Multisystemic Family Preservation Therapy: Preliminary Findings From a Study of Rural and Minority Serious Adolescent Offenders

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The increase in the number of serious offenses by adolescents, particularly among minority populations, has drawn attention to these difficult-to-treat youths. This article provides preliminary findings from the Diffusion of Multisystemic Family Preservation (MFP) Services Project, which conducted work with rural African-American and White families who have a chronic or violent adolescent offender at imminent risk for incarceration. Analyses assessed the impact of multisystemic therapy on family functioning (parental monitoring, family communications, family structure, etc.) and on the problem behavior of the delinquent adolescent (conduct problems, aggression, and criminal activity). In general, the MFP group demonstrated improvements in amount of problem behavior and mother psychological distress, and in aspects of family functioning following treatment. These results generally replicate the previous successes that MFP has shown in the treatment of samples of serious juvenile offenders in urban areas.

Violent crime perpetrated by adolescents has become one of our society's most severe problems. Juvenile delinquency has generated enormous costs in property loss, human resources, and suffering for its victims. Recent statistics (Federal Bureau of Investigations, 1992) show that juveniles accounted for over 17% of the violent crime arrests in the United States. This is particularly disconcerting because arrest data are underestimates of the rate of delinquent offenses, especially violent ones (Henggeler, Melton, Smith, Foster et al., 1993; Huizinga & Elliott, 1987; Mulvey, Arthur, & Reppucci, 1990). Moreover, an alarming increase in the frequency and savageness of adolescent crime has been noted (Kantrowitz, 1993; Mulvey, et al., 1990). Interestingly, a minority of youths have committed the majority of violent and serious crimes perpetrated by juveniles (Farrington, 1987; Henggeler, 1989; Mulvey et al., 1990). These serious juvenile delinquents characteristically maintain antisocial behavior consistently over time and are considered to be the "deep end" of the delinquent population (Blaske, Borduin, Henggeler, & Mann, 1989; Henggeler, 1989).

The overwhelming majority of studies of juvenile delinquents have featured urban and White adolescents. Recently, however, there has been a growing concern about rural and minority adolescents accused of or involved in serious juvenile crime. Arrest and incarceration rates of African-American adolescent males have been increasing (Federal Bureau of Investigation, 1992; Huizinga & Elliott, 1987). Moreover, the ratio of African-American to White juveniles arrested and incarcerated is grossly disproportionate to the percentage of African Americans in the general population (Dembo, 1988; Gray-Ray & Ray, 1990; Loury, 1987).

Serious juvenile offending has multiple determinants (Farrington, 1987; Henggeler, 1989; Loeber & Dishion, 1983; Mulvey et al., 1990). However, given the prominence of family life in the social development of youths, family factors have been in the vanguard of research aimed at understanding the etiology and maintenance of juvenile delinquency (Henggeler, 1989; Loeber & Dishion, 1983; Loury, 1987; Mulvey et al., 1990; Tolan, Cromwell, & Braswell, 1986). A comprehensive review of the correlates of juvenile delinquency and family functioning is beyond the scope of this article. However, the following family factors have been found to be associated with violent offending: family structure; poor parent–child bonding and affection; poor parental monitoring, supervision, and disciplinary practices; family discord and conflict; and parental deviance in behavior and attitude (for reviews, see Fagan & Wexler, 1987; Henggeler, 1989; Loeber & Dishion, 1983; Loury, 1987; Patterson, 1982, 1986; Patterson & Stouthamer-Loeber, 1984).

Despite the fact that as a group, minority adolescents are among the fastest growing segments of our population, very little social science research is available for informing efforts to intervene with minority youths presenting serious behavior problems (Borduin, Pruitt, & Henggeler, 1985; Gray-Ray & Ray, 1990). The available empirical knowledge about African-American families and delinquency, for example, is equivocal. African-American adolescent offenders are at a higher risk for ap-

prehension and incarceration than Whites, yet there are no statistically significant differences in the rates of self-reported offenses (Huizinga & Elliott, 1987). Coincidentally, few differences have been identified between minority families with juvenile offenders and the families of White juvenile offenders (Borduin et al., 1985; Fagan & Wexler, 1987).

The structure and integrity of African-American families has been cited as one correlate of juvenile delinquency (Jensen & Rojek, 1980; Matsueda & Heimer, 1987). For example, blurred generational boundaries and mother–son enmeshment in father-absent families have correlated strongly with delinquency among inner-city African-American families (Rodick, Henggeler, & Hanson, 1986). On the other hand, extended family networks may compensate for the excess of single-parent, mother-headed African-American families (Gray-Ray & Ray, 1990; Lindblad-Goldberg & Dukes, 1985), and father absence in African-American families in and of itself may have no direct effect on the development of delinquency (Brownfield, 1987; Farnworth, 1984; Loury, 1987). Moreover, there is some evidence to suggest that economic factors may overshadow family factors in the determination of the delinquent behavior of African-American adolescents (Henggeler, 1989).

How African-American families become women-headed households is probably more important in understanding the impact of single parenthood on developing children (Loury, 1987). Divorce, separation, and widowhood account for the majority of White single-parent families, whereas out-of-wedlock births explain the rise in women-headed African-American families. Moreover, African-American children are more likely to remain in women-headed homes than are their White counterparts (Loury, 1987). What adversely affects childrearing practices may be the relative social isolation experienced by African-American single mothers (Lindblad-Goldberg & Dukes, 1985; Loury, 1987). Socio-ecological pressures, in general, exert more influence over parenting style, socialization techniques, and the development and maintenance of delinquency, particularly violent offenses, in minority populations (Dembo, 1988; Fagan & Wexler, 1987; Huizinga & Elliott, 1987; Matsueda & Heimer, 1987; Steinberg, Mounts, Lamborn, & Dornbusch, 1991).

As a result of the pervasive impact of the social environment and the heterogeneity of families, particularly African-American families (Boyd-Franklin, 1989), recent delinquency research and interventions target smaller subsets of the delinquent population and multiple social systems. The majority of families of serious adolescent offenders face multiple problems, including poor health care, unemployment, educational difficulties, mental health problems, and a history of family violence. Interventions with a community focus (e.g., parent groups, neighborhood associations, church involvement, school-based interventions, and social services) might empower these families by offering extended resources that preserve family integrity, enhance family functioning, and strengthen appropriate parental authority. Moreover, this type of comprehensive treatment may provide the intensity needed for sustained impact (Henggeler & Borduin, 1990; Lipsey, 1992; Mulvey et al., 1990).

Evidence also suggests that intervening solely with family subsystems (e.g., the adolescent or the parents alone) is less effective with multistressed families (Lindblad-Goldberg, Dukes, & Lasley, 1988; Mulvey et al., 1990). This is particularly salient now when a grossly disproportionate number of African-American youths are separated from their families and detained in correctional facilities (Dembo, 1988). Furthermore, intervening multisystemically with serious offenders targets the minority of juvenile delinquents that are perpetrating the majority of juvenile crime.

Multisystemic therapy (MST) and its variant, multisystemic family preservation (MFP), have considerable empirical support as effective treatments for serious juvenile offenders (Borduin et al., 1993; Henggeler & Borduin, 1990; Henggeler, Melton, & Smith, 1992; Henggeler, Melton, Smith, Schoenwald, & Hanley, 1993; Henggeler et al., 1986). This article relates some preliminary findings from an in-progress multisite study using the MFP approach. The study was designed to provide an experimental evaluation of the effectiveness and diffusibility (e.g., community awareness of the project, and changes in attitudes toward the treatment of juvenile offenders and in the professional practices of professionals dealing with juvenile offenders) of MFP with serious juvenile offenders (primarily African Americans) in rural locales using state mental health professionals to provide the service. The data presented in these analyses consist of all data collected to date and comprise roughly one third of the projected sample size for the completed project.

Method

Subjects

Data are presented on 55 serious and chronic juvenile criminal offenders and their mother figures. To be included in the study, the juveniles had to be between 11 and 17 years old, have committed a violent criminal offense or have at least three arrests for criminal offenses, and be at imminent risk for being placed out of the home. Only youths whose cases had not yet been adjudicated at the time of selection were eligible.

The youths in the present sample ranged in age from 11.7 to 17.3 years (M = 15.12 years); 45 were boys and 10 were girls and 78% were African American and 22% White. Mother figures' ages ranged from 25.5 to 75.5 years (M = 41.39); 47 were the child's natural parent, 4 were grandmothers, and 1 each an aunt, older sister, or adoptive mother. In over 77% of the cases, this woman was the single head of the household. Mother figures' highest levels of education ranged from years 3 to 18 years (*Mdn* = 10.5) and that of the youths' fathers from 3 years to 16 years (*Mdn* = 11.7).

Only 13% of the mother figures reported living with the child's biological father. The majority (76%) were either never married, separated at the time of the interview, divorced, or widowed. Only 37.1% of the fathers, 46.3% of the mother figures, and 31.6% of the adolescents of legal age were employed. The sample also appeared to be highly mobile, with 38.9% moving one or more times in the previous year and 68.6% moving one or more times in the previous 5 years. Approximately 73% of the adolescents had been placed out of the home at least one time prior to the pretest measure. Median offenses reported on the Self-Report Delinquency Scale (SRDS; Elliott, Ageton, Huizinga, Knowles, & Canter, 1983) general delinquency index was 13.5%, 29.6% reported having committed a felony assault, 63.1% a felony theft, and 63.3% a crime against a person.

Setting

MFP is designed to be responsive to the multiple determinants of juvenile delinquency. It is an intensive time-limited intervention predicated on family systems and socioecological conceptualizations (Bronfenbrenner, 1979) of the contextual nature of behavioral problems and behavioral change. The project's two sites include three rural counties with a majority African-American population in central South Carolina (Orangeburg, Calhoun, and Bamburg counties) and three urban and rural counties with a majority White population in upstate South Carolina (Spartanburg, Cherokee, and Union counties). MFP is delivered in a variety of locations (e.g., home, school, peer hangouts) consistent with family preservation models of service delivery. Because it is not an office-based service, it contrasts sharply with more-traditional family interventions. MFP therapists are on call 24 hours per day and meet with families or family members multiple times in a given week. Moreover, MFP therapists may have a variety of indirect contacts during the week while they work with schools or employers on behalf of families or family members. This serves to minimize resistance to treatment; sustain an ecological validity that may enhance treatment generalization; and empower families to prevent traumatic, expensive, and ineffective out-of-home placements.

Multisystemic Family Preservation Program

MFP treatment strategies are typically pragmatic, problem focused, and competency based. Interventions are directed toward individuals, families, and dyadic family subsystems, peer relations, school relationships, and academic performance, as well as any other social system believed to be involved in the problem behaviors targeted by the therapist.

Family interventions are designed to capitalize on family strengths, provide resources for effective parenting, and strengthen family integrity. Discipline tactics are often a treatment focus. MFP therapists teach parents to consistently reward positive behavior and sanction inappropriate actions and to use developmentally appropriate and effective consequences when necessary. MFP therapists frequently emphasize the need for parental teamwork and communications to avoid adolescent manipulations of the parents and to enhance parental consistency. Additionally, MFP therapists work with families to enhance parent–child problem solving and negotiations to improve both parent and child self-efficacy. To accomplish these goals, MFP therapists may meet individually with family members, conjointly with parents or with parent–child dyads, or with the family as a whole.

Peer intervention strategies are designed to minimize antisocial peer contact and maximize affiliation with prosocial peers and activities. Particular emphasis is placed on intensifying parental supervision of peers and peer activities. Moreover, MFP therapists work with youths and the multiple systems affecting them to replace delinquent peers. MFP therapists encourage the introduction of delinquent adolescents to prosocial peers and peer activities related to a youth's interests, such as sports or school clubs. Finally, in many cases the MFP therapist must work with youths to remediate social skills deficits that hinder their acceptance by prosocial peers. This is often accomplished through role playing and practicing of appropriate social skills.

School interventions are designed to facilitate communications and coordinate the efforts of school personnel with parents to improve an adolescent's behavioral and academic performance. This may require a thorough assessment of a youth's academic/cognitive capacities and the extent to which these and/or behavioral problems are contributing to school performance difficulties.

TABLE 1
The Nine Principles of Multisystemic Therapy

1. The primary purpose of assessment is to understand the "fit" between the identified problems and their broader systemic context.
2. Interventions should be present focused and action oriented, targeting specific and well-defined problems.
3. Interventions should target sequences of behavior within or between multiple systems.
4. Interventions should be developmentally appropriate and should fit the developmental needs of the youth.
5. Interventions should be designed to require daily or weekly effort by family members.
6. Intervention efficacy is evaluated continuously by the therapist from multiple perspectives.
7. Interventions should be designed to promote treatment generalization and long-term maintenance of therapeutic change.
8. Therapeutic contacts should emphasize the positive and use systemic strengths as levers for change.
9. Interventions should be designed to promote responsible behavior and decrease irresponsible behavior among family members.

MFP therapists often work to open teacher–parent lines of communication so that appropriate academic support and behavioral expectations can be arranged and consistently reinforced at home and school. Furthermore, MFP therapists work to increase parental involvement in an adolescent's academic and vocational development and to structure after-school hours that promote academic efforts.

MFP uses a variety of therapeutic modalities to reach these goals, including pragmatic family therapy techniques, such as joining and enactment (Minuchin, 1974); cognitive–behavioral and social skills training (Kendall & Braswell, 1985); and effective community consultation techniques. The varying and unique demands of each case require MFP therapists to be flexible and tailor their therapeutic techniques to a family's needs and strengths. However, all interventions must meet the nine intervention and treatment guidelines prescribed in the MST text (Henggeler & Borduin, 1990) and MFP treatment manual (see Table 1).

In each case, MFP therapists perform an initial assessment of the delinquent youth's family, peer, and academic systems. Treatment plans delineating the focus of the therapy and the strategies to be used are developed during therapist supervision meetings, based on these assessments. With these plans in mind, MFP therapists define treatment goals in conjunction with the family. These goals are operationally defined in concrete terms and form a treatment contract that both the therapist and the family can use to track therapeutic progress. Therapy sessions with the youth and his or her family concentrate on changing necessary behaviors and attitudes to attain the desired goals. "Homework" is typically assigned to family members to facilitate the attainment of treatment goals between sessions. Generally, MFP therapists inquire about the response to these tasks at the beginning of the next session.

Ultimately the goals of MFP are to prevent the recurrence of delinquent, and especially violent, activity. However, there are instrumental outcomes and therapeutic objectives believed to precede and contribute to the ultimate outcome of reducing recidivism. These include improving family functioning—particularly affective relationships, enhancing the youth's adjustment at home and school, and altering the youth's peer relationships and peer attitudes. The decision to terminate a family from treatment is made using the criteria listed in Table 2.

TABLE 2
Criteria for Termination of Families from Therapy

Short-term successful termination:
The treatment team believes that the parent(s) have the motivation and skills needed for handling subsequent problems.
The youth is making reasonable educational/vocational efforts.
The youth is involved with prosocial peers and is minimally involved with problem peers.
The youth and family have been functioning reasonably well for at least 1 month.

Partially successful termination:
Treatment is considered to be partially successful when some of the preceding goals have been met but treatment has reached a point of diminishing returns for the therapy time invested as determined by the treatment team.

Failure termination:
There has been minimal therapeutic change in spite of considerable efforts on multiple fronts.
The youth and the parents refuse to extend the necessary efforts.
There are no viable alternatives (e.g., extended family are not available to help, problems are not serious enough to advocate foster placement).

Therapists. State-employed mental health professionals (MHP) provided the treatment. Three MHPs were at each site, two serving as therapists and the third, a senior therapist, acting as the site supervisor. The therapists were MA-level persons, most often with a background in social work or pastoral counseling. Previous therapy experience varied from less than 1 year to 15 years. Therapist supervisors were required to have had at least 2 years of therapy experience. All therapists were expected to complete an initial intensive 6-day training program on MFP and were provided with a manual detailing the treatment protocol.

The treatment teams were further supervised by the project's coordinator and the site's PhD-level child/adolescent services director, who had also completed the MFP training. Caseloads were kept small, averaging five families for the therapists and three for the supervisors. Although an attempt was made to ensure racially mixed treatment teams at each site, self-selection by applicants made this impossible to maintain at all times over the course of the project. Across the sites, 50% of the therapists have been African American and 50% White. Teams were, however, of mixed gender, with one woman and two men.

Research Assistants. The research assistants were BA-level individuals employed by the state Department of Mental Health who had prior experience working with delinquent juveniles. One research assistant in each site had the task of collecting data from the schools, family members, and the courts. All research assistants were trained in the administration of the data protocol and were regularly supervised by the project director.

Department of Juvenile Justice (DJJ) Program

To fully measure and compare the effectiveness of MFP, it was necessary to study a similarly situated group of delinquent youth who did not receive MFP services. Youths in the DJJ condition are placed on probation and are often court ordered to complete community service hours or some other form of restitution. Probation typically lasts for 6 months, during which a youth may be

seen as frequently as once per week. Other youths, however, may be seen as little as once per month or less due to the high caseloads carried by many probation officers. During this time, these officers are expected to monitor school attendance and refer the youths to other social service agencies for help in particular problem areas. These other services may include therapy through the local mental health center, alcohol and drug abuse programming, and vocational counseling or training. Youths may also be placed in alternative schools or a special program for school dropouts.

Dependent Measures

Brief Symptom Inventory (BSI; Derogatis, 1975). The BSI is the brief form of the Revised Symptom Checklist-90 (Derogatis, 1993). Its 53 items represent nine subscales assessing somatization, obsessive/compulsiveness, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. Three global scales include a global severity index, positive symptom index, and positive symptom total score. Mother figures and adolescents are asked to indicate the degree to which they were bothered in the previous week by various symptoms on a Likert-type scale ranging from 0 = *not at all* to 4 = *extremely*. Correlations of the BSI and the Revised Symptom Checklist-90 scales range from .92 to .99.

Self-Report Delinquency Scale (SRDS; Elliott et al., 1983). This 40-item scale measures the frequency of delinquent acts. The items can be aggregated to form seven offense-specific subscales, five offense-category subscales, and five summary subscales. Test–retest reliabilities and internal consistency on all subscales are adequate (above .60), with the exception of those representing the constructs of minor assault and property damage. Reliabilities for these latter scales fall between the values of .40 and .60. Adolescent respondents are asked to report the frequency with which they have engaged in each type of delinquent activity over a specified time period. The time periods were set at 4 months for the pretest measure and since the beginning of the program for the posttest one.

Revised Behavior Problem Checklist (RBPC; Quay & Peterson, 1987). The RBPC contains 77 items forming six subscales: conduct disorder, socialized aggression, attention problems–immaturity, anxiety withdrawal, psychotic behavior, and motor excess. Parent(s) rate the items on a 3-point scale ranging from 0 = *no problem* to 2 = *severe problem*. Test–retest reliability coefficients range from .49 for the socialized aggression subscale to .83 for the attention problems–immaturity subscale.

Family Assessment Measure III (FAM; Skinner, Steinhauer, & Santa-Barbara, 1983). The nine subscales of the FAM III measure task accomplishment, role performance, communication, affective expression, involvement, control, values and norms, social desirability, and denial. Parent and adolescent responses are scored using a 4-point scale where 1 = *strongly agree* and 4 = *strongly disagree*. High scores indicate dissatisfaction with task accomplishment.

Parental Monitoring. Parental monitoring was assessed using pertinent items from the parent and child versions of the Oregon Learning Center's Adolescent Transitions, Time Outside of School, and Decision Making questionnaires (Patterson & Dishion, 1985). Items from the Transitions form assess supervision by the adult when the child is out of the home and parental beliefs as to what the child is doing when not at home. Time-outside-of-school items measure monitoring that occurs outside scheduled school hours. The decision-making items assess the degree of responsibility of the parent and child in making decisions regarding the child's activities. Response formats varied across sets of items but all items were scored such that a low score represented more monitoring and a high score less monitoring on the part of the parent.

Research Design and Treatment Intervention

Participants were randomly selected and assigned to receive either MFP services or the usual DJJ services provided by the South Carolina Department of Juvenile Justice. To reduce the likelihood of historical confounds affecting the outcome, each youth in the MFP group was temporally and geographically yoked to another youth assigned to the DJJ condition. Although the study follows a 2 × 2 × 3 (Condition × Site × Time) repeated-measures design with immediate pretest, posttest, and 6-month follow-up measures, only Condition × Time (pretest, posttest) analyses on the first 54 youths are presented here.

Procedures. A list of all juveniles meeting the selection criteria was obtained from the DJJ intake personnel in each county. Youths were randomly selected from this list and assigned to receive either MFP services or the usual DJJ services. Following random assignment, the adolescent and his or her family were approached by the project staff at the time the family appeared in court for the adolescent's case. A general description of the project was provided to the family members and they were asked to participate in the study. If they agreed, a member of the project appeared in court with them and the DJJ probation officer to ask that the judge allow the youth to be placed in the project.

Within 2 days of entering the project, the families were visited in their homes by one of the project's research assistants. At this meeting, the project was explained in greater detail, informed consent obtained, the intake process completed, and the pretest measures administered individually to the youth and his or her parent(s) using an interview format.

For those families receiving MFP services, therapy was begun within 2 days following the administration of the pretest measures and continued on average for 3.5 months. All MFP cases were staffed once each week by the treatment team in the presence of the project director and the site child/adolescent

services director. Every 6 to 8 weeks, the two treatment teams attended a 1-day booster session during which cases were staffed or special topics covered by the originator of the MST approach. In addition, all therapy sessions were audiotaped, and therapists were required to maintain daily records of their activities broken down into half-hour increments, as well as logs of each direct contact (any contact involving at least one family member) and indirect family contact (any contact with anyone about the family but not including a family member).

Evaluation

Data were analyzed using a 2 × 2 (Condition × Time) repeated measures analysis of variance (ANOVA). Responses to the FAM III and BSI were analyzed using a 2 × 2 × 2 (Condition × Time × Respondent) ANOVA because the measures are responded to by the adolescents and their parents. Unless otherwise noted, the results reported are for the Condition × Time effects because these are associated with the hypotheses of interest. Analyses by site, race, and type of household (single parent, two parent, etc.) were not conducted due to insufficient numbers of participants in some cells. Data for two of the therapists (n = 13) who are no longer with the project were omitted when integrity checks indicated that they had seriously and continually violated the treatment protocol. Only mother figure and adolescent data were used in the analyses that follow. Although most analyses were conducted on the full sample, some were conducted on a subset because of the preliminary nature of the data. Due to the exploratory nature of the analyses and low statistical power, results were interpreted at the .05 level of significance across families of tests.

Means, standard deviations, and simple main effect F values for tests run on analyses with significant global F values are reported in Table 3. As can be seen in the table, a significant treatment effect was noted for the RBPC socialized aggression subscale. Mother figure reports of adolescent socialized aggression decreased over time, with a greater decrease in the MFP condition than in the DJJ condition, $F(1,42) = 4.67$, $p < .036$. Tests of the simple main effects for time yielded a significant F value for the MFP condition but not the DJJ one. A similar trend was noted in the conduct disorder subscale scores, $F(1,42) = 3.87$, $p < .056$. Nonsignificant effects were found for the attention problems–immaturity, anxiety withdrawal, psychotic behavior, and motor excess subscales on the RBPC.

As with the RBPC, significant Condition × Time effects were noted on the BSI for the somatization, $F(1,41) = 11.24$, $p < .002$; obsessive-compulsive, $F(1,41) = 5.90$, $p < .20$; interpersonal sensitivity, $F(1,41) = 8.20$, $p < .007$; and depression, $F(1,41) = 6.12$, $p < .018$, subscales, as well as for the general distress index, $F(1,41) = 8.34$, $p < .007$. The means in Table 3 indicate that the adolescents and mother figures in the MFP condition consistently reported decreased symptomology at posttest whereas participants in the DJJ condition did not. Simple main effects tests for time were significant in the MFP condition for the general distress, interpersonal sensitivity, depression, and obsessive-compulsive subscales and nonsignificant for all subscales for the DJJ condition. Respondent × Condition interactions were also present for the general distress index, $F(1,41) = 4.47$, $p < .05$, and the obsessive-compulsive, $F(1,41) = 7.48$, $p < .01$, scales. On both scales, mothers in the MFP condition and adolescents in the DJJ condition scored higher than their counterparts in the comparison condition. Trends toward significance were noted for the Time × Condition interactions for the anxiety, $F(1,41) = 3.59$, $p < .06$, and hostility, $F(1.41) = 3.65$, $p < .06$, subscales. Tests for the phobic anxiety, paranoid ideation, and psychoticism subscales were not significant.

Significant treatment effects were also obtained for parental monitoring. Based on mother figure reports, offenders in the MFP condition less often went to places to which they were asked not to go, $F(1,53) = 11.04$, $p < .002$, and were less often talked by friends into staying out longer than they should or go to places they should not, $F(1,53) = 4.27$, $p < .044$. DJJ mother figures, on the other hand, reported increases in such behavior at posttest. Significant simple main effects were found for both conditions on the variable Go Places but failed to reach significance for the variable Staying Out. The items related to time outside of school and decision making failed to reach significance.

A significant Time × Respondent × Condition interaction, $F(1,46) = 4.55$, $p < .038$, was noted for the task accomplishment subscale on the FAM. Parent reports of task accomplishment increased over time for the DJJ families and decreased in the MFP families; however, DJJ adolescents reported decreases and MFP adolescents increases on this measure. Analyses run on the SRDS subscales were not significant. No significant effects were noted for the role performance, communication, affective expression, involvement, control, or values and norms subscales.

Tests for the general delinquency, felony assault, assault, felony theft, crimes against persons, and index offenses subscales on the SRDS were not significant.

Synthesis

The preliminary findings from this study are generally consistent with the positive results from similar MST projects with delinquent youth (Borduin et al., 1993; Henggeler et al., 1992). MFP treatment is demonstrating the capacity to effect change in the functioning of rural, predominantly African-American families—both for parents and adolescents—in which the adolescent is a serious juvenile offender. Mothers, or the mother surrogates, in the MFP treatment group reported that their adolescents were engaging in significantly less socialized-aggressive problem behavior and demonstrated marginally less conduct disorder symptoms following treatment than did their counterparts in the control condition. Mother figures in the MFP group also reported experiencing significantly fewer symptoms of psycho-

TABLE 3
Significant and Marginally Significant ANOVA Effects

Condition		n	Pretest		Posttest		Simple main effect F values
			Mother	Child	Mother	Child	
RBPC:							
Socialized aggression							
DJJ	M	21	7.00		5.09		2.73
	SD		6.34		5.89		
MFP	M	23	8.09		2.65		23.25**
	SD		7.32		3.26		
Conduct disorder							
DJJ	M	21	12.86		10.47		NA
	SD		10.46		8.63		
MFP	M	23	13.91		6.57		NA
	SD		12.11		6.38		
BSI:							
General distress index							
DJJ	M	21	.43	.46	.32	.62	.24
	SD		.57	.46	.34	.60	
MFP	M	22	.72	.48	.44	.22	28.87**
	SD		.72	.50	.47	.33	
Somatization							
DJJ	M	21	.29	.27	.45	.45	2.77
	SD		.37	.45	.60	.54	
MFP	M	22	.72	.32	.57	.14	3.62
	SD		.87	.49	.91	.29	
Interpersonal sensitivity							
DJJ	M	21	.43	.41	.39	.67	.42
	SD		.57	.52	.47	.73	
MFP	M	22	.87	.52	.36	.27	3.94
	SD		.84	.66	.53	.52	
Depression							
DJJ	M	21	.39	.33	.26	.52	.04
	SD		.81	.57	.37	.69	
MFP	M	22	.75	.53	.42	.15	5.43*
	SD		.92	.74	.62	.29	
Obsessive/compulsive							
DJJ	M	21	.31	.43	.16	.58	.00
	SD		.52	.56	.29	.77	
MFP	M	22	.86	.51	.48	.22	5.97*
	SD		.94	.58	.50	.39	
Parental monitoring:							
Go places							
DJJ	M	24	1.79		2.41		6.49*
	SD		.78		1.10		
MFP	M	31	2.48		2.03		19.64**
	SD		1.36		1.17		
Staying out							
DJJ	M	24	2.17		2.71		2.75
	SD		1.01		1.33		
MFP	M	31	2.65		2.29		1.58
	SD		1.54		1.39		
FAM III:							
Task accomplishment							
DJJ	M	21	5.24	6.10	5.71	6.05	NA
	SD		1.58	1.64	1.01	1.53	
MFP	M	27	5.96	5.85	5.30	6.26	NA
	SD		1.81	1.92	1.73	2.46	

Note. RBPC = Revised Behavior Problem Checklist; BSI = Brief Symptom Inventory; FAM III = Family Assessment Measure III; DJJ = Department of Juvenile Justice program; MFP = multisystemic family preservation.
*$p < .05$. **$p < .01$.

logical distress following treatment than did mother figures who received the DJJ services.

Mothers, or their surrogates, who received the MFP treatment reported significantly more satisfaction with family task accomplishment than their adolescents and their DJJ counterparts. Perhaps most importantly, at posttest, MFP mother figures reported improvements in parental monitoring. They had more confidence than their counterparts that their adolescent was not going places he or she shouldn't and was less swayed by friends into going places or doing things he or she shouldn't. Taken together, these results support the conclusion that MFP is achieving its goals of empowering parents to direct and regulate events in their family and of decreasing youth antisocial behavior.

These preliminary findings are also consistent with research on the treatment of juvenile delinquents in general. Several reviewers (Lipsey, 1992; Mulvey et al., 1990) have determined that most empirically tested treatments for the remediation of juvenile delinquency demonstrate small effects. This is why comprehensive treatment programs and multitrait–multimethod program evaluation are necessary to demonstrate the efficacy of a treatment program for delinquent youth. Ongoing analyses of our current data suggest that MFP will demonstrate small to medium effects in remediation of adolescent delinquent behavior, in family functioning, and in the mental health of targeted parents and youth. These analyses replicate previous studies of the efficacy of MFP (Borduin et al., 1993; Henggeler et al., 1986; Henggeler et al., 1992; Henggeler, Melton, Smith, Schoenwald, & Hanley, 1993) with a rural population. Even more importantly, they are some of the first positive findings to be achieved in "real world" settings using community mental health professionals, which has been sorely missing in previous research (Weisz, Weiss, & Donenberg, 1992).

Furthermore, this investigation measured treatment effects from various perspectives (e.g., adolescent, parent, therapist, arrest reports), incorporated multiple measures of family and individual functioning, and will ultimately include data gathered from observational techniques as well as the self-report data presented here. Finally, it must be remembered that these positive findings have come about with some of the most serious and violent juvenile offenders. This population traditionally has been very difficult to engage in therapy and treat successfully (Henggeler, 1989). Achieving positive results with this group suggests that MFP could be at least as successful treating more functional and less disturbed adolescents and their families.

It will be important for more-sophisticated analyses to confirm and elucidate the findings presented here; such data are being collected. For example, further analyses are planned to investigate the treatment process and to study the overall cost-effectiveness of MFP treatment compared to juvenile justice services as they are currently conducted. The process data will enable us to discriminate as to which aspects of MFP are most important for successful treatment and which families are most likely to respond favorably to treatment. Cost-analysis data will be crucial for disseminating MFP services in political climates where incarceration is the preferred disposition for juvenile delinquents. Finally, we are exploring the degree to which MFP is tolerated and adopted by the communities in which it is practiced. This will provide us with the data needed to institute MFP programs in other venues.

The MFP project is an intermediate step in a series of MST studies for the treatment of juvenile delinquents. Our initial efforts clearly indicate the promise of MFP services for serious adolescent offenders and their families from rural and minority populations. Additional studies will be necessary for evaluating the most effective "dosage" of MST. This might be accomplished by varying the caseload carried by each therapist or time allotted for the treatment of each family. Further studies also are needed to determine ways of enhancing the provision of MFP therapy. Further work is needed to refine measurement procedures so that the effects of MFP can be more accurately portrayed.

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