aggression are

⁴ Many young men who are not known to be sexually aggressive also exhibit arousal to rape scenarios (Malamuth & Check, 1993).

more traditional on the Attitudes Toward Women Scale and show elevated scores on the Acceptance of Interpersonal Violence Scale, the Adversarial Beliefs Scale, and the Rape Myth Acceptance Scale. None of these measures was designed for or widely utilized with adolescent perpetrators, probably because most study samples are dominated by child molesters.

There have been two attempts to tap “thinking errors” among a broad range of adolescent sex offenders. The Multiphasic Sex Inventory (Nichols & Molinder, 1984) has been adapted for use with JSOs. This instrument contains, among many others, subscales measuring distorted thinking and justifications (i.e., rationalizations) for offending. Often used in the conduct of psychosexual evaluations, the MSI scales were validated on adult sex offenders. It is not clear that norms for JSOs exist. The MSI has not been used to compare JSOs to nonoffenders, delinquents, or adult sex offenders. More recently, the Adolescent Cognitions Scale (Hunter, Becker, Kaplan, & Goodwin, 1991) was developed for the purpose of assessing the appropriateness of sexual attitudes, values, and behaviors. Regrettably, social desirability responding was pervasive thereby attenuating the distribution of scores. The result was only marginal temporal stability and internal consistency. The authors concluded that the scale in its current form did not possess adequate psychometric integrity. Without better measures of distorted thinking, particularly among child molesters, this seemingly important characteristic cannot be included in etiological research that relies on structural equation modeling or, for that matter, in even simple descriptive studies.

Summary of JSO Characteristics

Despite near-exclusive use of clinical samples, it is pretty clear that the majority of JSOs offend solely against younger children. The first offense is most likely to occur when the perpetrator is about 13 or 14 years old. A significant minority of youthful child molesters have both male and female victims. Victims are most likely to be female acquaintances or siblings; rarely are they strangers. Most offenses could be construed as coercive rather than overtly aggressive or violent. Serious delinquency, drug and alcohol abuse, and interpersonal aggression are relatively uncommon among teens that molest only younger children. Still there has been a high prevalence of conduct disorder in some samples of child molesters. For the most part, adolescent child molesters are shy if not socially isolated. They lack self-esteem and have been sexualized at an early age, either as sex abuse victims, by viewing pornography, observing live sex acts, or engaging in peer sex play gone awry. Many are aroused to children, a phenomena supported by deviant fantasies and masturbatory practices. Despite an affinity for younger children, nearly all JSOs who molest are attracted to girls their own age. Youths who were themselves victims show the highest, most persistent levels of deviant arousal and are presumably most at risk for developing pedophilia.

Those boys who use threats, force, or violence to commit sex crimes against peers or adults are a different breed. Much of what is known about juvenile rapists emanates from the Graves (1993) meta-analysis. While (arguably) no more likely to commit non-sex offenses than do child molesters, rapists gravitate toward more violent crime. They are likely to have suffered parental neglect yet less prone to social isolation as teens. Contrary to the stereotype, there is little evidence of antisocial personality or lifestyle among JSOs who have sexually assaulted female peers. The Elliot (1994) self-report survey is a glaring exception. Peer rapists also show arousal to aggressive sex, harbor

condescending and adversarial attitudes toward women, and are likely to have used alcohol prior to the assault.

Peer rapists are underrepresented in clinical samples of JSOs because (a) rape arrests do not peak until the late teens and early 20s; (b) rapists are more likely to be incarcerated or handled exclusively within the juvenile justice system where less research is conducted; and (c) they are less likely to be admitted to specialized JSO treatment programs owing to a history of violent non-sex offenses. What is most unfortunate about this from a social policy perspective is that the most violent sex offenders are typically the least accessible to researchers and clinicians.

Typologies

Until recently, classification of JSOs has been very primitive. The most rudimentary classification scheme is based on victim age preference: child molesters, rapists (of peer-age or older victims), and nuisance offenders (e.g., voyeurs, exhibitionists). Very little has been written about JSOs who have committed only nuisance sex offenses. It is universally acknowledged that child molesters and rapists are very different from one another, yet most study samples combine the two for both clinical treatment and scientific study. Groups of mixed JSOs are typically dominated by child molesters, particularly if the maximum age of the participants is 16 or 17 years old. To the extent that 18 - 20 year olds are included, rapists are better represented, although they are still a minority in most studies and treatment programs. It is noteworthy that the child molester subgroup often contains many incest offenders, yet seldom is information provided about this subgroup. Information pertaining to degree of violence, coercion, or intrusiveness is typically omitted in sample descriptions.

There have been at least three systematic attempts to develop a typology of JSOs. Based exclusively on their clinical experience, O'Brien and Bera (1986) identified seven types of JSOs. This classification scheme, which appears in Table 1, has considerable face validity. It reflects variation in family background, temperament, socialization, mental status, peer influence, substance abuse, cognitive ability, and conduct problems.

A second typology was derived empirically by Knight and Prentky (1993) based on their seminal work with adult offenders. These investigators conducted a retrospective study comparing institutionalized adults who had committed a sex crime as a juvenile with those whose first known offense occurred as an adult. Obviously, JSOs who desisted after age 18 were not included in this derivation sample. This is understandable but also unfortunate, since those JSOs who desist as adults are (on the basis of recidivism studies) more the rule than the exception. The study sample was further divided into rapists and child molesters with the former having victims age 16 and older. Two additional groups labeled "hidden rapists" and "hidden child molesters" were also formed. Comprising these groups were men who admitted raping or molesting as juveniles, but whose early offenses went undetected by authorities.

Table 1
Typology of Adolescent Sexual Offenders, O'Brien & Bera (1986)

Naive Experimenters

1. Tend to be younger adolescents (12-15)
2. No previous history of acting-out problems
3. Adequate social skills/socialization
4. Lack of sexual knowledge and experience
5. Sexual events are isolated, opportunistic, exploratory, situational, nonviolent acts with younger children

Undersocialized Child Exploiters

1. More extensive patterns of sexual behavior with younger children effected through manipulation, enticement, entrapment
2. Chronic social isolation and poor social skills
3. No history of other acting-out behavior
4. Inadequacy, insecurity, low self-worth predominate
5. Family disengaged, father distant

Sexual Aggressives

1. Use of force or violence in commission of sexual assaults against peers, adults or older children
2. Socially and sexually active with peer group
3. History of anti-social, acting-out behaviors from early childhood
4. Likely to be using alcohol and/or drugs regularly
5. Difficulty handling aggressive impulses
6. Oversensitive to criticism, tense and anxious, emotionally labile
7. Uses primarily denial and projection as defenses
8. Family characterized by chaos, abuse, violence

Sexual Compulsives

1. Engages in repetitive sexually arousing behaviors that becomes compulsive, addictive in nature
2. Usually hands-off behaviors such as voyeurism (window peeping), obscene phone- calling, exhibitionism, fetish burglary
3. Quiet, socially withdrawn
4. May be studious tending toward overachievement and perfectionism
5. Constant state of tension and anxiety due to hypersensitivity to failure

Table 1 (Continued)

Sexual Compulsives (Continued)

6. Inability to express anger appropriately
7. Emotional constraint and anxiety results in tension reducing acting-out behaviors that involve sexual arousal
8. Behavior becomes patterned, cyclical and repetitive because it is self-reinforcing
9. Family system rigidly enmeshed with closed external boundaries. Parents may adhere to rigid and fundamentalist religiosity

Disturbed Impulsives

1. Sexual offense is impulsive and signifies acute disturbance of reality testing
2. Offense may be single, unpredictable, uncharacteristic act or pattern of bizarre and/or ritualistic acts
3. Offenses reflect malfunction of normal inhibitory mechanisms due to thought disorder caused by psychosis either endogenous or drug induced

Group Influenced Offenders

1. Sexual offense is an attempt to impress peers, gain approval or acceptance or prove oneself in peers presence, e.g., gang rape, “dare” exposing, bathroom abductions
2. Usually no previous history, personality and family characteristics normal

Pseudo Socialized

1. Active peers - but manipulative relationships, superficial
2. Narcissistic quality - they play on being special, unique, immunity to other people’s pain
3. Sociopathic streak
4. Normal on testing
5. Likes to break rules, not get caught, stealing, etc.
6. Seemingly lots of friends, gifted, successful
7. Magnetic, facile in group, plays at social wellness
8. Lack intimacy - family high expectations, little closeness
9. Do well in school, high IQ, computer programmers, hang around adults
10. Love being viewed as precocious
11. Air of superiority
12. Love to do, dream of very adventurous things
13. Lacking intimacy skills, also their father’s lack intimacy skills while appearing very successful

Knight and Prentky (1993) found that correlates of *apprehension* for sexual aggression are different from correlates of simply engaging in this sort of behavior. As such, correlates of specific crimes or outcomes will be affected by the level of apprehension in a derivation sample. They also found that family dysfunction, as measured by the presence of physical abuse, sexual abuse, or neglect, is associated with early onset of sexual aggression. Finally, two typologies for rapists and one for child molesters appear to have a potential for reducing heterogeneity, particularly if correlates between types and criterion measures are cross-validated using samples of JSOs instead of adult offenders. The typology for rapists is based on motivational intent and social competence. For child molesters, relevant dimensions include extent of fixation (i.e., exclusiveness), social competence, amount of and meaning of sexual contact, and degree of injury to a child victim. It is important to note that these variables differentiate early onset adult offenders (i.e., former JSOs) from adult onset offenders. Whether they would discriminate among teenage offenders in a meaningful way is as yet unknown.

A third typology was generated using a combined rational and empirical approach. Graves (1993) identified three types of offenders using 140 research samples comprising over 16,000 JSOs. Based primarily on court records, boys were classified as: (a) sexually assaultive, (b) pedophilic, or (c) undifferentiated. The undifferentiated category included those youths who committed more than one class of sex offense regardless of whether it was hands-on or hands-off. Sexually assaultive youth were those whose only offense(s) involved peer-age or older victims, whereas pedophilic youths were those whose only victims were at least three years younger than the perpetrator.⁵

Since the undifferentiated offense group consisted exclusively of multiple offenders (including some who offended against much younger children) it is not terribly surprising that they tended to begin offending at an earlier age than the sexually assaultive group and that the age range of their victims was widest. Undifferentiated offenders also appeared more generally antisocial and had families that were more dysfunctional than members of the other two groups. Conduct disorders were more prevalent as was social anxiety and school failure. The pure sexual assault group was characterized by a history of oppositional behavior, paternal alcohol abuse, isolation from mother as a child, and eventual divorce of parents. Assaultive types were more likely to use pornography, commit a first offense at ages 13-15, and rely heavily on verbal coercion. Consistent with Fagan and Wexler (1988), sexually assaultive youths seem to have relatively strong social ties and less of a delinquent lifestyle than either undifferentiated sex offenders or violent non-sexual offenders.

While these are interesting findings, it is difficult to synthesize them in the absence of a developmental theory. Graves, Openshaw, Ericksen, Jones, Timothy, and Vogel (1994) have recently formulated a model that has potential for identifying developmental paths to sexual exploitation. However, the model does not even theoretically account for differences among subgroups of JSOs despite a strong emphasis on classification. This deficiency is currently being addressed by further delineating JSOs subtypes and attempting to identify paths relevant to each. This is the kind of effort that the field sorely needs.

⁵ The age differential required for a diagnosis of pedophilia using DSM-IV is five years.

What little we know from classification studies is that there are at least several distinct types of JSOs some whom are socially isolated and naive (particularly those with child victims) and some of whom have adequate social ties and skills. There has typically been some form of abuse, neglect, or upheaval in families of violent JSOs, the nature of which varies among subtypes. Certainly there are differences in victim and offense characteristics, since these are typical classification variables. Finally, JSOs who tend to “specialize” in one form of sexual deviance appear to be less impaired than violent, non-sexual delinquents on measures of criminal activity, peer delinquency, drug abuse, and academic achievement.

Methodological Issues in Descriptive Research

In general those conducting studies of JSO characteristics need to do a better job of avoiding age-old methodological pitfalls. Some concessions are warranted given the infancy of the field, yet much of the most recent work still utilizes small samples that are hardly representative of either the population of JSOs or even a particular subgroup. Of 13 empirical studies reviewed by Graves (1993) all but one had either fewer than 20 subjects or utilized pre-existing nonrandom samples, some of which were comprised of adults giving retrospective accounts. When the effects of sampling bias are combined with the use of unproven instrumentation or subjective data, it becomes exceedingly difficult to develop a robust typology with any degree of fidelity.

The biggest problem in describing and classifying JSOs is reliance on samples that both (a) encompass a very wide range of diagnostic criteria (e.g., include both peer assaulters and child molesters), and (b) differ dramatically with respect to the distribution of various types. The conclusion is not only that JSOs are heterogeneous; this has been demonstrated many times both within and across studies. Rather, descriptive research is now doing as much to muddy the waters as purify them. Paraphiliacs are lumped together with boys whose sexual aggression is exploratory or part of a general antisocial lifestyle. Those who are socially isolated or anxious are combined with those who are not. Samples include families that are well-adjusted and those that are either dysfunctional or nonexistent. Victim age and sex preferences are often obscured in descriptive or intervention studies. Yes, JSOs may be very different from each other, but this is often not reflected in research designs. And, even when it is, the number of subjects in a given subgroup is often too small to provide adequate statistical power (c.f., Ford & Linney, 1995).

What is needed at the very least is better sample description. Until such time as correlates of outcome are derived, then youths should be described on those dimensions theoretically linked to dangerousness, recidivism, or some other criterion. While this would be helpful in interpreting disparate findings, it is not a satisfactory solution to the problems inherent in mixing apples and oranges. A recent but by no means isolated example comes from Moody, Brissie, and Kim (1994). They administered the High School Personality Questionnaire to 21 mixed JSOs, most of whom had molested prepubescent children, as well as 17 “oppositional-defiant” adolescents. While there were large differences between the two groups on background characteristics and the obtained scale scores, JSOs tended to score within the average range on measures of conformity, withdrawal, intelligence, excitability, and sensitivity, the only dimensions on which scores were reported. This is not meant to bestow upon them a clean bill of health. On the contrary, it is likely that many JSOs

had elevated scores on one or more scales. But by using a sample of mixed JSOs a few extreme scores on any given scale would not greatly affect group means. That heterogeneous groups appear average on a variety of psychometric measures is fairly well established, but that conclusion may be attributable more to biased sampling than lack of a relationship among underlying factors. Put differently, large subgroups of JSOs might very well yield distinct profiles.

The problems attributable to heterogeneity go well beyond the realm of personality assessment. A recent study comparing mixed JSOs and non-sex offenders revealed no meaningful differences between groups on 24 variables (Jacobs, 1995). These include measures of delinquency, intelligence, academic achievement and psychopathology. So consistent was this set of findings that the author used them to equate sexual and general violence with respect to etiology. As if this were not enough of a leap, the author went on to conclude that JSOs and delinquents have similar therapeutic needs, just like two patients, one with a sprained ankle and the other with pneumonia, both need to stay off their feet. Perhaps when viewed as two very heterogeneous groups, delinquents and JSOs are more similar than different, but by now the field should have evolved to the point where one would expect more fidelity in sampling and more sophistication in data analysis.

The heterogeneity problem is even more critical in intervention studies. Take for example a program that strives to foster anger control (among other things). In a sample of mixed JSOs, say that 50% of youths tend to overreact in a manner that is both hostile and measurable. Obviously 50% do not have such a tendency meaning that they appear “normal” on a pretreatment measure of anger expression. In other words, some youths cannot change in the desired direction. This makes it difficult to demonstrate a treatment effect because within group variance is so high prior to the intervention. In a sense, one is relying on a portion of the sample to demonstrate change because only a portion can. The result is an increased likelihood of a Type II error. This may help account for the conspicuous absence of in-program change data in clinical outcome studies.

Existing typologies which could be used to form more homogeneous samples have gone largely unnoticed or unappreciated. Certainly each has its shortcomings. For example, the O’Brien and Bera (1986) classification scheme was derived rationally not empirically. There has been no validation, nor for that matter, any attempt to establish the reliability (i.e., agreement) of classification. Nothing has been published regarding differential outcomes for the various types, or, for that matter, differential dispositions.

Even the simplest of JSO typologies is plagued by unknown base rates for the various types. And, since typologies tend to be derived from single samples, “complex types” may not actually hold up or appear in pure form in other samples. Even where clearly differentiated types have been identified (e.g., peer rapists and child molesters) no one has appraised their differential utility. In other words, even if there are differences why does this matter? Do the types differ from one another in ways that go beyond mere description? Do they yield different reoffense rates or patterns? Are some more amenable to treatment than others? Do some even need treatment?

Since there has never been a complex typology developed using a representative sample of JSOs, relationships between types and socially relevant criteria have not been explored. Accordingly, most

JSOs are exposed to “offense-specific group therapy” with degree of violence, persistence of offending, and relationship to victim determining whether services are delivered in an outpatient, residential, or institutional setting. Access to particular clinical techniques, while theoretically related to types, is almost random in practice. Only in Vermont does it appear that “types” are being handled as prescribed (Pithers, 1993). Elsewhere, court administrators and therapists are operating under a set of unproven assumptions and may not even be following these. This begs the question of whether typologies are as useful as they are interesting.

Also problematic for classification of JSOs is inadequate assessment of cognitive distortions, empathy, sexual intent, lifestyle impulsivity, control and dominance, sexual fantasy/arousal, antisocial behavior, attachment bonds, and cultural/peer support. These variables have been theoretically linked to sexual aggression (Barbaree, Marshall, & Hudson, 1993). Good measures exist for some of these constructs. Yet systematic assessment occurs in only a few research settings and is virtually unknown in clinics. For example, rather than measure the degree to which sexual intent played a role in, say, a rape, most investigators and therapists start with an a priori model in which rape is perceived to be a crime motivated primarily by power/dominance or one motivated primarily by sex. It seems clear that elements of both are present (Malamuth, Heavy, & Linz, 1993). In light of all the attention devoted to (lack of) empathy in JSOs, it is startling that it is rarely measured—this despite a wide range of options (Eisenberg & Miller, 1987). Similarly, appraisal of sexual fantasy and/or arousal is quite uncommon among adolescents. Perhaps this is because the reliability and validity of phallometric measures for JSOs have not been established (Hunter, Goodwin & Becker, 1994), although there is growing evidence of their integrity (Becker, Kaplan, & Kavoussi, 1988; Emerick, in press; Weinrott, 1994). Even the assessment of antisocial traits and behavior is unsatisfactory, largely because established instruments have been ignored. It is clear that among adult sex offenders, especially rapists, there is a great deal of undetected non-sex crime (Weinrott & Saylor, 1991). The same appears true for violent JSOs (Elliott, 1994), yet relatively few research subjects or therapy clients have completed a self-report delinquency scale. Far more common is the administration of a personality inventory for purposes of tapping antisocial traits. As already noted, most studies based on conventional personality assessment have failed to demonstrate predictive or discriminate validity. Yet social cognition measures which have become increasingly popular in the study of conduct-disordered youth (c.f. Elliott, Huizinga & Ageton, 1985; Lochman & Dodge, 1994) have been conspicuously absent from JSO research. The point of this discussion is that classification variables have not been adequately defined or assessed, which makes taxonomic studies of JSOs both an arbitrary and somewhat risky enterprise—arbitrary in the sense that assessment is not standardized, risky because classification indices may be poor measures of underlying phenomena.

Recommendations

1. Crucial to improving classification of JSOs are a few typology studies that include all (or a probability sample) of known sex offenders within a given jurisdiction. This is the only way to estimate base rates of various types and to determine the underlying distributions of characteristics associated with the onset or reoccurrence of sexual aggression.

-
2. There need to be new measures of cognitive distortions or “thinking errors” since these play so prominent a role in developmental and treatment models. Given the susceptibility of paper and pencil measures to socially desirable responding, consideration should be given to unobtrusive measures, laboratory analogue tasks, third-party ratings, coding of responses in structured interviews, and so forth.
 3. Measures developed in delinquency research should be utilized to assess parenting skills/style, criminal behavior, peer culture, and social bonding. Existing measures of empathy, impulsiveness, exposure to violence, and victimization history should be borrowed from other fields and adapted for use with JSOs. A good example of this is the Psychopathy Checklist which is now being modified for use with adolescents.
 4. It probably makes more sense to compare violent sex offenders to violent non-sex offenders and nonoffenders than it does to child molesters. Indeed, the principal communality between rapists and child molesters is sexual intent, and even that is arguable. The difficulty in implementing this recommendation is that there are more programs specifically designated for sex offenders than for violent offenders. Since most studies emanate from a single clinical setting, accessing appropriate comparison youths will require additional coordination and resources.
 5. Much research is needed on the assessment of deviant arousal in JSOs. Like cognitive distortions, this construct is integral to influential developmental and clinical models. Specifically, audio and visual stimuli used in phallometric research must be upgraded and subjected to further psychometric analysis. Documentation of the safety and client acceptance of physiological assessment would also be useful to quell irrational fears. Also suggested is a comparison of phallometric indices and measures obtained from the Abel Screen. If the latter holds up under independent scientific scrutiny, then it is sufficiently benign to permit collection of normative data from nonoffenders. This would certainly be a boon to the field. Eventually, some new physiological correlate of sexual arousal will supplant erectile response. Research devoted to both the identification of correlates and the design of noninvasive instrumentation should be considered a priority.
 6. Because truancy has been associated with recidivism, there should be more emphasis on measures of academic performance, school attendance, and behavior problems in school.
 7. There needs to be a fairly large-scale, retrospective study of pornography use in a representative sample of JSOs. The sample needs to be of sufficient size to be partitioned by offender type. Comparison groups of violent non-sex delinquents, nonviolent delinquents, and nonoffenders should also be included in this study. Confirmation polygraph examinations are essential.
 8. Methodology studies should focus on improving the validity of both pornography and violent sex exposure measures. Variables worthy of experimental manipulation include data collection mode (e.g., personal interview vs. computer administration), use of a bogus pipeline, item format and response options, and presentation of confidentiality assurance.

Etiology and Developmental Course

A critical review of etiological research on JSOs is necessarily fragmented because investigators have addressed the topic from very different perspectives. Some have focused almost exclusively on cognitive factors operating just prior to and during the period of sexual offending. Others incorporate elements of family and sexual history while still others emphasize personality traits and skill deficits. Finally, some models are based on early conduct problems evolving into non-sex crime and eventually to sexual aggression. Integrating the findings from etiological studies is premature because most of the relevant constructs do not overlap and competing models have rarely been presented, let alone tested.

The most widely accepted model accounting for sexual deviancy is probably the least scrutinized. Commonly referred to as the “sexual assault cycle” (Lane, 1991; Ryan, Lane, Davis, & Isaac, 1987) this is the linchpin of most JSO treatment programs (Ryan & Lane, 1991). The cycle is a way of conceptualizing offense-related behaviors and the distorted cognitions that both emanate from and foster deviant acts. Following is a capsule description of this model.

Illicit sex is considered a symptom of low self-esteem and feelings of helplessness. Accordingly, an offense is construed as a misguided attempt to exert control over a person or situation. The process then unfolds: feelings of inadequacy (whatever their origin) lead to negative expectancies which in turn makes it easy to slough off or give up altogether. The upshot of failing is withdrawal and social isolation. A “poor me” attitude develops in which blame is projected onto others. As anger intensifies, there arises a desire to retaliate which is rationalized on the basis of unfair treatment. Fantasies emerge, particularly those in which the JSO is depicted as powerful and attractive. Themes of power and control spill over into the sexual domain, and a preoccupation with sex may develop especially if fantasies are enhanced by pornography and/or masturbation. Presumably, when one sees him/herself as desirable this heightens self-image, reduces anxiety, and leads to more fantasies in which sex and control are intertwined. Since most fantasies are not attainable, a youth begins to consider feasible alternatives and these either form the content of new fantasies or directly initiate the grooming or planning phase of an offense. This phase is replete with cognitive distortions or self-statements enabling one to override the effects of conscience. Commonly referred to as “thinking errors” (Yochelson & Samenow, 1976), these self-statements help minimize the potential harm, sexual intent, odds of being caught, and so forth. An offense ensues, the aftermath of which is characterized by transitory guilt, reframing the event as benign or final, and a feeling of relief for escaping detection. Still, the youth senses that something is wrong with him, which erodes his self-esteem. The cycle then begins anew.

In one form or another, the sexual assault cycle has been promoted for nearly 20 years. Yet virtually no empirical validation of the model has occurred. Granted, there is evidence among JSOs of low self-esteem (Becker et al., 1991), social isolation (Fehrenbach, Smith, Monastersky, & Deisher, 1986; Prentky & Knight, 1993), and deviant arousal (Emerick & Dutton, 1993; Hunter & Santos, 1990; Weinrott, 1994). But the interactions and temporal relationships involving the various model components have not been explored. Moreover, there are virtually no data on the presence or measurement of cognitive distortions, one of the key elements of the model. In fact, the only

systematic investigation of distorted thinking yielded no differences in several attitudes between JSOs and non-sexual delinquents (Becker, under review). While the notion of the cycle seems to fit many JSOs, it does not account for naive experimentation or sexual assault committed in pairs or groups. It also falls short in explaining sexually compulsive behavior which may not be mediated by the kinds of thinking implicit in the model. Neither does it seem to apply to youths described by O'Brien and Bera (1986) as either disturbed impulsives or pseudo socialized. In fact, the notion of a cycle appears to fit only two of the seven types identified in the O'Brien and Bera typology. That the framework of a cycle is superimposed on most cognitive-behavioral programs suggests that nearly all JSOs in treatment are either undersocialized child exploiters or sexual aggressives. Of course, no one really knows if this is true, in part because the O'Brien and Bera typology has been the subject of even less research than the assault cycle.

Where the cycle model falls most short is in explaining why only a small fraction of youths with a negative self-image act out sexually. It is not sufficient to conclude that the need for power and control is met in part through sexual fantasy. And, what about JSOs whose motive to offend is almost exclusively sexual, that is, driven largely by deviant arousal rather than a need to compensate for personal inadequacy. Staunch proponents of the cycle model might deny that such cases exist, but it is clear that not all JSOs have feelings of inadequacy even if most do. Finally, the sexual assault cycle contains no provision for a youth desisting without treatment. Yet it is obvious from recidivism studies, however flawed, that once apprehended many JSOs learn to control their behavior without clinical intervention and that others do so without their offenses ever being detected.

Becker and Kaplan (1988) hypothesized that an early sex offense emanates from a constellation of risk factors: inadequate social skills, accompanying isolation, non-sexual misconduct, and disturbed family relations. Empirical support for this set of factors has been provided by Prentky and Knight (1993) who found relatively high levels of self-reported delinquency, aggressiveness, and social isolation among adult rapists who began their careers as juveniles. The pattern for adult child molesters was identical although not as dramatic as for rapists. While the developmental sequence of relevant factors is not clearly specified, Becker and Kaplan (1988) surmise that a learning disability and/or impulsiveness—both biological in nature—set the wheels in motion, especially if manifested in a dysfunctional family. These attributes interfere with the formation of appropriate peer relationships, the upshot of which is anger and/or depression. Such emotions give rise to a “don't care” or hostile attitude in which one is likely to take foolish risks either intentionally or inadvertently exploiting others in the process.

This model is apparently too simplistic to discriminate JSOs from non-JSO delinquents (Becker et al., 1993). When one also considers family variables, including a history of sexual victimization, witnessing sex acts, or having a parent afflicted with a paraphilia (Smith & Israel, 1987) then discrimination is apt to improve, at least for males with child victims. While these predictors are intuitively appealing and are supported by significant zero-order correlations, Becker and Kaplan's developmental model of sexual aggression has not been validated. That it has been formulated using groups of mixed JSOs makes such validation very unlikely since one need only examine the O'Brien and Bera (1986) typology to see that multiple paths to sexual aggression are likely to exist.

Malamuth et al. (1993) have confirmed this notion at least for males who exploit peers (see below). It should really come as no surprise given the dearth of descriptive studies, that little is known about why youths opt to act out sexually. Unquestionably, being the victim of child abuse or neglect can be a precipitating factor. Prentky and Knight (1993) classified 78 adult rapists and 53 adult child molesters as either early adolescent onset (i.e., age 14 and younger), late adolescent onset (ages 15-18), or adult onset perpetrators. "Onset" refers to the first self-reported hands-on sex offense regardless of type. One hundred percent of the early onset rapists disclosed parental neglect as compared to 50% of the late adolescent and 25% of the adult onset rapists. Interestingly, the incidence of physical and sexual abuse did not co-vary with age of onset, at least not for rapists. For child molesters the pattern was quite different, with the early onset offenders sexually victimized earlier and more intrusively than their later onset counterparts. So, an early history of sexual victimization appears to portend child molestation whereas a history of emotional or physical neglect is associated with rape. The recapitulation notion—that nearly all sexual perpetrators were themselves victims—is a gross exaggeration. As noted earlier, in most samples of mixed JSOs, the proportion of youths reporting a history of sexual victimization is less than 50%.

When one looks more carefully at age and gender preferences, then a clearer developmental pattern emerges. Benoit and Kennedy (1992) found that 36% of JSOs who had at least one male child victim disclosed a history of sexual victimization compared to only 16% of those whose only victims were female. A more striking result was obtained by Worling (1995). Fully 75% of JSOs with a male victim claim to have been abused; only 25% of those who assaulted female children, peers or adults described such a history. It seems clear that sexual victimization is an important etiological factor in the development of homosexual pedophilia. This set of findings highlights the importance of utilizing homogeneous subgroups in etiological research.

Despite the role of parental neglect in the etiology of rape, a recently formulated developmental model omitted this variable in favor of one based on physical and sexual victimization. Kobayashi, Sales, Becker, Figueredo and Kaplan (1995) focused on family variables in a study replete with methodological flaws. Utilizing structural equation modeling, these investigators attempted to confirm a theoretical link between antisocial attitudes on the part of parents, a youth's exposure to abuse, the strength of parent-child bonds, and sexual aggression. Reliance on questionable measures—all based on youth self-report—as well as absence of longitudinal assessment renders any conclusions extremely tenuous. Other problems include attenuated distributions in both predictors and criterion variables, single items representing some key constructs, a sample of mixed JSOs, and failure to consider bi-directional relationships among constructs. Conspicuous in their absence were (a) separate measures of parental deviance for mothers and fathers, (b) any mention or accommodation of single-parent families, and (c) even a gross estimate of exposure to sex by means other than direct victimization. Nonetheless there emerged two findings that might well hold up under replication. First, physical and sexual victimization by males was associated with later sexual aggression; second, strong bonds to one's mother tend to mitigate this relationship. That hypotheses related to parental attitudes were not supported implicates the methodology at least as much as the theory.

During the past decade, Malamuth and his colleagues have systematically formulated a developmental model for predicting sexual aggression against women. This probably comes closest to explaining why some young men with antisocial tendencies select peers or women as targets. Unlike most researchers who have utilized criminal and clinical samples, this model was derived from an extensive series of experiments involving young adult males, typically undergraduate volunteers. While the model did not emerge from studies of JSOs, it does have implications for the manner in which sexual violence unfolds. It is thought to be the product of promiscuous sex interacting with hostile, controlling personality traits, and of course, ample opportunity to offend. In combination these factors enable one to put aside his inhibitions for purposes of exerting power and/or venting anger. Consistent with Elliott's (1994) formulation (see below) in which rape is preceded by pressuring for sex, Malamuth et al. (1993) have demonstrated that arousal to rape themes, hostility toward women, dominance motive, sexual experience, antisocial tendencies, and acceptance of violence against women are in combination predictive of self-reported sexual aggression. How these behavior patterns, phallometric responses, and attitudes evolve over the course of childhood and adolescence is now becoming clearer. Using structural equation modeling, two paths to sexual aggression have been identified, one of which presupposes significant delinquency. In this path, the relationship between delinquency and subsequent sexual aggression is mediated by promiscuity. A second path consists of attitudes supporting violence, which in turn predict hostile masculinity which in turn leads to sexual aggression as a teenager or young adult. Sexual aggression during this period, regardless of how it unfolds, predicts later sexual aggression ten years later, both within and outside close relationships. Despite the fact that virtually no JSOs were included in Malamuth's samples, the basic message is that sexual aggression in adolescence is apt to persist not only in its original form, but conceivably expanding to encompass spousal and child abuse.

Specific to date rape, Lundberg-Love and Geffner (1989) proposed a variation of Finkelhor's (1984) well known four-factor model of sex abuse. Categories of risk factors are (a) motivation to offend, (b) internal disinhibitors, (c) external disinhibitors, and (d) victim acquiescence. Briefly, a date rape is most likely to occur when the male is highly aroused, has strong power or control needs, and perceives his date as willing (if not eager) to submit. Given a sufficient level of motivation, he must then overcome his conscience or internal controls. This is made easier when the male subscribes to traditional sexual stereotypes, condones violence, endorses myths regarding rape, and has a history of adversarial relationships, some of which may have been abusive. External correlates of date rape include a willingness of the female to go to certain places, like visiting a boy's home when no one else is there, or to go "parking." Also, having the male provide transportation, pay the expenses and engage in alcohol or drug use will increase the risk. Finally, victim characteristics such as passivity, inadequate self-defense measures, minimal sex education, traditional attitudes, and a history of sex abuse can undermine victim resistance.

This model has the advantage of providing both the male and female perspective. It incorporates historical elements, prevailing attitudes and an individual's present level of motivation. Implied in the model is the notion that each of the four general factors is necessary but insufficient to produce a date rape. Elements of all four must be present, although there has been no attempt to establish thresholds empirically. Validation of this model has been limited to bivariate correlational analyses

from uncoordinated studies. There has been no systematic attempt to document temporal relationships, interactions among concurrent variables, or to measure latent constructs (e.g., the four factors) simultaneously. Like its cousin, the sexual assault cycle, it has widespread intuitive appeal and clear preventive and clinical implications. The authors readily concede that their proposed framework is simply a way to organize many of the empirical findings about date rape.

Elliott (1994) analyzed sexual assault data obtained in the National Youth Survey to determine whether sexual assault (i.e., rape and attempted rape of peers) emanated from more benign criminal activity. Eighty males disclosed a total of 184 forcible rapes. Several interesting patterns emerged. First, 92% of those who self-reported a sexual assault previously committed a (non-sexual) aggravated assault. Property crimes and less aggressive crimes against persons tended to precede both. Only 7% of sexually assaultive males were exclusively sex offenders. It would appear that forcible rape is the final act in a developmental progression. Moreover, the probability of committing rape given prior “pressuring for sex” was 0.4 compared to only 0.07 if there had not been pressure applied in the past. Other antecedents of sexual violence included a delinquent peer group and substance abuse.⁶

Taken together, these results suggest an “early starter” path (Patterson, Reid, & Dishion, 1992) involving affiliation with delinquent peers and commission of property offenses. Eventual sexual assaulters gravitate to aggravated assault and pressuring for sex. Finally, the sequence culminates in a forcible rape. It is noteworthy that sex offenses are not substituted for minor offenses which continue unabated for the group of admitted rapists. That rapists engage in frequent and varied antisocial acts is consistent with findings of Weinrott and Saylor (1991). What is interesting in the Elliott study is the cumulative nature of sexual assault. Little wonder that treatment programs for adult rapists have had relatively little impact on recidivism (Furby, Weinrott, & Blackshaw, 1989; Marshall & Pithers, 1993).

The Elliott (1994) research represents the sole *longitudinal* study of sexually assaultive youth. But because the National Youth Survey is devoted to delinquency in general, very few items targeted sexual behavior or its possible precursors (e.g., social isolation, sexual victimization, use of pornography, or deviant arousal). All of the other attempts to chart a developmental course have either been theoretical (O’Brien & Bera, 1986), retrospective Malamuth, Sockloskie, Koss, & Tanaka, 1991; Malamuth, Heavey, & Linz, 1993; Prentky & Knight, 1993), or devoted to verbally coerced rather than violent sex (Kelly & Lusk, 1992).

⁶ Poverty and race were not related to the onset of sexual violence, but to its maintenance into adulthood. While minorities are not predisposed to sexual violence, they are more likely to continue it. The most likely explanations are employment instability and lack of sustained intimate relations.

Despite so few studies of developmental progression, a number of firm conclusions can be drawn. First, there is good evidence that family instability and lack of attachment in childhood are associated with more intrusive forms juvenile sexual aggression. Second, a history of sexual abuse and/or neglect is associated with sexual aggression as an adolescent or young adult. Third, there are multiple paths to sexual exploitation. This is true both between categories (e.g., rapists versus child molesters) and types within categories.

With only a handful pioneering efforts to date, it is hardly surprising that there are gaping holes in developmental models. What models do exist are parochial. This is inevitable given heavy reliance on archival data, wildly disparate samples, and theoretical biases. So little is known about the developmental antecedents of various JSO types, that it is premature to criticize the idiosyncratic selection of assessment methods and their lack of standardization.

Recommendations

1. As in the areas of delinquency and adult sexual aggression, developmental models of juvenile sexual offending need to be dictated by sound theory. While the entire field is driven more by theory than data, most explanations for juvenile sex crime are either too simplistic or applied universally. Latent constructs should ideally be tapped using multiple measures with demonstrated reliability and validity. Such assessment tools are either lacking or ignored making it almost impossible to demonstrate temporal relationships among various antecedents. Specific suggestions for improving JSO assessment were offered in the previous set of recommendations.

2. While extracting large numbers of JSOs from a national probability sample is impractical, if even feasible, the field desperately needs a prospective longitudinal study of known JSOs. Granted, early risk factors would need to be assessed after the fact, but a fair number of measures could be administered around the time that sexual acting-out emerged and for years thereafter. This would be preferable to the retrospective approach Malamuth has adopted in several ways. First, measures based on short-term recall are less susceptible to bias. Second, the specification of intermediate and outcome criteria can be identified in advance thereby sidestepping the constraints imposed by archival data. Third, a prospective longitudinal study would permit empirical validation or confirmation of a JSO typology that might permit classification *during* adolescence when judicial and clinical decisions are actually being made.

3. Integration of findings from typology research and etiological studies must be improved. Heretofore, there has been strikingly little influence of one on the other. To the extent that distinct types of JSOs have been identified, then future etiology studies should probably focus on these individually. Only if the underlying model attempts to account for the *type* of sexual deviance that emerges does it make sense to mix apples and oranges when forming a sample. Otherwise, the more homogeneous the population the more one can utilize measures of greater fidelity.

4. Those developmental models that incorporate early childhood experiences and family functioning should be extended to include exposure to pornography and sexually violent films as potential causal variables.

Recidivism

The typical JSO recidivism study is retrospective, focusing on mixed sex offenders who have come to the attention of a juvenile court or treatment program over a period of at least one year. Follow-up periods are typically short, variable both within and across studies, and seldom extending beyond the age of majority. These factors make it difficult to interpret recidivism rates, particularly when single-group or cohort designs are utilized.

Furby, Weinrott, and Blackshaw (1989) have described a myriad of methodological problems associated with recidivism studies of adult offenders. These deficiencies need not be reiterated here. Suffice it to say that the validity of recidivism measures for JSOs are susceptible to all of the threats that apply to their adult counterparts. In addition, there are at least three problems exclusive to JSOs. First, younger people tend to be more geographically mobile. To the extent that recidivism data are gathered in a single jurisdiction or even statewide, arrests occurring elsewhere may not appear. Second, many juveniles who have committed a sex offense are processed informally. Either formal charges are never filed, or they are dropped as part of an agreement to complete therapy and avoid further law violations. Therefore, a youth may not show up in a study sample because he was technically not a sex offender, or, for that matter, an offender of any type. Third, because so few investigators have tracked JSOs into adulthood, relatively few failures would be expected. It is clear from at least two studies of adults that after the first few years, the rate of recidivism for a sample of sex offenders is fairly uniform over a long period of time, perhaps over twenty years (Prentky, Knight, & Lee, 1994; Soothill & Gibbens, 1978). It is easy to imagine JSOs reoffending when they themselves become parents. Of course, there are no prospective data to support this notion because follow-up intervals have rarely exceeded five years and are often less than three. But what virtually all of the studies show, contrary to popular opinion, is that relatively few JSOs are charged with a subsequent sex crime. Whether this is due to deterrence, humiliation, lack of opportunity, clinical treatment, increased surveillance, or inadequate research methodology, is difficult to ascertain. Because there have been so few studies of JSO outcomes, only one of which is prospective and truly experimental, trying to account for recidivism is fairly speculative.

Table 2 summarizes 23 JSO recidivism studies. As early as 1943, Doshay investigated outcomes for 256 teenage males, 96 of whom committed sex offenses exclusively. The remaining 160 JSOs also had a record of non-sex crime. Sex offenses tended to be nonviolent. In fact, among 350 known sex offenses, only one was classified as a forcible rape. Seven additional offenses were designated as “sadism.” Approximately 20-30% of crimes involved child victims.⁷ The majority of offenses consisted of excessive masturbation, exposing, voyeurism, obscenity, and perversion. Treatment in court and an attached clinic consisted of shame/guilt induction in an open proceeding, followed by referral to a psychiatrist for “sex hygiene guidance” and “reorientation” in the presence of one’s family.

⁷ In cases of sibling incest, the authors made no reference to the age of the victim(s).

Table 2. Summary of JSO Recidivism Studies						
Study	Sample	Treatment	Time Followed	Recidivism Measured	Recidivism Results	
					Sex	Non-Sex
Acheson & Williams (1954)	116 JSOs 126 Delinquents	Unspecified “clinical study”	To age 16	Reappearance in juvenile court	3% 0%	40% 55%
Becker (1990)	52 Treatment Completers	6 mos. group & covert sensitization, satiation, social skills training, relapse prevention.	1 year post-treatment	Referral or Self-Report	10%	
Becker & Abel (1985)	106 Child Molesters	Covert sensitization, sex education, cognitive restructuring, social skills/assertiveness training	6 mos. (n=52)a 12 mos. (n=32)b	Referral or Self-Report	10% a 24% b	
Borduin, Henggeler, Blaske, & Stein (1990)	8 JSOs 8 JSOs	Multisystemic Individual	21 mos. – 4 yrs.	Rearrest	12% 75%	25% 50%
Brannan & Troyer (1991)	53 JSOs 57 Non-SO Delinquents	Residential Adlerian peer group Residential Adlerian peer group	Unspecified – variable length of parole	Felony conviction	2% 0%	32% 16% 34% 16%
Bremer (1990)	149 JSOs	Residential, primarily group	0-8 yrs.	Reoffense	11%	
Doshay (1943)	108 exclusive JSO 148 SO + Non-SO	Brief guilt induction and sex education with family Brief guilt induction and sex education with family	6-12 yrs. 6-12 yrs.	Rearrest	11%	
Elliott (1994)	66 Self-reported “rapists” – nearly all undetected	None	Approx 15 yrs.	Self-report of later “sexual assault”	22%	78%

Table 2. Summary of JSO Recidivism Studies (Continued)

Study	Sample	Treatment	Time Followed	Recidivism Measured	Recidivism Results		
					Sex	Non-Sex	Any
Heinz, Gargaro, & Kelley (1987)	28 Treatment Completers	Residential, primarily group	Unspecified min. 1 yr.	Reoffense	7%		
Kahn & Chambers (1991)	221 JSOs	Multisite specialized	\bar{X} = 20 mos.	Juvenile conviction	8%		45%
Kahn & Lafond (1988)	350 JSOs	Institutional multicomponent group therapy	1 mo. – 6 yrs. post treatment	Juvenile conviction	9%	8%	17%
Lab, Shields, & Schondel (1993)	46 JSOs 109 JSOs	Spec. Cog Groups Multisite generic	0-3 yrs.	Juvenile Reoffense	2% 4%	22% 13%	24% 17%
Lane & Zamora (1984)	16 Juvenile rapists with multiple sex offenses	Institutional Group	Max 1 yr.	Reoffense			12%
Mazur & Michael (1992)	10 JSOs – mostly child molesters	Outpatient Group and Family Therapy; sex education and relapse prevention	6 mos.	Self and parent report of “relapse”	0%		
McConaghy, Blaszczyński, Armstrong, & Kidson (1989)	6 JSOs 39 Adult SOs	Covert sensitization, imaginal desensitization and/or medroxyprogesterone	3-6 yrs.	Reoffense	50% 8%		
Milloy (1994)	59 JSOs in residential facilities 197 non-sex delinquents	70% referred to specialized programs Variable, unspecified	3 yrs.	Reconviction	0% 1%	44% 58%	44% 58%
O’Brien (1990)	200 treatment completers	Outpatient group	Unspecified, variable	Reoffense	6%		

Table 2. Summary of JSO Recidivism Studies (Continued)							
Study	Sample	Treatment	Time Followed	Recidivism Measured	Recidivism Results		
					Sex	Non-Sex	Any
Ryan & Miyoshi (1990)	69 JSOs	Multisite Specialized Treatment, Inpatient & Outpatient	12-30 mos.	Rearrest or Questioned	9%		
Schram, Milloy, & Rowe (1991)	197 JSOs	Multisite – Specialized 40% Outpatient 60% Institutional	5-10 yrs. \bar{X} = 6.8 yrs.	Rearrest Reconviction	12% 10%	51%	63%
Smets & Cebula (1987)	21 JSOs – mostly child molesters	Outpatient Group, most with follow-up individual and/or family therapy	Max 3 yrs. from entry in program	Reoffense	5%		
Smith & Monastersky (1986)	112 JSOs 73% with child victims 63% with prior SO	Group & Family Therapy for “many”	Min. 17 mos.	Rearrest	14%	35%	49%
Song & Lieb (1995)	138 18-20 yr. olds – mostly child molesters	Unspecified Correction Treatment for fewer than half	\bar{X} = 5.7 yrs. Max 7 yrs.	Rearrest felony charges	17%	39%	
Steiger & Dizon (1991)	105 JSOs 388 Violent, non-sex 433 Property	Residential/institutional variable approaches	6.5 yrs.		12% 3% 3%	55% 76% 81%	68% 80% 83%

Treatment was brief with relatively little emphasis placed on the instant offense. Reoffense data were obtained from probation, court, prison, institution, and social service records. These were supplemented by interviews with families, neighbors, and the subjects themselves.

Doshay's presentation of the outcome data was rather convoluted owing to initial misclassification of some offenders. He also had a tendency to jump back and forth between number of *reoffenders* and number of *reoffenses* making it impossible to compute the proportion of youths who reoffended non-sexually either as juveniles or adults. Therefore the entries in Table 2 for non-sex crime are estimates, possibly slight underestimates, of non-sex crime. Still, the sex offense recidivism rate was low. Based on his findings, Doshay considered the various perversions to be "self-curing" and recommended against protracted treatment, criticism, or monitoring. As long as "latent forces of shame and guilt are stimulated into action" youths are unlikely to reoffend. He went on to speculate that adults who commit violent sex offenses are those whose crimes are either undetected or ignored by juvenile authorities. No data are presented in support of this notion.

Specialized treatment was also unavailable in 1954 when Acheson and Williams found that only 3% of 116 male JSOs reoffended sexually through age 16. In fact there is no indication that significant intervention occurred except for those youths (21%) committed to training school. In a study replete with omissions, the sample was among the most inclusive consisting of 90% of all male JSOs appearing in Toronto's juvenile court over a 10-year period. Obviously, sex crime or its detection, was rare at that time since only about a dozen boys were adjudicated annually. Moreover the sample consisted of youths charged with anything from rape to "immorality" to nuisance offenses. While sexual recidivism was practically nil, non-sex offenses were quite prevalent. A random comparison sample of delinquents showed an even higher overall recidivism rate. Follow up occurred only through age 16 and it was not possible to estimate its mean length, variance, or range.

The two aforementioned recidivism studies are biased in the sense that they included offenders whose misconduct was relatively benign by current standards. However, there is no reason to believe that those whose crimes are intrusive or violent are also the most likely to reoffend. On the contrary, nuisance offenders have the highest base rates of sexual offending (Abel et al., 1987). Therefore one cannot simply dismiss the low sexual recidivism rates as a product of sampling bias. Neither is this author convinced that the low rates are due to inadequate record keeping. If there is any historical variable operating to suppress relapse rates, it is a relatively low detection/apprehension rate for sex offenses.

There have been only two multiple-group studies with a fixed-length follow-up period. Steiger and Dizon (1991) compiled criminal reconviction data for all males released from Washington State Juvenile Residential Facilities in 1982. During the ensuing six and a half years, sex offenders were twice as likely to desist than either non-sex violent offenders or property offenders. The JSOs were four times as likely to commit another sex crime, but still only 12.4% reoffended in this manner. As in most other studies, those JSOs who failed did so in a manner that was neither sexual nor violent. It is important to note that while the proportion of failures was 80% across the three groups, the actual rate of offending during follow-up was much lower than the rate prior to commitment. Moreover, sex offenders offended at only about 60% of the rate for the other two groups. No information was

provided about the length and/or nature of any clinical treatment. However in 1982 specialized programs for JSOs were extremely rare. There were several methodological advantages of this study: (a) the inclusiveness of the sample; (b) the fixed length of the follow-up period; (c) the use of multiple recidivism measures (although only reconvictions are reported in Table 2); and (d) cross-tabulation of both prior- and post-release offense types. Despite these strengths, the authors are on shaky ground in concluding that confinement was responsible for an overall decrease in the rate of crimes committed by members of all three groups. Perhaps this interpretation is valid, however there was no statistical accommodation for the well established phenomenon that delinquency decreases beginning at about age 17, the modal age of the sample at the time of release.

The second multiple-group study with a fixed-length follow-up period was also conducted in Washington (Milloy, 1994). For three years this investigator tracked 59 mixed JSOs who had been released from residential facilities along with 197 non-sex delinquents who had been similarly committed. By the end of the follow-up period, none of the JSOs was re-convicted of a subsequent sex offense, 18% reoffended in a violent, non-sexual fashion, and 37% in a non-violent manner. The corresponding failure rates for the delinquent comparison youths were 0.5%, 21% and 55%. There were a number of pre-existing differences between the two groups which might account for the higher overall recidivism rate among non-sex offenders. Delinquents had more academic problems, less work experience, more drug and alcohol use and more prior convictions. Also complicating interpretation of failure rates was a lack of information about the amount and type of clinical treatment provided to either JSOs or their delinquent counterparts. Seventy percent of the JSOs were earmarked for offense-specific treatment, but it is not clear how many boys actually received it or any other recommended components devoted to family problems, anger, social deficits, child victimization and sex education. While differential clinical *needs* of JSOs and delinquents were documented, nothing about implementation appears in the report. As a consequence, about all that can be concluded is that neither JSOs nor delinquents are likely to reoffend sexually, and that both groups showed a pattern of generalized delinquency prior to and following placement. Despite Milloy's contention that there is no basis for isolating sex offenders for either clinical or management purposes, her results provide only indirect support for this stance. This study was not an experimental test of treatment efficacy for either JSOs or delinquents. Neither was there any attempt to compare outcomes for JSOs who were segregated, and receiving specialized treatment, from those who were not. Still, the results are quite consistent with those obtained by Atcheson and Williams forty years earlier.

Song and Lieb (1995) recently gathered recidivism data on 1,373 adult males convicted of a felony sex offense in Washington State. Fewer than half the offenders received any sort of treatment while in prison. Follow up was a maximum of seven years following release from closed custody, with an average time "at risk" of 5.7 years. For those 132 young men who were sentenced prior to their 21st birthday (79% of whom were child molesters), 17% were later rearrested for sex offense, 15% for a non-sexual violent offense, and 24% for another felony (usually property crime).⁸ Survival analyses

⁸ Of the 104 child molesters, 17 (16%) had at least one sex rearrest. Six of the 28 rapists (21%) were rearrested for a sex crime.

yielded *estimated* rearrest rates at the seven year mark of 23%, 18%, and 33% respectively. Unfortunately, estimates based on so small a sample are very unstable, yielding confidence intervals that are quite large. To illustrate, the seven year estimated failure rate using a sex rearrest criterion lies somewhere between 18-30% which is a very wide range.⁹ The confidence intervals for violent, non-sex offenses (12-27%) and other felonies (25-42%) are even larger. It is worth noting that young men arrested prior to age 20 were far more likely to be rearrested than older offenders. This held true regardless of offense category.

Despite hundreds of programs for JSOs, there has been only one controlled evaluation of treatment. Borduin et al. (1990) randomly assigned 16 mixed JSOs to either multi-systemic (MST) or individual therapy (IT), both of which were delivered on an outpatient basis. The former consisted of cognitive restructuring, family intervention, school intervention, and social skills training. Individual therapy addressed the same deficits but without direct systems intervention or specific skill training. The active treatment phase lasted one to seven months for youths receiving MST and three to nine months for their IT counterparts. Follow-up varied from a minimum of twenty-one months to a maximum of four years. State and local law enforcement and court records showed that only one of eight MST youths was rearrested for a sex crime compared to six (of eight) IT youths. The corresponding numbers for non-sex crimes were two and four, respectively. Differences in the percentage of sexual recidivists and in the number of sex offenses were statistically significant. While this is an encouraging finding for proponents of MST, this study does suffer from a small sample size, failure of the authors to assess (or report) pre-treatment comparability of groups, and no noted attempt to track subjects who may have moved away during the follow-up phase. The authors acknowledge the limitations of the study and are to be commended for having conducted the first and only randomized outcome evaluation of JSO treatment. Why there has been no replication of this study (by anyone) is incomprehensible.

Uncontrolled studies of either single or combined programs constitute the remainder of JSO clinical outcome research. Most striking are the low rates of sexual reoffending and the fact that so few studies have been conducted given the notoriety of sexual aggression.

Kahn and Chambers (1991) evaluated outcomes for 221 JSOs in Washington who had received specialized treatment in one of eight outpatient or two institutional programs. The authors noted that only 25% of youths actually completed all phases of their treatment due chiefly to lengthy waiting lists coupled with very short-term probation or parole. A statewide juvenile justice information system was tapped for information on reconvictions. Average length of time at-risk was 20 months with an unspecified but presumably wide range and large variance. Nearly half of the youths were reconvicted, 7.5% for sex offense and another 6.6% for a violent offense. As in most other JSO recidivism studies, the bulk of subsequent crimes were misdemeanors and property-related felonies.

⁹ Even with so large a confidence interval there remains a .05 probability that the true sex offense rearrest percentage lies outside it. In fairness to the authors, they were concerned with adult perpetrators only a small fraction (10%) of whom were between the ages of 18-20 when sentenced. Estimated reoffense rates were more stable for older age groups since they contained many more subjects. The authors are to be commended for utilizing survival analysis, a method used in only a handful of sex offender recidivism studies.

This is only one of two studies in which an attempt was made to identify characteristics of recidivists. Owing to low variance in the sex-reoffense criterion measure, only two reliable predictors were derived: use of verbal threats (as opposed to no threats), and blaming the victim. Therapist-rated deviant arousal was also associated with sexual reoffending, but not conclusively. Predictors of overall recidivism were, not surprisingly, age at first sex offense, prior conviction (of any type) and diversion in lieu of adjudication.

Schram et al. (1991) gathered rearrest and reconviction data on 197 male JSOs five to ten years after discharge from ten specialized treatment programs. About 60% of youths had been committed to institutions. The other 40% were treated in the community. No information was provided about the proportion of youths completing treatment or even receiving minimal exposure to it. Characteristics of sexual reoffenders were (a) deviant sexual arousal, (b) truancy, (c) cognitive distortions, and (d) a prior conviction for a sex crime. Only 12.2% of the entire sample was rearrested for a sex crime.¹⁰ Subjects were far more likely to be apprehended for a non-sex offense; indeed, 51% of them were. That the sex offense recidivism rate was relatively low might mean that specialized treatment is quite effective. Alternatively, one could argue that, with an overall 63% failure rate (based on arrests), these programs missed the boat because they were specialized. Of course, the absence of any viable standard of comparison makes it impossible to say anything about the impact of these programs, a conclusion proffered by the authors themselves.

Becker and Abel (1985) and Becker (1990) reported on two overlapping samples of outpatients, the vast majority of whom were child molesters. Perhaps the most noteworthy aspect of this study is the multifaceted nature of the clinical intervention. However comprehensive other treatments appear, they are verbally mediated, meaning that whatever changes are deemed necessary can be achieved via talk therapy. Supplementing the usual psychoeducational and cognitive components were behavioral methods for reducing deviant arousal and bona fide heterosocial / heterosexual skills training. The 10% sex offense recidivism rate appears fairly low, although it applies solely to program completers (Becker, 1990). No data are presented with respect to attrition, outcomes for dropouts, or non-sex offenses. These omissions are conspicuous although no more so than those in other studies. Interpreting the percentages reported in the earlier study (Becker & Abel, 1985) is difficult since only about half the boys consented to be interviewed six months after treatment, and less than a third at the one year mark. No formal records check was conducted in either study.

Lab, Shields, and Schondel (1993) evaluated a court-based JSO program using a sample of 155 consecutive referrals. Forty-six youths were assigned to a specialized court program consisting of 20 weekly group sessions devoted to cognitive restructuring, supplemented by an unspecified amount of family and individual therapy. Depicted as specifically tailored to sexual aggression, youths were exposed to elements common to most JSO programs. The remaining 109 youths were assigned to a variety of generic programs based in outpatient clinics, group homes, or institutions. The death knell from a scientific perspective is group assignment based on community risk factors. Those youths who were considered low and medium risk were earmarked for specialized treatment; high risk youth comprised a non-equivalent control group. Probably the most surprising finding in the entire

¹⁰ Almost all rearrests resulted in a reconviction.

study was the failure of the risk matrix (Ross & Loss, 1991) to differentiate the two groups, even though it was used to form them. Either the matrix was used improperly, lacks reliability, generated scores that were simply ignored, or most boys were at equal risk. The authors contend that aside from racial differences the two groups were essentially equivalent, even though they weren't supposed to be. The recidivism data are almost as puzzling. Only one boy (2.2%) in a specialized program committed a subsequent sex offense, whereas four (3.7%) of the controls did. The corresponding figures for non-sex offenses were 22% and 13% respectively. Differences between groups were not significant. Certainly, this study provides no evidence that specialized treatment reduces recidivism, but it is replete with flaws: an unspecified and presumably brief follow-up period, non-equivalent time at risk (owing to institutionalization of some controls), a preponderance of trivial offenses, unidentified sources of reoffense data, and so forth. It is precisely the kind of study that leads some people to conclude that treatment is ineffective when in fact the methodology is so poor it is impossible to conclude anything.

Brannon and Troyer (1991) compared 53 mixed JSOs (i.e., red and green apples) with a random sample of delinquents (i.e., oranges), all of whom were committed to the same residential program. JSOs received an average of 12.4 months of treatment compared to 7.9 months for control youths. Treatment was described as an Adlerian peer group milieu with an emphasis on self-disclosure, accountability, altruism, problem-solving, and lifestyle changes. Reconviction data were obtained exclusively from parole officers. The follow-up period corresponded to each individual's time on parole. No information about the actual length was provided. Thirty-four percent of the JSOs and 15.8% of the garden-variety delinquents were reconvicted while on parole. Probably the only useful finding was that only one JSO was violated due to a sex offense. Property crimes accounted for the bulk of reoffenses for both groups as they have in other studies.

A highly unorthodox comparison was made by McConaghy, Blaszcynski, Armstrong and Kidson (1989) who reported outcomes for six JSOs: two homosexual pedophiles, a heterosexual pedophile, two fetishists and an exhibitionist. Boys ranged in age from 14-19 and received one or more of the following treatments: covert sensitization, imaginal desensitization, or medroxyprogesterone. Follow-up ranged from 3-6 years. Three of the six JSOs were charged with a subsequent sex crime. However, it would appear that no actual law enforcement records were checked; self- and third-party reports of "new charges" served as the criterion measure. No information about non-sex offenses was provided. The authors then went on to compare the failure rate of the six mixed JSOs to that of 39 adult sex offenders whose diagnoses also varied widely. The appropriateness of this comparison was undermined by a very small sample of JSOs, heterogeneity of diagnoses, differential treatment, non-equivalent follow-up intervals and differential access to clients and collateral contacts. Nonetheless, the authors concluded that adolescents are more likely to relapse than are adult sex offenders and actually conducted a statistical test ostensibly authenticating the difference. While it may be true that JSOs are relatively resistant to the three treatments utilized in the study, the authors go well beyond the data in concluding this or anything else about recidivism of JSOs.

Twenty-one JSOs who received group therapy were followed by Smets and Cebula (1987) for up to three years from their dates of admission. Two-thirds continued in individual or family therapy after being discharged from the group. Most subjects had child victims, about half of which were

intrafamilial. Treatment emphasized self-disclosure, group process, appropriate and abusive sexuality, fantasy content, personal victimization, and a generic form of relapse prevention. In what really amounts to a program description, the authors did note that one boy reoffended sexually. No information is given about the definition of a reoffense, data source, or distribution of follow-up intervals. The small sample is a problem and since there really is no reference group, the low recidivism rate of 5% is probably more impressive to the program staff than to the discerning reader.

Ten mixed JSOs who participated in a four month outpatient program were tracked for six months following discharge by Mazur and Michael (1992). Comprised largely of child molesters, this clinical sample received sex education, sexual communication training (which included their parents), and a healthy dose of relapse prevention. An adult victim and perpetrator made separate presentations, the former to promote empathy and the latter to underscore the necessity of lifelong self-regulation. Based exclusively on youth and parent report of “relapse” all ten boys remained offense free, at least with respect to sexual misconduct. Presumably a check of law enforcement or court files would not have yielded unreported offenses. Obviously the sample was very small, the length of follow up short, and assessment of non-sex offenses either overlooked or undocumented.

Overlapping samples of boys treated at the Hennepin County Home School in Minnesota yielded sex reoffense rates of 7% (Heinz, Gargaro, & Kelley, 1987) and 11% (Bremer, 1990). This highly regarded program relies upon a combination of group and family therapy. Heavy emphasis is placed on motives for sexual acting out, interpersonal problem solving, human sexuality, abandoning defenses, personal victimization, empathy and bonding with others. In the latter of the two recidivism studies, follow-up data were obtained for only 52% of youths. No explanation for this was given, nor was there any information about the pretreatment comparability of the two groups (i.e., those for whom follow-up records were obtained and those for whom none were available).

The Program for Healthy Adolescent Sexual Expression (PHASE) also in Minnesota, claims a sex offense recidivism rate of only 6% based on 200 program completers. No information was given about the composition of the sample, the proportion of dropouts, length of follow-up, or non-sex crime. It is noteworthy that half the boys who reoffended did so prior to graduating (O'Brien, 1990).

Knopp (1982) described the institutional program at Echo Glen Children's Center in Washington. Treatment consisted primarily of group therapy devoted to empathy, sex-role stereotyping, assertiveness, substance abuse and academics. Of 80-90 boys paroled at the time of the report, four were known to have been violated on sex charges and nine others on non-sex charges. Once a youth turned 18, no data were gathered. The mean length of the follow-up interval was not reported. An updated appraisal of outcomes for 350 Echo Glen parolees was conducted by Kahn and Lafond (1988). By then the treatment program had been extended to include strategies for combating denial, controlling anger, dating, managing leisure time and reducing deviant sexual arousal. No details were given about the source of recidivism data, although in a later article (Kahn & Chambers, 1991) the criterion measure was defined as a juvenile reconviction, documentation of which was obtained from a statewide data bank. The length of the follow-up interval was expressed only as a range. Seventeen percent of youths reoffended, about half sexually. The most noteworthy finding is the low rate of non-sex crime following discharge. Indeed, this is the only study in which sexual recidivists

outnumbered their non-sexual counterparts. However, the authors classified a recidivist on the basis of his first reoffense; no mention was made of youths who committed both sex and non-sex crimes during follow-up. Also suppressing the rate of non-sex recidivism might have been the relatively stringent (and insensitive) reconviction criterion.

Proponents of JSO treatment point to recidivism rates of 35-80% of convicted adult sex offenders who have been imprisoned, presumably without treatment (Heinz, Ryan, & Bengis, 1991). There are no corresponding data for adolescents. Only Elliott (1994) followed JSOs who did not receive clinical treatment of some sort. His sample is unique in another way as well, since virtually no one had been arrested for the initial (self-reported) sexual assault. Absence of either judicial or clinical intervention would presumably lead one to expect a very high recidivism rate. That was certainly the case for non-sex offenses. Indeed, 78% of self-identified JSOs disclosed a subsequent non-sex felony in the year of the first reported sexual assault or thereafter. Whether the 22% figure for sex assault recidivism is fairly accurate or a gross underestimation is impossible to say, but it seems plausible given the restricted number of acts that a respondent might construe as “assaultive.” Since most JSOs are known to offend against children, and most molestation is coercive rather than assaultive, the overall sex crime recidivism rate for Elliott’s sample could be much larger. And, of course, inclusion of nuisance sex offenses would further inflate this figure.

Synthesis of Findings and Issues

The recidivism studies cited herein raise at least as many questions as they provide answers. Taken together, there emerge only two clear conclusions with respect to criminal outcomes. First, most boys who sexually abuse younger children do not reoffend, at least not sexually, during the 5-10 years following apprehension. Despite near exclusive reliance on law-enforcement records, it is inconceivable that the majority of adolescent child molesters actually revert prior to their twenties. Thereafter, there are too few data to speculate. Second, there exists at least a fair likelihood that JSOs will subsequently come to the attention of police for non-sex offenses. In most studies where both sex and non-sex offenses were reported, the latter rate was at least twice as high.

One would expect a variety of more detailed conclusions emanating from a set of nearly two dozen studies, but only a few of these contained comparison groups or utilized a relatively homogeneous sample of JSOs. On the basis of those that did, a number of tentative conclusions can be drawn. It appears that JSOs whose only offenses are sexual in nature are less inclined to reoffend non-sexually. JSOs who have been institutionalized are more likely to reappear in court than those who have not. JSOs are somewhat less likely than non-sex-offending delinquents to commit a new offense, although the difference is neither striking nor consistent across studies. Internal evaluations conducted by treatment program administrators tend to yield the lowest rates of both sex and non-sex crime. These also tend to have shorter follow-up intervals than studies commissioned by state agencies. Again, the differences are neither striking nor entirely consistent. It is noteworthy that nearly one-third of the studies were conducted in the state of Washington, including a disproportionate share of those with a long follow-up interval.

Nothing can be ascertained about the relative likelihood of recidivism among JSOs with male child victims, female child victims or peer victims. Similarly, little has been reported on differential outcomes for first-time vs. repeat JSOs. And, as stated earlier, there are precious few data on adult outcomes for clinical, let alone representative, samples of JSOs.

Whether clinical intervention prevents future sex or non-sex crime remains unknown. Based on the results to date, there are major assumptions that should be subjected to scientific scrutiny. For example, the prevailing view is that early clinical intervention is needed to break the cycle of sexual deviance, and that intervention should take the form of lengthy, offense-specific, peer-group therapy. There is not a shred of scientific evidence to support this stance. On the contrary, the only experimental evidence of therapeutic efficacy derives from a more general, delinquency-oriented approach (Borduin et al., 1990). By the same token, there exist no data to promote a more heavy-handed correctional orientation. Granted, there is growing support for community notification, prohibiting expunction of criminal records, remanding juveniles to criminal court, and paying restitution to victims. Yet there is nothing that shows such practices will deter youths from committing sex crimes or reduce recidivism among existing JSOs.

Recommendations

1. In the absence of a proven method for assessing risk, it makes sense to first isolate those measures that differentiate reoffenders from those who (allegedly) have abstained from sexual misconduct. Schram et al. (1991) have already identified four such characteristics. This study needs to be systematically replicated by extending the follow-up interval and number of constructs evaluated.

The first step in such a retrospective study is to form a sample for which the follow-up is at least ten years. The second step is to refine the criterion measures, a difficult task given the limitations of retrospective research. If at all possible, official abstainers should be administered a confidential polygraph examination which focuses on reoffending. Individuals who refuse to be examined, who reveal undetected offenses in a pre-test or post-test interview, or who fail the examination should be (a) excluded, (b) treated as a separate group, or (c) be added to the group of known recidivists as per Prentky and Knight (1993). The purpose of this is to “purify” the group of abstainers, thereby increasing the validity of the dependent (criterion) variable(s). Then, characteristics which discriminate among recidivists and non-recidivists should be identified.

2. There need to be well-designed, prospective intervention studies of JSOs who are at high risk to reoffend. Specifically, the promising multisystemic approach espoused by Borduin et al. (1990) should be evaluated using a much larger sample, longer follow-up, and broader range of criteria. Other effective delinquency-oriented approaches should also be evaluated since the likelihood of non-sexual reoffending is relatively high among JSOs. Perhaps such approaches should be pitted against “offense-specific group therapy” promoted by the National Adolescent Perpetrator Network.

3. The previous recommendation in no way implies that state-of-the-art JSO treatment is inadequate. In fact, because it has barely been evaluated itself, there really must be randomized outcome studies of existing programs. These studies do not necessarily require a no-treatment condition. Other alternatives include (a) less-intensive treatment comparisons, (b) clinical intervention vs. intensive probation, and (c) one series of therapeutic components vs. another. Surely other design possibilities exist as well.

4. As is the case in descriptive research, recidivism studies must include samples that are either homogeneous or sufficiently large and well-defined to allow partitioning. It would be preferable to drop a few subjects from the analysis rather than include them thereby relegating the entire group to “mixed” status.

5. Research must focus more on the environment to which institutionalized JSOs return. Measures tapping this dimension should be correlated with recidivism measures and tested in models predicting relapse.

6. Similarly, investigators must attempt to establish the role of stable heterosexual relationships and employment in preventing both sexual and non-sexual recidivism.

7. Because psychopathy has proven to predict recidivism in incarcerated adult sex offenders, this characteristic should be assessed in JSOs who serve as subjects in outcome studies.

CONCLUSION

The body of literature on JSOs is about as extensive and sophisticated as it was on delinquents in the late 1960s and early 70s when policy was dictated by a combination of increased social consciousness, cultural sensitivity, and highly publicized and sometimes radical treatments. What’s followed in the two decades since has been a fairly concerted effort to identify developmental paths to delinquency and to evaluate various prevention and treatment strategies. When taken as a whole, studies of etiology and treatment efficacy have helped guide policy with respect to delinquents—not that the impact has been striking—but there does seem to be at least some connection between what researchers have unearthed and what is happening in communities, courts, and programs. This is not yet the case in the realm of juvenile sexual aggression.

Unless many of the recommendations in this paper are followed, the balance of research on juvenile sexual aggression will likely shift from psychology to criminology. The groundswell of support that launched so many JSO treatment programs will eventually die out for want of data on effectiveness. With specialized programs shrinking, so too will be the pool of easily accessible research participants. Accessibility usually translates into fewer studies, especially in a field where grant support has been minimal. Clinical research will be hit the hardest, but taxonomic and etiological work will also slow appreciably, which is difficult to imagine given the current pace. Juvenile corrections will take on more responsibility and archival data will achieve greater importance, which given the state of large data bases, is a disquieting thought indeed. After all, there still exists no measure remotely indicating just how much sex crime is committed by juveniles in any jurisdiction.

Much of this scenario is based on trends observed in the adult sex offender domain. There have been only a few quality evaluations of sex offender treatment (Marshall, Jones, Ward, Johnston, & Barbaree, 1991; Marshall, 1993) and only one in which subjects were randomly assigned (Marques, Day, Nelson & Miner, 1989). The results are mixed at best (Quinsey, Harris, Rice & Lalumiere, 1993). Since societal problems like sexual violence remain “hot topics” for only 5-10 years, state legislators charged with making funding decisions are becoming increasingly skeptical and impatient (Breiling, 1995). Some very prominent institutional programs have recently been eliminated (e.g., Atascadero (CA) State Hospital; North Florida Evaluation & Treatment Center; Oregon State Hospital; Western (WA) State Hospital), and others are in jeopardy. Where the influence of mental health administrators is waning, corrections officials are playing a larger role. As a growing percentage of sex offenders are processed exclusively within the purview of the criminal justice system, empirical research will decrease, at least the rate at which studies are mounted. For example, in the past five years not a single randomized field evaluation of sex offender treatment has been initiated, either outpatient or institutional, juvenile or adult, in a mental health or correctional setting. While other areas of sex offender research have remained relatively active, the warning signs are visible and the Association for Treatment of Sexual Abusers (ATSA) is concerned (Jensen, 1995).

ATSA should translate its concern into action along the following lines: First, it should attempt to merge with the National Adolescent Perpetrator Network. This would provide advocates of JSO research and treatment with a single, and presumably louder voice. Second, and probably most important, ATSA must lobby vigorously for more research dollars. For reasons already detailed in the Introduction, ATSA is the only entity truly advocating more research on the perpetrators of sexual violence. In concert with the National Institute of Mental Health and the Department of Justice, ATSA should develop research initiatives to attract proposals that are competitive. As part of this effort, there should be some provision to provide applicants with technical assistance. ATSA should also seek government and private support to produce educational materials to be used in undergraduate classes in psychology and sociology. At the graduate and post-graduate level there should be fellowships awarded for pursuit of a research career devoted to JSOs or to the measurement of sexual aggression. Third, ATSA must encourage established investigators to mount a longitudinal evaluation of JSO treatment along the lines of the recommendations made earlier. Perhaps the Association could even provide seed money as an inducement to generate proposals. The theme underlying these general recommendations to ATSA and its members is to strike while the iron is hot. Once it cools, there needs to be something firm to stand on.

REFERENCES

- Achenbach, T.M., & Edelbrock, C. (1986). *Manual for the TRF and teacher version of the Child Behavior Profile*. Burlington, VT: Department of Psychiatry, University of Vermont.
- Acheson, J.D., & Williams, D.C. (1954). A study of juvenile sex offenders. *American Journal of Psychiatry*, *111*, 366-370.
- Abel, G.G., Becker, J.V., Mittelman, M.S., Cunningham-Rathner, J., Rouleau J.L., & Murphy, W.D. (1987). Self-reported sex crimes of nonincarcerated paraphiliacs. *Journal of Interpersonal Violence*, *2*, 3-25.
- Abel, G.G., Mittelman, M.S., & Becker, J.V. (1985). Sexual offenders: Results of assessment and recommendations for treatment. In H. Ben-Aron, S.I. Hucker, C.D. Webster (Eds.), *Clinical Criminology* (p. 191-205). Toronto, Canada: M.M. Graphics.
- Ageton, S. (1983). *Sexual assault among adolescents*. Lexington, MA: Lexington Books.
- Awad, G.A., & Saunders, E.B. (1989) Male adolescent sexual assaulters. *Journal of Interpersonal Violence*, *6*, 446-460.
- Awad, G.A., Saunders, E.B., & Levene, J. (1984). A clinical study of male adolescent sexual offenders. *International Journal of Offender Therapy and Comparative Criminology*, *28*, 105-116.
- Barbaree, H.E., Marshall, W.L., & Hudson, S.M. (Eds.). (1993). *The juvenile sex offender*. New York, NY: Guilford.
- Barbaree, H.E., Hudson, S.M., & Seto, M.C. (1993). *The juvenile sex offender*. New York, NY: Guilford.
- Becker, J.V. (1990). Treating adolescent sexual offenders. *Professional Psychology Research and Practice*, *21*, 1-4.
- Becker, J.V., & Abel, G. (1985). Methodological and ethical issues in evaluating and treating adolescent sex offenders. In E.M. Otey & G.D. Ryan (Eds.), *Adolescent Sex Offenders: Issues in research and treatment*, (pp. 109-129). Department of Health and Human Services (Publication No. ADM-85-1396). Rockville, MD: NIMH.
- Becker, J.V., Cunningham-Rathner, J., & Kaplan, M.S. (1986). Adolescent sexual offenders: Demographics, criminal and sexual histories, and recommendations for reducing future offenses. *Journal of Interpersonal Violence*, *1*, 431-445.

-
- Becker, J.V., Harris, C.D., & Sales, B.D. (1993). Juveniles who commit sexual offenses: A critical review of research. In G.C. Nagayama Hall, R. Hirschman, J.R. Graham, & M.S. Zaragoza (Eds.), *Sexual aggression: Issues in etiology, assessment, treatment, and policy*, (pp. 215-228). Bristol, PA: Taylor & Francis.
- Becker, J.V., Hunter, J.A., Stein, R.M., & Kaplan, R.S. (1989). Factors associated with erection in adolescent sex offenders. *Journal of Psychopathology and Behavioral Assessment*, *11*, 353-362.
- Becker, J.V., & Kaplan, M.S. (1988). The assessment of adolescent sexual offenders. *Advances in Behavioral Assessment of Children and Families*, *4*, 94-118.
- Becker, J.V., Kaplan, M.S., & Kavoussi, R. (1988). Measuring the effectiveness of treatment for the aggressive adolescent sexual offender. *Annals of the New York Academy of Sciences*, *528*, 215-222.
- Becker, J.V., Kaplan, M.S., & Tenke, C.E. (1992). The relationship of abuse history, denial and erectile response profiles of adolescent sexual perpetrators. *Behavior Therapy*, *23*, 87-97.
- Becker, J.V., Kaplan, M.S., Tenke, C.E., & Tartaglino, A. (1991). The incidence of depressive symptomatology in juvenile sex offenders with a history of abuse. *Child Abuse and Neglect*, *15*, 531-536.
- Becker, J.V., & Stein, R.M. (1991). Is sexual erotica associated with sexual deviance in adolescent males? *International Journal of Law and Psychiatry*, *14*, 85-95.
- Becker, J.V., Stein, R.M., Kaplan, M.S., & Cunningham-Rathner, J. (1988). *Follow-up study of adolescent sex offenders seen at an outpatient treatment clinic*. Paper presented at the 22nd annual convention of the Association for the Advancement of Behavior Therapy, New York.
- Benoit, J.L. & Kennedy, W.A. (1992). The abuse history of male adolescent sex offenders. *Journal of Interpersonal Violence*, *7*, 543-548.
- Bischof, G.P., Stith, S.M., & Wilson, S. (1992). A comparison of the family systems of adolescent sexual offenders and non-sexual offending delinquents. *Family Relations*, *41*, 318-323.
- Bischof, G.P., Stith, S.M., & Whitney, M.L. (1995) Family environments of adolescent sex offenders and other juvenile delinquents. *Adolescence*, *30*, 157-170.
- Blaske, D.M., Borduin, C.M., Henggeler, S.W., & Mann B.J. (1989). Individual, family, and peer characteristics of adolescent sex-offenders and assaultive offenders. *Developmental Psychology*, *25*, 846-855.

-
-
- Borduin, C.M., Henggeler, S.W., Blaske, D.M., & Stein R.J. (1990). Multisystemic treatment of adolescent sexual offenders. *International Journal of Offender Therapy and Comparative Criminology*, 34, 105-113.
- Brannon, J.M., & Troyer, R. (1991). Peer group counseling: A normalized residential alternative to the specialized treatment of adolescent sex offenders. *International Journal of Offender Therapy and Comparative Criminology*, 35, 225-234.
- Breiling, J. (1995). *Developing and implementing a science knowledge base: A juvenile sex offenders clinical research network initiative*. A paper presented at the Eleventh National Training Conference of the National Adolescent Perpetrator Network.
- Bremer, J. (1990). Personal communication to F.H. Knopp. In F.H. Knopp, *The youthful sex offender: The rationale and goals of early intervention and treatment*. Brandon, VT: Safer Society.
- Brownmiller, S. (1975). *Against our will: Men, women, and rape*. New York: Simon & Schuster.
- Bureau of Justice Statistics. (1989). *Correctional populations in the United States, 1987* (NCJ 118762). Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.
- Carpenter, D.R., Peed, S.F., & Eastman, B. (1995). Personality characteristics of adolescent sexual offenders: A pilot study. *Sexual Abuse*, 7, 195-203.
- Chambers, H. (1993). *Snohomish County Juvenile Sex Offender Treatment Program policy statement on the use of polygraph in treatment of juvenile sex offenders*. Everett, WA: Snohomish County Juvenile Department.
- Chappell, D. (1989). Sexual criminal behavior. In N. A. Weiner & M. E. Wolfgang (Eds.), *Pathways to criminal violence* (p. 68-108). Newbury Park, CA: Sage Publications.
- Daleiden, E., Kaufman, K.L., Hilliker, D.R., & O'Neil, J.N. (1995). *The sexual histories and fantasies of adolescents: A multi-sample comparison*. Poster presented at the annual convention of the Association for the Treatment of Sexual Abusers, New Orleans, LA.
- Davis, G.E., & Leitenberg, H. (1987). Adolescent sex offenders. *Psychological Bulletin*, 101, 417-427.
- Deisher, R.W., Wenet, G.A., Paperny, D.M., Clark, T.F., & Fehrenbach, P.A. (1982). Adolescent sexual offense behavior: The role of the physician. *Journal of Adolescent Health Care*, 2, 279-286.
- Doshay, L.J. (1943). *The boy sex offender and his later career*. New York: Grune & Stratton.

-
-
- Dunford, F.W., & Elliott, D.S. (1984). Identifying career offenders using self-reported data. *Journal of Research in Crime and Delinquency*, 21, 57-86.
- Elliott, D.S. (1994). *The developmental course of sexual and non-sexual violence: Results from a national longitudinal study*. Paper Presented at the 13th Annual Research and Treatment Conference of the Association for the Treatment of Sexual Abusers, San Francisco, CA.
- Elliott, D.S., Huizinga, D., & Ageton, S.S. (1985). *Explaining delinquency and drug use*. Beverly Hills, CA: Sage Publications.
- Empey, L.T. (1982). *American delinquency: Its meaning and construction*. Homewood, IL: Dorsey.
- Emerick, R.L. (in press). *Providers manual of treatment of sexual offenders*. Beverly Hills, CA: Sage Publications.
- Emerick, R.L., & Dutton, W.A. (1993). The effect of polygraphy on self report of adolescent sex offenders: Implications for risk assessment. *Annals of Sex Research*, 6, 83-103.
- Fagan, J., & Wexler, S. (1988). Explanations of sexual assault among violent delinquents. *Journal of Adolescent Research*, 3, 363-385.
- Farber, E.D., Showers, J., Johnson, C.F., Joseph, J.A., & Oshins, L. (1984). The sexual abuse of children: A comparison of male and female victims. *Journal of Clinical Child Psychology*, 13, 294-297.
- Farrell, K., & O'Brien, B. (1988). *Sexual offenses by youth in Michigan: Data implications and policy recommendations*. Report to the Michigan Legislature. Detroit, MI: Safer Society Resources of Michigan.
- Federal Bureau of Investigation. (1994). *Age-specific arrest rates and race-specific arrest rates for selected offenses, 1965-1992*. Washington, DC: U.S. Government Printing Office.
- Fehrenback, P.A., Smith, W., Monastersky, C., & Deisher, R.W. (1986). Adolescent sexual offenders: Offender and offense characteristics. *American Journal of Orthopsychiatry*, 56, 225-233.
- Finkelhor, D. (1984). *Child sexual abuse: New theory and research*. New York: Free Press.
- Finkelhor, D., & Dziuba-Leatherman, J. (1994). Victimization of children. *American Psychologist*, 49, 173-183.
- Freeman-Longo, R.E., Bird, S., Stevenson, W.F., & Fiske, J.A. (1995). *1994 Nationwide survey of treatment programs and models*. Brandon, VT: Safer Society.

-
- Furby, L., Weinrott, M.R., & Blackshaw, L. (1989). Sex offender recidivism: A review. *Psychological Bulletin, 105*, 3-30.
- Goldstein, M.J., Kant, H.S., & Hartman, J.J. (1973). *Pornography and sexual deviance*. Berkeley, CA: University of California.
- Graves, R.E. (1993). *Conceptualizing the youthful male sex offender: A meta-analytic examination of offender characteristics by offense type*. Unpublished dissertation at Utah State University, Utah.
- Graves, R.E., Openshaw, D.K., Ericksen, S., Jones, K., Timothy, A., & Vogel, M. (1994). *Conceptualizing youthful sex offenders*. Paper Presented at the 10th National Training Conference of the National Adolescent Perpetrator Network, Denver, CO.
- Greer, W.C. (1991). Aftercare: Community integration following institutional treatment. In G. Ryan & S. Lane (Eds.), *Juvenile sexual offending: Causes, consequences, and correction* (pp. 377-390). Lexington, MA: Lexington Books.
- Groth, A.N., Longo, R.E., & McFadin, J.B. (1982). Undetected recidivism among rapists and child molesters. *Crime and Delinquency, 28*, 450-458.
- Groth, A.N., & Loreda, C.M. (1981). Juvenile sexual offenders: Guidelines for assessment. *International Journal of Offender Therapy, 25*, 31-39.
- Heinz, J., Ryan, G., & Bengis, S. (1991). The system's response to juvenile sex offenders. In G. Ryan & S. Lane (Eds.), *Juvenile sexual offending: Causes, consequences, and correction* (pp. 185-198). Lexington, MA: Lexington Books.
- Heinz, J.W., Gargaro, S., & Kelly, K.G. (1987). *A model residential juvenile sex offender treatment program: The Hennepin County Home School*. Brandon, VT: Safer Society.
- Hilliker, D.R., Kaufman, K.L., & Daleiden, E.L. (1995). *The impact of sexual victimization on the modus operandi of adolescent sexual offenders*. Poster presented at the annual conference of the Association for the Treatment of Sexual Abusers, New Orleans, LA.
- Humphrey, J.A., & White, J.W. (1992). *Perpetration of sexual assault: Social psychological predictors*. Paper presented at American Society of Criminology, New Orleans, LA.
- Hunter, J.A., Becker, J.V., Kaplan, M., & Goodwin, D.W. (1991). Reliability and discriminative utility of the Adolescent Cognitions Scale for juvenile sexual offenders. *Annals of Sex Research, 4*, 281-286.
- Hunter, J.A., & Goodwin, D.W. (1992). The clinical utility of satiation therapy with juvenile sexual offenders: Variations and efficacy. *Annals of Sex Research, 5*, 71-80.

-
-
- Hunter, J., & Santos, D. (1990). The use of specialized cognitive-behavioral therapies in the treatment of adolescent sexual offenders. *International Journal of Offender Therapy and Comparative Criminology*, 34, 239-247.
- Hunter, J.A., Goodwin, D.W., & Becker, J.V. (1994). The relationship between phallometrically measured deviant sexual arousal and clinical characteristics in juvenile sexual offenders. *Behavioral Research and Therapy*, 32, 533-538.
- Jacobs, W.L. (1995). *Juvenile delinquents: A between-group comparison study of sex and non-sex offenders*. Paper presented at Annual Convention of the Association for Treatment of Sexual Abusers, New Orleans, LA.
- Jensen, S. (1995). *Personal communication*.
- Kahn, T.J., & Chambers, H.J. (1991). Assessing reoffense risk with juvenile sexual offenders. *Child Welfare*, 70, 333-345.
- Kahn, T.J. & Lafond, M.A. (1988). Treatment of the adolescent sexual offender. *Child and Adolescent Social Work*, 5, 135-148.
- Kavoussi, R.J., Kaplan, M., & Becker, J.V. (1988). Psychiatric diagnoses in adolescent sex offenders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 27, 241-243.
- Kelly, R.J., & Lusk, R. (1992). Theories of pedophilia. In W. O'Donohue & J.H. Geer (Eds.), *The sexual abuse of children: Theory and research* (pp. 168-203). Hillsdale, NJ: Erlbaum.
- Kempton, T., & Forehand, R. (1992). Juvenile sex offenders: Similar to, or different from, other incarcerated delinquent offenders? *Behavior Research and Therapy*, 30, 533-536.
- Knight, R.A. & Prentky, R. (1993). Exploring characteristics for classifying juvenile sex offenders. In H.E. Barbaree, W.L. Marshall & S.M. Hudson (Eds.), *The juvenile sex offender* (pp. 45-79). New York: Guilford.
- Knopp, F.H. (1982). *Remedial intervention in adolescent sex offenders: Nine program descriptions*. New York: Safer Society.
- Knopp, F.H., & Lane, S. (1991). Program development. In G.D. Ryan & S.L. Lane (Eds.), *Juvenile sexual offending: causes, consequences and correction* (pp. 21-37). Lexington, Mass: Lexington Books.
- Knopp, F.H., & Stevenson, W. (1989). *Report on nationwide survey of juvenile and adult sex offender treatment programs and models, 1988*. Orwell, VT: Safer Society.

-
-
- Kobayashi, J., Sales, B.D., Becker, J.V., Figueredo, A.J., & Kaplan, M.S. (1995). Perceived parental deviance, parent-child bonding, child abuse, and child sexual aggression. *Sexual Abuse: A Journal of Research and Treatment*, 7, 25-44.
- Koss, M.P., & Dinero, T.E. (1988). Predictors of sexual aggression among a national sample of male college students. *Annals of the New York Academy of Sciences*, 528, 133-147.
- Lab, S.P., Shields, G., & Schondel, C. (1993). Research note: An evaluation of juvenile sexual offender treatment. *Crime and Delinquency*, 39, 543-553.
- Lakey, J.F. (1994). The profile and treatment of male adolescent sex offenders. *Adolescence*, 29, 755-761.
- Lane, S. (1991). The sexual abuse cycle. In G. Ryan & S. Lane (Eds.), *Juvenile sexual offending: Causes, consequences, and correction* (pp. 103-142). Lexington, MA: Lexington Books.
- Lane, S., & Zamora, P. (1984). A method for treating the adolescent sex offender. In R. Mathias, P. Demuro & R. Allinson (Eds.), *Violent juvenile offenders: an anthology* (pp. 347-363). San Francisco: National Council on Crime and Delinquency.
- Lewis, D.O., Shankok, S.S., & Pincus, J.H. (1979). Juvenile male sexual assaulters. *American Journal of Psychiatry*, 136, 1194-1196.
- Lewis, D.O., Shankok, S.S., & Pincus, J.H. (1981). Juvenile male sexual assaulters: Psychiatric, neurological, psychoeducational, and abuse factors. In D.O. Lewis (Ed.), *Vulnerabilities to delinquency* (pp. 89-105). Jamaica, NY: Spectrum.
- Linz, D., Wilson, B., & Donnerstein, E. (1992). Sexual violence in the mass media: Legal solutions, warnings, and mitigation through education. *Journal of Social Issues*, 48, 145-171.
- Lochman, J.E., & Dodge, K.A. (1994). Social-cognitive processes of severely violent, moderately aggressive and nonaggressive boys. *Journal of Consulting and Clinical Psychology*, 62, 366-374.
- Longo, R.E. (1982). Sexual learning and experience among adolescent sexual offenders. *International Journal of Offender Therapy and Comparative Criminology*, 26, 235-241.
- Longo, R., & McFadin, B. (1981). Sexually inappropriate behavior: Development of the sexual offender. *Law and Order*, 3, 21-23.
- Lundberg-Love, P., & Geffner, R. (1989). Date rape: Prevalence, risk factors, and a proposed model. In M. Pirgo-Good and J. Stets (Eds.), *Violence in dating relationships: Emerging social issues* (pp.169-184). New York: Praeger Publishers.

-
-
- Malamuth, N.M. (1986). Predictors of naturalistic sexual aggression. *Journal of Personality and Social Psychology*, 50, 953-962.
- Malamuth, N.M., & Check, J.V.P. (1983). Sexual arousal to rape depictions: Individual differences. *Journal of Abnormal Psychology*, 92, 55-67.
- Malamuth, N.M., Sockloskie, R., Koss, M.P., & Tanaka, J. (1991). The characteristics of aggressors against women: Testing a model using a national sample of college students. *Journal of Consulting and Clinical Psychology*, 59, 670-681.
- Malamuth, N.M., Heavey, C.L., & Linz, D. (1993). Predicting men's antisocial behavior against women: The interaction model of sexual aggression. In G.C. Nagayama Hall, R. Hirschman, J.R. Graham, & M.S. Zaragoza (Eds.), *Sexual aggression: Issues in etiology, assessment, and treatment* (pp. 63-97). Washington, DC: Taylor & Francis.
- Marques, J.K., Day, D.M., Nelson, C., & Miner, M.H. (1989). The sex offender treatment and evaluation project: California's relapse prevention program. In D.R. Laws (Ed.), *Relapse prevention with sex offenders* (pp. 247-267). New York: Guilford.
- Marshall, W.L. (1993). The treatment of sex offenders: What does the outcome data tell us? A reply to Quinsey, Harris, Rice & Lalumiere. *Journal of Interpersonal Violence*, 8, 524-530.
- Marshall, W.L., Barbaree, H.E., & Eccles, A. (1991). Early onset and deviant sexuality in child molesters. *Journal of Interpersonal Violence*, 6, 323-336.
- Marshall, W.L., & Eccles, A. (1993). Pavlovian conditioning processes in adolescent sex offenders. In H.E. Barbaree, W.L. Marshall & S.M. Hudson (Eds.), *The juvenile sex offender* (pp. 118-142). New York: Delford.
- Marshall, W.L., & Pithers, W.D. (in press). A reconsideration of treatment outcome with sex offenders. *Criminal Justice and Behavior*.
- Marshall, W.L., Jones, R., Ward, T., Johnston, P., & Barbaree, H.E. (1991). Treatment outcome with sex offenders. *Clinical Psychology Review*, 11, 465-485.
- Mazur, T., & Michael, P.M. (1992). Outpatient treatment for adolescents with sexually inappropriate behavior: Program description and six-month follow-up. *Journal of Offender Rehabilitation*, 18, 191-203.
- McConaghy, N., Blaszcynski, A., Armstrong, M.S., & Kidson, W. (1989). Resistance to treatment of adolescent sex offenders. *Archives of Sexual Behavior*, 18, 97-107.
- Menard, S. & Elliott, D.S. (1993). Data set comparability and short-term trends in crime and delinquency. *Journal of Criminal Justice*, 21, 433-445.

-
- Milloy, C.D. (1994). *A comparative study of juvenile sex offenders and non-sex offenders*. Olympia, WA: Washington State Institute for Public Policy.
- Mihalic, S.W., & Elliott, D.S. (1995). *If violence is domestic, does it really count*. Manuscript in review.
- Monastersky, C., & Smith, W. (1985). Juvenile sexual offenders: A family systems paradigm. In E.M. Otey & G.D. Ryan (Eds.), *Adolescent sex offenders: Issues in research and treatment* (DHHS Pub. No. ADM-85-1396, p. 164-183). Rockville, MD: U.S. Department of Health and Human Services.
- Moody, E.E., Brissie, J., & Kim, J. (1994). Personality and background characteristics of adolescent sexual offenders. *Journal of Addictions and Offender Counseling*, *14*, 38-48.
- Muehlenhard, C.L., & Linton, M.A. (1987). Date rape and sexual aggression in dating situations: Incidence and risk factors. *Journal of Counseling Psychology*, *34*, 186-96.
- Murphy, W.D., Haynes, M.R., & Page, I.J. (1992). Adolescent sex offenders. In W. O'Donohue & J.H. Geer (Eds.). *The sexual abuse of children: Clinical issues: Vol. II* (pp. 394-429). Hillsdale, NJ: Erlbaum Associates.
- National Council on Juvenile and Family Court Judges. (1993). The revised report from the National Task Force on Juvenile Sexual Offending, 1993, of the National Adolescent Perpetrator Network. *Juvenile and Family Court Journal*, *44*, 1-120.
- Nichols, H.R., & Molinder, I. (1984). *The multiphasic sex inventory manual*. Tacoma, WA: Nichols & Molinder.
- O'Brien, M. (1990). Personal communication to F.H. Knopp. In F.H. Knopp, *The youthful sex offender: The rationale and goals of early intervention and treatment*. Brandon, VT: Safer Society.
- O'Brien, M. (1994). *Personal communication*.
- O'Brien, M., & Bera, W.H. (1986). Adolescent sexual offenders: A descriptive typology. *Preventing Sexual Abuse: A Newsletter of the National Family Life Education Network*, *1*, 2-4.
- Patterson, G.R., Reid, J.B., & Dishion, R.J. (1992). *Antisocial boys*. Eugene, OR: Castalia.
- Pithers, W.D. (1993). Treatment of rapists: Reinterpretation of early outcome data and exploratory constructs to enhance therapeutic efficacy. In G.C. Nagayama Hall, R. Hirschman, J.R. Graham, & M.S. Zaragoza (Eds.), *Sexual aggression: Issues in etiology, assessment, and treatment* (pp. 167-196). Washington, DC: Taylor & Francis.

-
-
- Prentky, R.A., & Knight, R.A. (1986). Impulsivity in the lifestyle and criminal behavior of sexual offenders. *Criminal Justice and Behavior*, 13, 141-164.
- Prentky, R.A., & Knight, R.A. (1993). Age of onset of sexual assault: Criminal and life history correlates. In G.C. Nagayama Hall, R. Hirschman, J.R. Graham, & M.S. Zaragoza (Eds.), *Sexual aggression: Issues in etiology, assessment, and treatment* (pp. 43-62). Washington, DC: Taylor & Francis.
- Prentky, R.A., Knight, R.A., & Lee, A.F.S. (1994). *A 24 year follow-up of (variably) treated sex offenders: Methodological issues in determining recidivism rates*. Paper presented at the 13th Annual Research and Treatment Conference of the Association for the Treatment of Sexual Abusers, San Francisco, CA.
- Prentky, R.A., Knight, R.A., & Quinsey, V.L. (1990). *Sexual violence*. Review Commissioned by the Panel on the Understanding and Control of Violent Behavior of the National Research Council. Presented in Symposia, Destin, FL.
- Quinsey, V.L. (1984). Sexual aggression: Studies of offenders against women. In D. Weisstub (Ed.), *Law and mental health: International perspectives, Vol 1*. New York: Pergamon.
- 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.
- Rogers, C., & Tremaine, T. (1984). Clinical intervention with boy victims of sexual abuse. S. Greer, & I.R. Stuart (Eds.), *Victims of sexual aggression: Men, women, and children*. New York: Van Nostrand Reinhold.
- Ross, J., & Loss, P. (1991) Assessment of the juvenile sex offender. In G. Ryan & S. Lane (Eds.), *Juvenile sexual offending: Causes, consequences, and correction* (pp. 199-251). Lexington, MA: Lexington Books.
- Rouleau, J., Abel, G.G., Mittelman, M.S., Becker, J.V., & Cunningham-Rathner, J. (1986). *Effectiveness of each component of a treatment program for non-incarcerated pedophiles*. Paper presented at the National Institute of Mental Health Conference on Sex Offenders, Tampa, FL.
- Russell, D.E.H. (1982). The prevalence and incidence of forcible rape and attempted rape of females. *Victimology*, 7, 81-93.
- Russell, D.E.H., & Howell, N. (1983). The prevalence of rape in the United States revisited. *Journal of Woman in Culture and Society*, 8, 688-695.
- Ryan, G., & Lane, S. (Eds.). (1991) *Juvenile sexual offending: Causes, consequences, and correction*. Lexington, MA: Lexington Books.

-
-
- Ryan, G., Lane, S., Davis, J., & Isaac, C. (1987). Juvenile sex offenders: Development and correction. *Child Abuse and Neglect, 11*, 385-395.
- Ryan, G., & Miyoshi, T. (1990). Summary of a pilot follow-up study of adolescent sexual perpetrators after treatment. *Interchange, 1*, 6-8.
- 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.
- Serin, R.C., Malcolm, B.P., Kahanna, A., & Barbaree, H.E. (1994). Psychopathy and deviant sexual arousal in incarcerated sexual offenders. *Journal of Interpersonal Violence, 9*, 3-11.
- Showers, J., Farber, E.D., Joseph, J.A., Oshins, L., & Johnson, C.F. (1984). The sexual victimization of boys: A three-year survey. *Health Values: Achieving High-Level Wellness, 7*, 15-18.
- Smets, A.C. & Cebula, C.M. (1987). A group treatment program for adolescent sex offenders: Five steps toward resolution. *Child Abuse and Neglect, 11*, 247-254.
- Smith, H.E., & Israel, E. (1987). Sibling incest: A study of the dynamics of 25 cases. *Child Abuse and Neglect, 11*, 101-108.
- Smith, W.R. (1988). Delinquency and abuse among juvenile sex offenders. *Journal of Interpersonal Violence, 3*, 400-413.
- Smith, W., & Monastersky, C. (1986). Assessing juvenile sexual offenders' risk for reoffending. *Criminal Justice and Behavior, 13*, 115-140.
- Song, L., & Lieb, R. (1995). *Washington state sex offenders: Overview of recidivism studies*. Olympia, WA: Washington State Institute for Public Policy, Evergreen State College.
- Soothill, K.L., & Gibbens, T.C.N. (1978). Recidivism of sexual offenders. *British Journal of Criminology, 18*, 267-276.
- Steiger, J.C., & Dizon, C. (1991). *Rehabilitation, release and reoffending: A report on the criminal careers of the division of juvenile rehabilitation "Class of 1982"*. Olympia, WA: Juvenile Offender Research Unit, Department of Social and Health Services.
- Walker, C.E. (1970). Erotic stimuli and the aggressive sexual offender. In *Technical reports of the commission on obscenity and pornography*. (Vol. 7). Washington, DC: U.S. Government Printing Office.
- Weinrott, M.R. (1994). *A new clinical package for arousal control of adolescent offenders*. Paper presented at the 13th Annual Research and Treatment Conference of the Association for the Treatment of Sexual Abusers. San Francisco, CA.

-
-
- Weinrott, M.R., & Riggan, M. (1991). *Vicarious sensitization: A new method to reduce deviant arousal in adolescent sex offenders*. Paper presented at annual convention of the American Psychological Association. San Francisco, CA.
- Weinrott, M.R., & Saylor, M. (1991). Self-report of crimes committed by sex offenders. *Journal of Interpersonal Violence, 6*, 286-300.
- Weinrott, M.R., Riggan, M. & Frothingham, S. (1995). *Reducing deviant arousal in juvenile sex offenders using vicarious sensitization*. Manuscript in review.
- Wilson, J.Q., & Herrnstein, R.J. (1985). *Crime and human nature*. New York, NY: Simon & Schuster.
- Worling, J.R. (1995). Adolescent sibling-incest offenders: Differences in family and individual functioning when compared to adolescent non-sibling sex offenders. *Child Abuse and Neglect, 19*, 633-643.
- Worling, J.R. (in press). Sexual abuse histories of adolescent male sex offenders: Differences on the basis of the age and gender of their victims. *Journal of Abnormal Psychology*.
- Yochelson, S., & Samenow, S. (1976). *The criminal personality. Vol 1: A profile for change*. New York, NY: Aronson.