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Multisystemic Treatment of Adolescent Sexual Offenders

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Abstract: *This study compared the efficacy of multisystemic therapy (MST) and individual therapy (IT) in the outpatient treatment of adolescent sexual offenders. Sixteen adolescent sexual offenders were randomly assigned to either MST or IT conditions. Youths in the MST and IT conditions received an average of 37 hours and 45 hours of treatment, respectively. Recidivism data were collected on all subjects at an approximately 3-year follow-up. Between-groups comparisons showed that significantly fewer subjects in the MST condition had been rearrested for sexual crimes and that the frequency of sexual rearrests was significantly lower in the MST condition than in the IT condition. The relative efficacy of MST was attributed to its emphasis on changing behavior and interpersonal relations within the offender's natural environment.*

The development of effective treatment strategies for adolescent sexual offenders is important for several reasons. First, arrest data indicate that males under 19 years of age account for 19% of forcible rapes and 18% of other sexual offenses (Federal Bureau of Investigation, 1987). Second, the ratio of self-reported sexual offenses to actual arrests for sexual offenses is approximately 25:1 (Elliott et al., 1985). Third, sexual offenses often have very detrimental initial and long-term effects on victims, family members, and the community (Browne and Finkelhor, 1986). Fourth, deviant sexual behavior during adolescence seems to be associated with the development of serious sexual deviance during adulthood (Groth, et al., 1982).

Despite the serious problems presented by adolescent sexual offenders, relatively little is known regarding the efficacy of extant treatment approaches. In fact, Davis and Leitenberg (1987) concluded that "controlled comparisons between treatment and no treatment and between one form of treatment and another form of treatment do not exist" (p. 425). One of the primary impediments to conducting such research is administrative resistance in the juvenile justice system and the health care system to the random assignment of adolescent sexual offenders to treatment conditions. Although overcoming such resistance can be exceedingly difficult, it is necessary if we are to have "the rudiments of a scientific enterprise with something to contribute beyond popular opinion and clinical impressions" (Davis and Leitenberg, 1987, p. 426).

To date, all of the published literature regarding the treatment of adolescent sexual offenders has been limited to program descriptions (Knopp, 1982;

Ryan, 1986; Salter, 1988) and uncontrolled program evaluations (Becker et al., in press; Hains et al., 1986; Smith and Monastersky, 1986). In general, the interventions used in these treatment programs target cognitive and behavioral characteristics of the individual adolescent. More specifically, these programs often attempt to (a) reduce denial and increase accountability; (b) increase empathy for the victim; (c) provide insight into precipitating events; (d) address the adolescent's own victimization, if appropriate; (e) provide sex education; (f) use conditioning procedures to alter deviant arousal patterns; (g) modify cognitive distortions regarding inappropriate sexual behavior; and (h) develop social skills and anger control (Davis and Leitenberg, 1987).

Although it is certainly important for treatment to address deficits of the individual adolescent offender, research (Henggeler, 1989) has suggested that adolescent sexual offenders are also embedded in multiple systems (family, peer, school) in which dysfunctional transactions are rather evident. For example, investigators have concluded that the family relations of sexual offenders are characterized by high rates of intrafamily violence and neglect (Van Ness, 1984); conflict, disorganization, and drug abuse (Mio, Nanjundappa et al., 1986); and high rates of other family problems (Deisher et al., 1982; Fehrenbach et al., 1986; Lewis et al., 1979). Similarly, there is a general consensus that adolescent sexual offenders have difficulty maintaining close interpersonal relations and are isolated from their peers (Blaske et al., 1989; Deisher et al., 1982; Fehrenbach et al., 1986). Finally, a relatively high percentage of adolescent sexual offenders evidence behavioral and academic difficulties in school (Fehrenbach et al., 1986). Thus, as suggested by Saunders and Awad (1988), effective treatment of adolescent sexual offenders might need to consider several characteristics of the offender and of his social systems.

The purpose of this study is to present a preliminary evaluation of multisystemic therapy of adolescent sexual offenders. Within this broad-based treatment approach (Henggeler and Borduin, 1990), interventions are targeted at characteristics of the adolescent sexual offender and his family and peer relations that have been linked with sexual offending. The relative efficacy of the multisystemic approach has been supported in controlled outcome studies with families of inner-city delinquents (Henggeler et al., 1986) and with abusive and neglectful families (Brunk et al., 1987). Moreover, reviewers have suggested that systems-based interventions have shown the most promise in the treatment of antisocial behavior (Hazelrigg et al., 1987; Kazdin et al., 1987). To our knowledge, this is the first study to provide a controlled evaluation of the efficacy of a specific treatment approach to adolescent sexual offenders.

METHOD

SUBJECTS

Sixteen male adolescents who had been arrested for sexual offenses served as subjects. The mean age of these youths was approximately 14 years; 37.5% were Black and the remainder were White; 31% lived with both natural parents and the remainder lived with their divorced mothers, and the families were

predominantly of lower socioeconomic status (Hollingshead, 1975). These adolescents constituted all of the sexual offenders who had participated in a larger study of delinquency between July 1983 and July 1985 (Borduin et al., 1989). As noted in Table I, six of the youths had been arrested for rape or attempted rape, five for sexual assault, four for sodomy, and one for exhibitionism. Most of the adolescents had committed multiple sexual offenses. Although formal psychiatric diagnoses were not made on the adolescents, the vast majority met the criteria for conduct disorder (group type or solitary aggressive type) and a small minority met the criteria for one of the paraphilias. Almost all of the offenders had presented long-term emotional and interpersonal difficulties.

TABLE I
INITIAL OFFENSES, TREATMENT LENGTH, AND FOLLOW-UP RESULTS

CASE	INITIAL OFFENSE	TREATMENT LENGTH (MONTHS)	FOLLOW-UP LENGTH (MONTHS)	REARRESTS
	MULTISYSTEMIC THERAPY			
1.	sexual assault (2)	7	49	none
2.	exhibitionism (2) animal torture	6	21	none
3.	rape of 10-year-old girl; theft	5	29	none
4.	attempted rape (2)	4	47	2: receiving stolen property; theft
5.	molestation of 3-year-old girl	6	39	none
6.	sodomy of young boy and girl	4[a]	42	none
7.	sexual assault (2)	1[b]	38	4: theft; larceny; rape; vandalism
8.	rape and molestation of young boys and girls (4)	3[c]	43	none
	INDIVIDUAL THERAPY			
9.	rape	8	38	13: sexual assault (3); runaway (2); rape; harassment; attempted rape; burglary; assault with deadly weapon; vandalism (2); resisting arrest

(Table continued next page)

TABLE I (continued)
INITIAL OFFENSES, TREATMENT LENGTH, AND FOLLOW-UP RESULTS

CASE	INITIAL OFFENSE	TREATMENT LENGTH (MONTHS)	FOLLOW-UP LENGTH (MONTHS)	REARRESTS
10.	attempted rape of young child; vandalism	9	24	5: possession of intoxicant; attempted rape; truancy; sexual assault; burglary
11.	molestation of young children (2); sodomy	6	36	none
12.	sodomy of young child	6	41	9: molestation; runaway (3); sexual assault (2); theft; vandalism; false police report
13.	sexual assault	10	43	1: sexual assault
14.	sodomy of young boy (2)	3[b]	25	1: rape (incarcerated in state prison)
15.	attempted rape	5[b]	43	1: attempted rape (incarcerated in juvenile detention center)
16.	sexual assault (3)	7[b]	36	1: assault (incarcerated in juvenile detention center)

[a]The family terminated treatment prematurely.

[b]Therapy was not completed because the adolescent was incarcerated after committing a subsequent offense.

[c]Therapy was not completed because the adolescent was incarcerated for his original offense.

TREATMENT CONDITIONS

The adolescent offenders were assigned randomly to either multisystemic therapy or individual therapy conditions.

MULTISYSTEMIC THERAPY (MST)

MST was provided by two female and two male doctoral students in clinical psychology. The total number of hours that the adolescent or family was in treatment or in consultation ranged from 21 to 49 (M = 37 hours). Supervision was provided weekly by the first author in a 2.5-hour group meeting. During these supervisory sessions, the goals and progress of each case

were reviewed, videotaped therapy sessions were observed and discussed, and decisions were made about how to facilitate the family's progress.

Therapeutic interventions were based on the multisystemic approach to treating the behavior problems of youths (Henggeler, 1982; Henggeler and Borduin, 1990). It is assumed that behavior problems are multidetermined and multidimensional and that interventions may need to focus on any one or combination of systems. The exact nature of the therapeutic interventions varied for each family, depending on the strengths and weaknesses of the pertinent systems. In general, however, multisystemic treatment attempted to ameliorate deficits in the adolescent's cognitive processes (denial, empathy, distortions), family relations (family cohesion, parental supervision), peer relations (developing age-appropriate peer relations with girls and boys), and school performance.

Two cases are briefly presented to provide examples of the types of interventions that are used in multisystemic therapy.

CASE 1

The adolescent, who lived with both of his natural parents, was arrested for fondling several girls in school and for breaking into his teacher's home while she was out and cutting the crotch out of her panties. Presenting problems included (a) association with deviant peers who practiced devil worship; (b) truancy; (c) paternal alcoholism, authoritarianism, and physical abuse; and (d) severe marital problems. The adolescent's strengths included high intelligence (IQ = 123), relatively strong interpersonal skills, and no previous history of behavior problems. The goals and course of treatment were as follows: (a) the adolescent was disengaged from his deviant peers and his activities with prosocial peers were developed. These ends were accomplished primarily through individual goal setting and obtaining employment for the boy. (b) Marital therapy was largely unsuccessful because the father refused to seek treatment for alcoholism and the mother continued to enable her husband's drinking. (c) Improvements in school attendance and grades were accomplished through the encouragement of maternal monitoring and the implementation of a contingency system. And (d), slight gains were made in improving the quality of the father-son relationship.

CASE 2

The adolescent lived with his adoptive parents and was arrested for sexually assaulting a 13-year-old girl. Presenting problems included (a) a learning disability, (b) social isolation from peers, (c) marital problems centering on power issues and reflected in a history of marital separation, (d) parental disciplinary inconsistency and low family warmth, and (e) high paternal intellectualization. Individual and social system strengths included the fact that the adolescent was likeable, a good athlete, and performing well in school. Moreover, the parents were genuinely concerned about their son's difficulties as well as their own. Treatment included the following aspects: (a) Marital therapy enabled the couple to become more cooperative and equalitarian as spouses and

more effective as parents in setting consistent limits on their son's behavior. (b) Family therapy helped to open intrafamily communications channels regarding issues such as sexuality, masturbation, and adoption. Family members also developed greater affective bonds, and the family system became more cohesive. (c) Athletics and academic mainstreaming were used to promote the adolescent's peer relations.

INDIVIDUAL THERAPY (IT)

Offenders in this condition were treated by two female and two male M.A. level professionals who worked for local mental health agencies, including the treatment services branch of the juvenile court. The adolescents received an average of approximately 45 hours of therapy. All of the offenders in this condition received individual counseling that focused on personal, family, and academic issues. The therapists offered support, feedback, and encouragement for behavior change. Their theoretical orientations were a blend of psychodynamic (promoting insight), humanistic (e.g., building a warm relationship), and behavioral (providing social approval for school attendance and other positive behaviors) approaches.

PROCEDURE

The offenders were randomly assigned to receive either MST or IT. Thus, eight adolescents were referred to each treatment condition. Six of the adolescents and their families (three in each treatment condition) did not fully complete treatment. In four of these six cases, therapy was not completed because the adolescent was incarcerated after committing a subsequent offense. Nevertheless, these six adolescents received an average of four months of therapy (range = one month to seven months). In light of the ample opportunity that these offenders had to respond to the therapies, we decided that it was appropriate to incorporate the recidivism data of the adolescents who did not fully complete treatment with the data of the adolescents who had completed treatment.

RECIDIVISM

The records of juvenile court, adult court, and the state police were searched to determine rearrest history of each adolescent following referral for treatment. Since it was also determined that none of the adolescents in either group had moved outside of the local judicial circuit during the follow-up period, the rearrest data are considered to be valid. The length of this follow-up ranged from 21 months to 49 months (M = 37 months). Rearrests were classified as sexual or nonsexual.

RESULTS

Evidence for long-term treatment effects emerged from the recidivism data (Table I). Based on the entire sample, the MST group had recidivism rates of 12.5% for sexual offenses and 25% for nonsexual offenses. In contrast, the recidivism rates of the IT adolescents were 75% for sexual offenses and 50% for

nonsexual offenses. Fisher's Exact Test showed that the recidivism rates for sexual offenses differed at $p < .040$, two-tailed. Moreover, the frequency of rearrest for sexual offenses was greater for IT adolescents ($M = 1.62$) than for MST adolescents ($M = .12$), $t(14) = 2.46, p < .027$, two-tailed. The frequency of rearrest for nonsexual crimes was also greater for the IT adolescents ($M = 2.25$) than the MST adolescents ($M = .62$), but this difference was not statistically significant.

DISCUSSION

The follow-up data, which were collected an average of three years following therapy, suggest that treatment effects were more long-lasting for the offenders who received MST as compared to those who received IT. Regardless of the criteria used (rates of sexual offenses, rates of nonsexual offenses, seriousness of offenses), the adolescents who received IT showed considerable continuity in their highly deviant behavior. The relatively low rates of rearrest for the adolescents who received MST might have resulted from the systemic emphasis of this approach to treating deviant behavior. That is, MST is highly contextual in its consideration of the important systems in which adolescents are embedded. Systems theorists (Hoffman, 1981) have argued that behavior change is best maintained when the individual's systemic context has been altered to support such change, and Kazdin's (1987) review of promising treatments of antisocial behavior in children supports this contention. Similarly, we have proposed that serious adolescent behavior problems are treated most effectively when interventions directly address dysfunctional behavior and relationships within their naturally occurring environment (Henggeler and Borduin, 1990).

It must be emphasized, however, that our small size requires that the findings be considered tentative. Replication of these findings with a larger subject sample is needed before more definite conclusions can be drawn. Nevertheless, in a context in which controlled outcome studies have not been conducted, the present findings are suggestive. Moreover, the results of this investigation add to a growing data base regarding the efficacy of MST in the treatment of serious individual and family dysfunction. As noted previously, controlled studies have supported the efficacy of MST in the treatment of serious juvenile offenders (Henggeler et al., 1986) and child maltreatment (Brunk et al., 1987). The present findings suggest that MST warrants further consideration as a treatment strategy for adolescent sexual offenders. It would be most heuristic if MST could be compared with an established cognitive-behavioral program for adolescent sexual offenders in a well-controlled outcome study.

REFERENCES

Becker, J., Kaplan, M., and Kavoussi, R. (in press). "Measuring the Effectiveness of Treatment for the Aggressive Adolescent Sexual Offender." *Annals of the New York Academy of Science.*

Blaske, D., Borduin, C., Henggeler, S., and Mann, B. (1989). "Individual, Family, and Peer Characteristics of Adolescent Sex Offenders and Assaultive Offenders." *Developmental Psychology* 25:846-855.

Borduin, C., Blaske, D., Mann, B., Treloar, L., Henggeler, S., and Fucci, B. (1989). *Multisystemic Treatment of Juvenile Offenders: A Replication and Extension.* Manuscript in preparation.

Browne, A., and Finkelhor, D. (1986) "Impact of Child Sexual Abuse: A Review of Research." *Psychological Bulletin* 99:66-77.

Brunk, M., Henggeler, S., and Whelan, J. (1987). "Comparison of Multisystemic Therapy and Parent Training in the Brief Treatment of Child Abuse and Neglect." *Journal of Consulting and Clinical Psychology* 55:171-178.

Davis, G., and Leitenberg, H. (1987) "Adolescent Sex Offenders." *Psychological Bulletin* 101:417-427.

Deisher, R., Wenet, G., Paperny, D., Clark, T., and Fehrenbach, P. (1982). "Adolescent Sexual Offense Behavior: The Role of the Physician." *Journal of Adolescent Health Care* 2:279-286.

Elliott, D., Huizinga, D., and Morse, B. (1985). *The Dynamics of Deviant Behavior: A National Survey Progress Report.* Boulder, CO: Behavioral Research Institute.

Federal Bureau of Investigation, U.S. Department of Justice (1987) *Uniform Crime Reports.* Washington, D.C.: Author.

Fehrenbach, P., Smith, W., Monastersky, C., and Deisher, R. (1986). "Adolescent Sexual Offenders: Offender and Offense Characteristics." *American Journal of Orthopsychiatry* 56:225-233.

Groth, A., Longo, R., and McFadin, J. (1982). "Undetected Recidivism Among Rapists and Child Molesters." *Crime and Delinquency* 28:450-458.

Hains, A., Herrman, L., Baker, K., and Graber, S. (1986). "The Development of a Psycho-Educational Group Program for Adolescent Sex Offenders." *Journal of Offender Counseling, Services and Rehabilitation* 11:63-76.

Hazelrigg, M., Cooper, H., and Borduin, C. (1987). "Evaluating the Effectiveness of Family Therapies: An Integrative Review and Analysis." *Psychological Bulletin* 101:428-442.

Henggeler, S. (Ed.) (1982). *Delinquency and Adolescent Psychopathology: A Family-Ecological Systems Approach.* Littleton, MA: Wright-PSG.

Henggeler, S. (1989). *Delinquency in Adolescence.* Newbury Park, CA: Sage.

Henggeler, S., and Borduin, C. (1990). *Family Therapy and Beyond: A Multisystemic Approach to Treating the Behavior Programs of Children and Adolescents.* Pacific Grove, CA: Brooks/Cole.

Henggeler, S., Rodick, J., Borduin, D., Hanson, C., Watson, S., and Urey, J. (1986). "Multisystemic Treatment of Juvenile Offenders: Effects on Adolescent Behavior and Family Interaction." *Developmental Psychology* 22:132-141.

Hoffman, L. (1981). *Foundations of Family Therapy.* New York: Basic Books.

Hollingshead, A.B. (1975). *The Four-Factor Index of Social Status.* Unpublished manuscript, Yale University, New Haven, CT.

Kazdin, A. (1987). "Treatment of Antisocial Behavior in Children: Current Status and Future Directions." *Psychological Bulletin* 102:187-203.

Knopp, F. (1982) *Remedial Intervention in Adolescent Sex Offenses: Nine Program Descriptions.* Syracuse, NY: Safer Society Press.

Lewis, D., Shankok, S., and Pincus, J. (1979). "Juvenile Male Sexual Assaulters." *American Journal of Psychiatry* 136:1194-1196.

Mio, J., Nanjundappa, G., Verleur, D., and De Rios, M. (1986). "Drug Abuse and the Adolescent Sex Offender: A Preliminary Analysis." *Journal of Psychoactive Drugs* 18:65-72.

Ryan, G. (1986). "Annotated Bibliography: Adolescent Perpetrators of Sexual Molestation of Children." *Child Abuse and Neglect* 10:125-131.

Salter, A.C. (1988). *Treating Child Sex Offenders and Victims.* Newbury Park, CA: Sage.

Saunders, E., and Awad, G. (1988). "Assessment, Management, and Treatment Planning for Male Adolescent Sexual Offenders." *American Journal of Orthopsychiatry* 58:571-579.

Smith, W., and Monastersky, C. (1986). "Assessing Juvenile Sex Offenders' Risk for Re-offending." *Criminal Justice and Behavior* 13:115-140.

Van Ness, S. (1984). "Rape as Instrumental Violence: A Study of Youth Offenders." *Journal of Offender Counseling, Service and Rehabilitation* 9:161-170.

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