

Adolescent Sexual Offenders: Incidence of Childhood Maltreatment, Serious Emotional Disturbance, and Prior Offenses

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Adolescents incarcerated for sexual offenses were compared to those incarcerated for other crimes on measures of prior child abuse and neglect, serious emotional disturbance, and involvement in child welfare and the juvenile justice system. Sexual or physical abuse was more common than neglect among sexual offenders with fewer than three prior maltreatment reports. Sexual offenders were twice as likely to be receiving special education services for severe emotional disturbance, and were usually incarcerated later than other offenders. Implications for research and practice are discussed.

The number of violent juvenile sexual offenders processed through the nation's courts in the early 1990s increased by 50%, and by 11% for nonviolent juvenile sexual offenders (Snyder & Sickmund, 1995). Studies of sexually abused children have indicated that 23% to 26% of reported molestations are committed by adolescents (Allard-Dansereau, Haley, Hamane, & Bernard-Bonnin, 1997; Dubé & Hébert, 1988; Dubowitz, Black, & Harrington, 1992), and that 56% of molested boys are victims of an adolescent (Showers, Farber, Joseph, Oshins, & Johnson, 1983; Rogers & Terry, 1984). An understanding of factors associated with adolescent sexual offending is therefore vital in attempting to protect child and adult victims of sexual offenses.

Despite substantial interest in the relationship between maltreatment and sexual offending by youths, several gaps remain in our knowledge (Cooper, Murphy, & Haynes, 1996; Widom, 1995; Worling, 1995a). Most studies of sexual offenders and maltreatment have used retrospective recall of abuse rather than official records of maltreatment. Re-

liance on self-report data introduces the risk of bias due to faulty memory, repression, minimization, or denial (Stein & Lewis, 1992; Watkins & Bentovim, 1992). Retrospective accounts also lack accurately dated events and information about agency intervention. Thus, it is nearly impossible to assess when and with what agency an offender has had contact and this, in turn, hampers attempts to assess the value of interventions. Further, many study samples have been small and derived from treatment settings; comparisons with other types of offenders have therefore been impossible. In consequence, it is not known whether intervening in certain types of abuse has an impact on the likelihood of being a sexual offender, as compared to other types of youthful offenders. Very few studies of sexual offenders have used official maltreatment reports (Widom, 1995). While reliance on formal records fails to take account of unreported maltreatment, and this is especially significant in cases of sexual abuse of male children (Finkelhor, 1984, pp. 221-236; Widom, 1988), it has the advantage of larger samples, more accurately dated events,

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and information about services. Finally, knowledge is limited by the fact that few studies have contrasted the relationship between type of offense and prior physical abuse, sexual abuse, or neglect. As a result, it is difficult to know whether physical or sexual victimization are more frequently associated with crimes against persons, or whether *all* types of maltreatment can have an effect on later sexual delinquency.

DELINQUENCY AND PRIOR MALTREATMENT Prior Victims/Future Victimizers

Many researchers have suggested that experience of victimization begets victimizers (Jonson-Reid, 1998). Indeed, studies have found associations between abuse or neglect in childhood and various types of juvenile offenses, including sexual (Ford & Linney, 1995; Widom, 1995). The relationship between maltreatment and later delinquent acts, however, is not necessarily "within type": among youthful offenders with child maltreatment histories, sexual offending does not always coincide with prior sexual abuse (Widom, 1995), while violent offending seems to be frequently associated with prior neglect (Jonson-Reid, 2000). Researchers also caution that victim-to-victimizing conceptualizations must consider the influence of other confounding factors (Jonson-Reid, 1998) such as poverty (Peeples & Loeber, 1994; Zingraff, Leiter, Myers, & Johnsen, 1993); cumulative exposure to violence in the home, school, and community (Jonson-Reid, 1998); other family dysfunction (Goetting, 1994); school failure (Williams & McGee, 1994); and genetic or psychiatric factors (Lewis, 1992; Weiler & Widom, 1996). Further, the association of maltreatment with type of offense may sometimes be indirect. For example, maltreatment has been linked to higher levels of psychopathology (Forth, 1995); this, in turn, has been associated with violent behavior (Weiler & Widom, 1996). There is clearly an association between childhood victimization and youthful offending, but much remains to be discovered about how this relationship functions.

Juvenile Sexual Offenders

Research into the prevalence of maltreatment among sexual offenders has generally involved small samples, and estimates of rates have varied from 17% to 75% (Ford & Linney, 1995; Worling, 1995a). One of the few larger ($N=496$) studies (Way, Satwah, & Drake, 1999) that examined sex-

ual offenses according to prior reported maltreatment found that 35% of adolescents reported to child welfare agencies for sexual abuse of a child had themselves been reported as victims of childhood sexual abuse, physical abuse, or neglect. However, the study included only child molesters referred to child protective services, and cannot be generalized to broader sexual offender populations involved in the juvenile justice system. In a study by Way (1999) of adolescent sexual offenders in specialized treatment ($N=96$), 67.7% self-reported childhood sexual abuse, 72.3% physical abuse, and 39.6% neglect.

The prevalence of maltreatment among sexual offenders may be similar to that among other juvenile offenders. A retrospective study (Benoit & Kennedy, 1992) of maltreatment history among delinquent youths ($N=100$) found no difference in the prevalence of such history across offender types. One other study (Widom, 1995) of the relationship between prior maltreatment and delinquency reported similar results, but the sample ($N=908$) included children with substantiated abuse reports from 1967 to 1971; because this period predates initiation of mandatory reporting laws, it is not clear whether the results can be generalized to the current population.

Gender

There is clear consensus that maltreated males become sexual offenders more frequently than do females. Males represent 25% to 33% of children who are sexually abused (Rogers & Terry, 1984; Sedlack & Broadhurst, 1996) but comprise 95% of adolescents who sexually abuse a child (Fehrenbach, Smith, Monastersky, & Deisher, 1986; Wasserman & Kappel, 1985). This latter phenomenon may be partially explained by the greater tendency of males than females to use externalizing behavior in coping (McGee, Wolfe, & Wilson, 1997; Summit, 1983; Wolfe & McGee, 1991) and to use aggression in achieving interpersonal goals (Briere, 1992; Wolfe, Wekerle, Reitzel-Jaffe, & LeFebvre, 1998).

Type of Maltreatment

The questions used to gather self-reports about maltreatment history among sexual offenders vary from single items requiring a yes/no response to multiple-item scales, such as the Childhood Trauma Questionnaire (Way, 1999). Studies that use official reports are restricted to a definition of mal-

treatment based on state policy; some states record multiple types of abuse and neglect, while others require workers to choose a primary type as basis for the child maltreatment report (*Jonson-Reid & Barth, 2000*). Such variations in the measurement and operationalization of childhood maltreatment make comparisons across studies problematic.

A number of studies have examined retrospective self-reports of childhood sexual abuse among adolescent sexual offenders. Rates of self-reported abuse history vary according to the type of offender and the treatment setting from which the sample is drawn. For example, the prevalence of childhood sexual abuse among child molesters in outpatient treatment ranges from 21% to 25% (*Awad & Saunders, 1989, 1991; Becker, Kaplan, Cunningham-Rathner, & Kavoussi, 1986; Worling, 1995c*), compared to 52% among those in residential settings (*Ford & Linney, 1995*). Male adolescent sexual offenders consistently report a higher prevalence of childhood sexual abuse victimization (17%–75%) than do male adolescents in the general population (10%–16%) (*Faller, 1993*).

Studies indicate that 27% of adolescent child molesters and 33% of assaulters in outpatient treatment have been physically abused in childhood (*Awad & Saunders, 1991*). *Widom (1995)* found that physically abused children were more likely to be arrested later for certain sexual crimes (particularly rape) than were children who suffered sexual abuse or neglect.

Little is known about the relationship of neglect to sexual offending. In a prospective study, *Widom (1995)* found that sexually abused children were no more or less likely than neglected children to become involved in later criminal sexual behavior. A national survey of treatment providers found that 26% of adolescent sexual offenders reported having been neglected as children (*Ryan, Miyoshi, Metzner, Krugman, & Fryer, 1996*). A study (*Way, 1999*) of adolescent assaulters and child molesters in specialized offender treatment found that the former reported a higher rate of childhood neglect (58.6% versus 31.34%).

Comparisons With Other Delinquents

Few investigations of adolescent sexual offenders have compared them with other types of adolescent offenders (*Way, 1999*). There is some evidence that sexual offenders may initially display behavior problems later than other offenders (*Bagley & Schewchuk-Dann, 1991; Jacobs et al.,*

1997). Thus, age of onset of delinquency may be an important factor in understanding ongoing offense patterns.

Differences between subgroups of delinquents are confounded by frequent overlap among offenses. In a study (*Jacobs, Kennedy, & Meyer, 1997*) of incarcerated adolescent sexual offenders, 81% reported at least one nonsexual offense. This tendency may vary according to maltreatment experience. Nonabused adolescent sexual offenders have been found to report higher rates of prior nonsexual arrests than have abused offenders (*Cooper et al., 1996*).

Present Study

It is evident that much remains unknown about the relationship between childhood maltreatment and sexual offending in adolescence. The study reported here used administrative data to compare different types of offenders within a state-level juvenile corrections system in terms of investigated reports of childhood maltreatment. Thus, unlike prior research, it could compare sexual offenders with other serious youthful offenders and identify types of maltreatment without resort to retrospective self-reports of abuse or neglect. It is one of the few studies to investigate sexual offenders in non-treatment settings. Also, by controlling for such confounding factors as eligibility for services for serious emotional disturbance (SED), child welfare services, and prior juvenile court involvement, the study was able to investigate whether certain types of child abuse and neglect were specific to incarcerated sexual offenders.

The questions posed in this study were: 1) Do incarcerated adolescent sexual offenders differ from other adolescent offenders as childhood victims of maltreatment? 2) Among offenders with records of prior child maltreatment, do specific types of maltreatment history characterize sexual versus other types of incarcerated offenders?

METHOD

Data Sources

Administrative data was obtained from the California Youth Authority (CYA) child abuse reporting and child welfare services, and from the State Department of Education special education services. CYA is the state-level youth corrections system and is generally reserved for the most serious youthful offenders. Because California lacked a state-wide child abuse reporting data system, data

were available only from ten counties that had computerized and compatible systems.

The special education data were limited to those children identified by the public school system as SED and were receiving services as of 1996. This ensured that the SED data included all cases identified before and during 1996 who were still receiving special education services. Data were matched across systems, using specialized probabilistic matching software.

Data on investigated maltreatment reports contained only those cases reported after age seven. Excluded from the study were data on abuse and neglect reports screened out at intake (i.e., not investigated), recorded after the offense for which the adolescent was committed, and concerning children under age seven (to ensure that those with investigated abuse or neglect reports were old enough to enter CYA during the study period).

Sample

The study sample included all youth entering CYA between the ages of 11 and 18 years from the ten counties for which child abuse and neglect information was available ($N=6,082$). Within this CYA sample, 304 had been incarcerated for sexual offenses, 3,091 for violent nonsexual offenses, and 2,687 for nonviolent property or drug-related offenses. A total of 981 incarcerated youth had at least one investigated child abuse or neglect report. The sample frame for analyses controlling for SED designation was restricted to incarcerated youth who were 19 or younger in 1996 ($N=2,787$) because of the possibility that older youth would already have exited the Special Education.

The ten study counties included urban, suburban, and rural areas, and contained over one-third of California's child population. In 1992, six of the counties reported a very high juvenile violent crime rate of over 500 per 100,000 juveniles (Snyder & Sickmund, 1995). The demographics of the school-aged children with investigated maltreatment reports in these counties were similar to those of children included in the 1994 national maltreatment report data (U.S. Department of Health and Human Services, 1996), except for race: the CYA study sample had a higher proportion of Hispanic children than was reported in the national data (30% versus 9%), and a lower proportion of African-American (14% versus 26%) and Caucasian (46% versus 56%) children. This was also true in comparing the study sample with correc-

tional facility residents nationwide (Snyder & Sickmund, 1995). Slightly less than 4% of the study sample was female, which is consistent with findings from studies of females in more restrictive juvenile justice settings (Chesney-Lind, 1997).

Variables

Dependent. Offenders were categorized according to type of primary offense: property and drug-related nonviolent offenses, nonsexual violent offenses (e.g., assault, robbery, and murder), and sexual offenses (e.g., rape, molestation, prostitution or pimping).

Independent. These consisted of maltreatment history, as measured by the presence or absence of an investigated report of abuse or neglect prior to the date of the commitment offense; maltreatment type, categorized as neglect, physical abuse, or sexual abuse for each investigated report (other types of maltreatment—emotional abuse, etc.—were insufficient in number for separate analyses); and recurrent maltreatment, as measured by the existence of a child abuse or neglect report at least five days after the prior report.

Control. These consisted of five factors, as follows: child demographics, which included ethnicity, gender, and date of birth; single-parent home, measured by family structure status at the time of CYA entry; child welfare service provision, measured by whether a case was opened to services (including in-home and foster care) following the investigation; SED, indicated by receipt of special education services for SED, as defined by the California Department of Education (1999) (the prolonged presence, with no health or environmental explanation, of one or more of the following problems: inability to learn, inability to build or maintain satisfactory peer relationships, inappropriate behavior or feelings under normal circumstances, and a pervasive mood of unhappiness or depression); juvenile justice system history, including prior delinquent offenses, as measured by the number of prior sustained petitions, the age at which the act leading to incarceration was committed, and the presence of a secondary commitment offense (drug versus nondrug).

Analyses

The association between offender type and other variables was analyzed using bivariate statistics, logistic regression, and multinomial logistic regression models (logit models with three response

variables). The significance of bivariate associations between offender types and the independent and control variables were analyzed using the Mantel-Haenszel chi-square. Because of the smaller SED sample size, the association between SED status and offender type was assessed using the EXACT procedure (similar to Fisher's exact test) available in Statistical Analysis System (SAS) (Stokes, Davis, & Koch, 1995).

The multinomial response logistic regression models were constructed using the PROC CATMOD procedure in SAS to understand the association between child welfare system involvement and the reason for incarceration (sexual versus property offense, sexual versus violent offense, and violent versus property offense). The small proportion (4%) of female sexual offenders prevented the inclusion of gender as a variable in the model. Because the model coefficients did not change significantly when run without them, the females were retained in the sample rather than further complicating the discussion of sample size. For ease of interpretation, the logit coefficients from the multinomial regression models were converted into odds ratios (ORs) (Stokes *et al.*, 1995). ORs lower than one indicate less likelihood of committing a sexual as opposed to other type of offense, while those greater than one indicate greater likelihood of being a sexual offender. The multinomial model was re-run with SED data included to test for change in the relationship between child welfare system involvement and offense type when controlling for SED status.

To examine the association between the type of maltreatment and incarceration for a sexual offense, sampling was restricted to incarcerated youth with child welfare records. The smaller sample did not permit the use of multinomial logistic regression. Logistic regression was used to examine sexual offending versus all other offenses among youths with records of prior maltreatment, using the PROC LOGISTIC procedure in SAS, which reports ORs. As before, this model was re-run with SED data included to test for change in the relationship between maltreatment type and sexual offending when controlling for SED status.

RESULTS

The characteristics of the total sample of CYA wards are shown in TABLE 1 by type of offense. Among incarcerated adolescents, only about 5% were sexual offenders, 99.3% of them male. Prop-

Table 1
OFFENDER CHARACTERISTICS (%) BY PRIMARY
OFFENSE TYPE (N=6,082)

CHARACTERISTIC	OFFENSE			M-H χ^2
	SEXUAL (N=304)	VIOLENT (N=3091)	PROPERTY (N=2687)	
Race				
African American	36.5	27.9	26.4	9.2*
Caucasian	20.1	9.8	17.8	31.3*
Hispanic	38.5	47.4	43.3	15.5*
Other	4.9	14.9	12.6	1.4
Female gender	0.7	4.1	3.9	1.8
Single-parent family	27.3	21.3	22.0	0.5
Maltreatment	16.8	14.0	18.5	13.6*
3+ offenses	36.8	44.5	72.6	477.9*
Incarc. age <15 yrs	8.6	5.5	6.1	0.004
Drug-rel. 2nd offense	11.2	8.2	17.6	88.6*

* $p \leq .001$.

erty offenders had a higher proportion of prior sustained juvenile court petitions (somewhat analogous to convictions in the adult corrections system) than did sex or violent offenders (72.6%, 36.8%, and 44.5%, respectively).

To examine the relationship of SED to offender type, sampling was restricted to youths aged 19 or less in 1996 ($N=2,787$), thus accounting for the period of available special education data. The demographics and overall proportion of maltreatment reports and prior offense history variables did not change. Youths primarily incarcerated for sexual offenses were more than twice as likely as other offender types to be also designated SED (4.8%, and approximately 2.3% for both violent and property offenders, respectively). Results of the Exact test for association between all three offense types and SED were not significant (Exact test $p=.17$). The test for association was re-run by collapsing the categories of violent and property offenders and comparing this to sexual offenders, with a near-significant result of $p=.09$.

Characteristics of youths with at least one maltreatment report ($N=981$) are shown in TABLE 2 by type of offense. This subgroup differed from the total sample and the child welfare subgroup in that 31.4% of its members were Caucasian, compared to 20% of the sex offenders in the sample as a whole. Maltreated youths were somewhat more likely than the sample as a whole to have had three or more sustained delinquency petitions prior to incarceration. No statistically significant differences emerged in types of offense by maltreated youths with a history of at least one child abuse report in terms of maltreatment type, proportion of cases receiving services, or proportion with three or more child abuse reports. As can be seen in

Table 2

CHARACTERISTICS (%) OF OFFENDERS WITH CHILD WELFARE HISTORIES BY OFFENSE TYPE (N=981)

CHARACTERISTIC	OFFENSE			M-H χ^2
	SEXUAL (N=51)	VIOLENT (N=433)	PROPERTY (N=497)	
Race				
African American	35.3	34.6	23.1	14.1**
Caucasian	31.4	10.4	23.9	8.6*
Hispanic	33.3	46.2	45.9	0.8
Other	0.0	8.8	7.0	1.3
Gender				
Female	2.0	10.4	7.4	0.1
Male	98.0	89.6	92.6	99.9
Single-Parent Family	27.3	21.3	22.0	0.5
Maltreatment				
Age, 1st Report				
7-10 years	9.8	12.0	14.1	1.3
11-13 years	45.1	49.4	49.5	0.1
14-17 years	45.1	38.6	36.4	0.003
Type				
Neglect	37.2	48.0	46.1	0.1
Physical abuse	45.2	35.6	39.0	0.1
Sexual abuse	17.6	16.2	13.3	1.8
3+ reports	45.1	43.6	48.3	1.5
CWS After 1st Report	35.3	35.3	31.0	1.8
3+ offenses	39.2	52.2	74.6	61.6**

* $p \leq .01$; ** $p \leq .001$.

TABLE 2, while the differences were not statistically significant, physical abuse was initially reported for a slightly higher proportion of sexual offenders than violent or property offenders, and sexual abuse for a slightly higher proportion of sexual and violent offenders than for property offenders. A higher proportion of sexual offenders than violent or property offenders were Caucasian (31.4%, 10.4%, and 23.9%, respectively, $p=.003$).

The association between existence of a child welfare investigation and type of offense was examined by multinomial logistic regression* (see TABLE 3) The three response variables were sexual offense, violent offense, and property/drug offense. The final model included ethnicity, prior child welfare investigation, a secondary commitment offense (drug-related versus nondrug-related), a prior sustained juvenile court petition, and commitment of the incarceration offense before age 15. The likelihood ratio (LR) chi-square indicated a relatively good fit between model and data ($\chi^2=46.2$, $df=52$, $p=.70$). As can be seen in TABLE 3, in comparisons of pairs of offender subgroups, the variables were better able to discriminate between property offenders and sexual or violent offenders than between violent offenders and sexual offenders.

*It is important to note that this analysis modeled the likelihood of being one or another type of offender; it did not model the likelihood of a child later becoming a sexual offender.

Differences between violent and sexual offenders were nonsignificant (TABLE 3, column 3), except that violent offenders were much more likely to enter CYA prior to age 15 than were sexual offenders (OR=2.88). In contrast, comparisons between sexual and property offenders yielded several significant ORs. African Americans and Caucasians were at least three times more frequent than Hispanics among sexual offenders compared to property offenders. The association between being Caucasian and incarceration for sexual offenses was moderated by a history of at least one child maltreatment investigation (OR=.79). Sexual offenders were almost three times more likely to have three or more sustained petitions than property offenders, when controlling for the other factors in the model. Prior sustained petitions and a secondary drug-related commitment offense were more indicative of incarceration for a sexual offense (OR=2.16). The offender-type multinomial regression model was re-run with SED as an independent variable. The ORs for SED in the models were nonsignificant, and inclusion of the SED variable did not alter the remaining coefficients sufficiently to warrant a separate report.

The relationships among types of maltreatment, child welfare services, and offender type were further examined in a logistic regression model com-

Table 3

ODD RATIOS, MULTINOMIAL LOGISTIC REGRESSION MODEL: COMPARISON OF OFFENSE TYPES (N=6,082)

ADOLESCENT	OFFENSE		
	SEX/PROP	VIOL/PROP	VIOL/SEX
Race			
Hispanic	1.00	1.00	1.00
AFAM	3.85**	0.47	2.13
CAUC	3.00***	0.34**	0.74
CWS	1.11	1.30	1.15
ENTRY	0.49	1.40	2.88*
DRUG	2.31	3.74***	1.62
PETITIONS	2.77***	0.41***	0.87
Interactions			
AFAM/CWS	1.08	0.79*	0.71
CAUC/CWS	0.79*	1.28	1.62
AFAM/ENTRY	0.81	1.11	1.11
CAUC/ENTRY	1.10	1.12	1.01
CWS/ENTRY	0.77	0.92	1.19
AFAM/DRUG	0.78	1.71	0.58
CAUC/DRUG	1.32*	0.61*	0.35
CWS/DRUG	1.40	1.21	0.90
DRUG/ENTRY	1.95	1.03	0.53
DRUG/PETITIONS	2.16***	1.47***	0.68

LR χ^2 46.2, $df=52$, $p=.70$

Note: AFAM=African American, CAUC=Caucasian, CWS=Investigated maltreatment, ENTRY=Aged less than 15 yrs at CYA entry, DRUG=Secondary drug offense, PETITIONS=3 or more sustained juvenile court petitions.

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

Table 4

LOGISTIC REGRESSION MODEL: INCARCERATION
FOR SEXUAL VERSUS OTHER OFFENSE AMONG
MALTREATED ADOLESCENTS (N=981)

FACTOR	N	OR	CI
Race			
Caucasian	180	1.00	NA
African-Amer/Hisp.	801	0.54*	0.30–0.98
Maltreatment Report			
Age≤13 yrs	610	0.82	0.46–1.47
3+	452	0.85	0.42–1.71
Maltreatment Type			
Sexual abuse	145	1.00	NA
Physical abuse	371	1.03	0.49–2.17
Neglect	456	0.33*	11.0–0.95
3+ Offenses	617	0.42**	0.24–0.72
Interaction Terms			
Neglect/3+offenses	222	3.63*	1.10–11.95
LR χ^2 38.68, <i>df</i> =40, (<i>p</i> =.53)			

p*≤.05; *p*≤.01.

paring sexual offenders with other offender types among maltreated youths (see TABLE 4). The opening of a case to child welfare services (in-home or foster care services) was not significant and did not remain in the final model. The LR chi-square ($\chi^2=38.7$, *df*=40, *p*=.53) indicates the model fits the data relatively well. In this model, maltreated African-American and Hispanic youths were almost 50% less likely to be sexual than violent or property offenders. Youths initially reported for neglect were less likely to be sexual offenders unless they had a history of three or more maltreatment reports. It is important to note that maltreatment type among offenders was not necessarily stable over time. For example, 21 sexual offenders who had more than one report of maltreatment were initially reported for neglect; at the second report, 33% of them were reported for sexual abuse and 4.8% for physical abuse.

The sample of youth with prior maltreatment reports was restricted to those who were younger than 19 in 1996 in order to re-run the model with SED data included. The inclusion of the SED variable did not significantly alter the impact of the other variables, nor did the SED variable reach statistical significance, despite the large effect size (OR=2.35). This model is therefore not shown.

DISCUSSION

The present study of adolescent sex offenders was limited to youth who had been arrested, convicted, and incarcerated. Given that most prior studies have used clinical samples, the present findings expand our knowledge of the sexual offender population and provide information that

can be compared with findings from other studies. The use of administrative data also gave a relatively infrequent opportunity to disaggregate sexual offenders from other incarcerated adolescents and compare rare events (e.g., child welfare services).

Sex, Violent, and Property/Drug Offenders

The proportion of incarcerated youth with prior investigated reports of child abuse or neglect was similar across the three offender types in the present study. This is consistent with findings from two other studies of sexual offending (*Benoit & Kennedy, 1992; Widom, 1995*), which reported little difference in the prevalence of maltreatment history between sexual and other types of offenders. This adds to the growing evidence that maltreatment is associated with serious delinquency or crime in general rather than in an offense-specific manner.

Few differences in prior juvenile court contacts were found between sexual and other offenders. As in other studies (*Bagley & Schewchuk-Dann, 1991; Jacobs et al., 1997*) sexual offenders in this study tended to enter CYA at a later age than non-violent offenders when controlling for other factors. Prior studies (*Jacobs, et al., 1997*) have suggested that youthful offenders do not usually specialize in specific types of offenses; this is consistent with the present findings that many of the sexual offenders had a secondary offense related to use or sale of drugs. Although a substantial proportion of the sexual offenders had prior sustained delinquency petitions, it could not be determined whether these petitions were for sexual offenses. The idea that abused and nonabused sexual offenders would have different juvenile court histories (*Cooper et al., 1996*) received some support in that sexual offenders in the present study's total sample were more likely to have a history of three or more sustained petitions than were other offenders. However, the opposite was true when the sample was restricted to maltreated youth.

A larger proportion of the study's sexual offenders came from a single-parent home or were designated as SED than other offenders, but neither family structure nor SED status were statistically significant predictors of offender type in the multivariate models. Other research (*Forth, 1995; Weiler & Widom, 1996*) has shown that both maltreatment and psychopathology are related to youthful offending. In the present study, SED criteria were

not helpful in discriminating between sexual offenders and other incarcerated youth when controlling for maltreatment report history, but there are several possible explanations for this outcome. It is not known whether the higher proportion of youth designated as SED among the sexual offenders reflects a difference in the mental health profiles of sexual offenders or the contribution of systemic factors (whether youths charged with sexual offenses are more frequently referred for this type of mental health assessment). Further, the SED variable reflected eligibility criteria for special education services rather than a general assessment of psychopathology among the incarcerated adolescents.

Overall, other than type of offense, relatively small differences were found between sexual and violent offenders. It may be that all crimes committed against persons share similar etiological characteristics. For example, reduced empathy has been identified as a major psychological effect for children who have experienced various types of maltreatment (Cicchetti & Toth, 1995; Feshbach, 1989; Kolko, 1992; Ryan, 1989; Wiehe, 1986) and has been cited as a component of delinquent behavior by adolescents (Eckenrode, Powers, & Garbarino, 1997).

Maltreated Sexual Offenders

Prior research has found that child neglect is the type of maltreatment most predictive of later violent delinquency and equal to the import of sexual abuse for later sexual offending (Widom, 1995; Widom & Maxfield, 1996). In the present study, children whose initial maltreatment report was for neglect were more likely to be among the (non-sexual) violent or property/drug offenders. No difference was evident in the association between sexual offending and a physical or sexual abuse history. Youths initially reported as victims of neglect who had at least two more maltreatment reports, however, were likely to be sexual offenders. A closer examination of this subgroup revealed that many had been reported as victims of physical or sexual abuse after an initial report of neglect. These findings are supportive of a victim-to-victimizing theory (Ryan *et al.*, 1987) among this adolescent sex offender population. They were not supportive, however, of a within-type relationship; i.e., neither physical nor sexual abuse (as opposed to neglect) was associated with the nature of the victim's subsequent offending. Further, many of-

fenders with more than one report of maltreatment received a second report for a different type of maltreatment. The fact that maltreatment type tends to change or co-occur among recurrent child welfare cases suggests caution in using it as a risk factor for specific types of later offense.

Over 40% of offenders with prior child maltreatment records in the study sample had three or more reports of maltreatment. This is similar to the level found in the general child welfare population (DePanfilis, 1995; Drake & Jonson-Reid, 2000). Youth reported initially for neglect and at least twice more for maltreatment were more likely to be sexual offenders.

Victim-to-victimizing theory proposes that family and professional reaction to disclosure of such childhood trauma itself has an impact on children's psychological and behavioral adjustment (Everson, Hunter, Runyon, Edelsohn, & Coulter, 1989; Henry, 1997). Furthermore, if maltreatment continues or resumes following intervention by child protective services, the provision of ineffective services may exacerbate the damaging effects of maltreatment. This means that interventions should focus on prevention of recurrent maltreatment; to do so, they should include adequate monitoring and follow-up for the maltreating families.

Implications for Research and Practice

Clinical theory of treatment for sexual offending behavior in adolescents focuses on two broad goals: resolving problematic effects of prior life experiences, and altering cognitive and behavioral patterns in order to prevent relapse (Marshall, Hudson, & Hodgkinson, 1993; Ryan, 1997; Ryan *et al.*, 1987; Sermabeikian & Martinez, 1994; Way & Spieker, 1997). While some of the literature on child psychopathology and maltreatment has suggested links between different types of maltreatment and specific behavioral outcomes (Cicchetti & Toth, 1995), this is not supported by the current study findings. Rather, they point toward the identification and mitigation of developmental and socioemotional damage (Widom, 1998), inasmuch as they suggest that the type of prior negative experience (including attempts to find a link between sexual abuse and sexual offending) are less important than the child's response to that trauma (Way, 1999). Research on maltreated children and sexual offenders has suggested that much of this population lacks empathy because of negative experiences during critical periods of development (Cic-

chetti & Toth, 1995; Way, 1999). Since it is possible that many conditions besides physical or sexual abuse can result in a failure to develop empathy, it seems less important to develop treatment theoretically based on a specific type of trauma than on methods of assessing children's deficits in various areas of functioning.

Research on violent and sexual offenders thus points increasingly to a nonspecific relationship between maltreatment and later offending. Rather than focus on direct associations between such risk factors and sexual offending, therefore, clinical theory would benefit from research that identified intermediate factors influencing developmental trajectories. Further, since many sexual offenders seem to become involved in multiple service sectors, it is important that clinical theory look at how the timing, type, and duration of services intersect with developmental and psychological factors to influence treatment.

Limitations of the Study

The nature of the sample and data used in the present study necessarily limited the hypotheses, as well as comparability to prior studies that used mostly clinical samples. The current findings can be generalized to understanding types of offenders among incarcerated adolescents but cannot predict which children will become sexual offenders. The use of administrative data also placed limits on certain findings. For example, there was a lower prevalence of maltreatment in the sample than anticipated. This was probably because maltreatment was restricted to definitions by official child welfare investigations, and because incarceration in a state-level juvenile corrections system is a rare event. Further, severity of abuse and relationship to the perpetrator were not rated. On the other hand, only with the use of such data is it possible to capture a sample of sufficient size to study such singular subgroups as youthful offenders identified as SED. Using a combination of self-report and administrative data would undoubtedly go far toward revealing the true prevalence of maltreatment among incarcerated sexual offenders. This, in turn, would be helpful in assessing the level of under-reporting of maltreatment among such offenders, and in investigating why it goes undetected and unreported. A study comparing incarcerated sexual offenders to those in treatment settings would be particularly useful in locating and understanding differences between offenders with

different service trajectories following identification by child welfare authorities.

There are relatively few females in the population of incarcerated juveniles (Chesney-Lind, 1997; Snyder & Sickmund, 1995). This was also true of the present sample of sexual offenders, of whom there were fewer than 1% (Fehrenbach et al., 1986; Wasserman & Kappel, 1985). Unfortunately, the number of females was insufficient for a thorough examination of gender differences. A multistate administrative data sample may be necessary to garner a female sample adequate to such an analysis.

Because data on child abuse and neglect before 1990 were not available for this sample, occurrence of such maltreatment among the children prior to age seven could not be measured. Early maltreatment has been associated with very poor outcomes (Beitchman et al., 1992; Berrick, Needell, Barth, & Jonson-Reid 1998). While the present findings were similar to Widom's (1995), whose sample consisted of children with maltreatment reports prior to age 11, more research is needed to elucidate whether outcomes like sexual offending are related to the age at which abuse or neglect is experienced. Unfortunately, few longitudinal data sets currently hold the 15–20 years of data required. Researchers with access to administrative data should be encouraged to explore archival information so that future studies can include children from birth through age 18 years.

Research has suggested that without intervention, maltreated children may be more aggressive (Miller & Eisenberg, 1988), show less empathy for others (Eckenrode et al., 1997), and demonstrate poorer social skills (Friedrich, Beilke, & Urquiza, 1988). Beyond the provision of child welfare services (which focus on the maintenance of families rather than rehabilitation of the child), or services related to the SED classification, no treatment information could be obtained for the present study. Research is needed that combines public sector intervention information (e.g., child welfare, education) with child-level treatment following abuse or neglect. Such research would give a better understanding of the timing and combination of services that hold the greatest promise for reduction of later sexual offending.

CONCLUSION

Understanding how sexual offending might be prevented has been a significant concern of researchers, practitioners, and policy makers for

some time. Despite substantial research on risk factors for offending behavior, however, we are only beginning to understand how service histories may intersect with such risks as child maltreatment to influence later outcomes. The current study findings, for example, support prior results suggesting that maltreatment is a general rather than an offense-specific risk factor for youthful offending. They also support an emerging consensus in the literature that maltreatment may be best understood as a complex phenomenon consisting of many types of neglectful and abusive experiences for children. This points to use of a more unified approach to the prevention of sexual offending. Such an approach would concentrate on interventions that ameliorated damage from any type of maltreatment (e.g., programs that help children develop empathy) rather than on programs aimed at a specific type (e.g., sexual offense prevention for sexually abused children). Finally, it seems likely that a number of sexual offenders have mental health needs qualifying them for services in other sectors, such as public education. It is important to prevention and intervention efforts that professionals in the child welfare, education, and juvenile court systems have the capacity for appropriate assessment of the mental health needs of maltreated children and for connecting these children to the necessary treatment.

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