

A MULTIPLE FAMILY GROUP INTERVENTION FOR FIRST-TIME JUVENILE OFFENDERS: COMPARISONS WITH PROBATION AND DROPOUTS ON RECIDIVISM

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This study evaluated a multiple-family group-intervention program (MFGI) for first-time juvenile offenders. The recidivism rate for subjects who completed the MFGI (the Family Solutions Program) was compared to recidivism rates of two other groups of first-time juvenile offenders. Using logistic regression analysis predicting who will recidivate, juvenile first offenders who were placed on probation ($N = 95$) were 9.3 times more likely to re-offend compared to the Family Solutions Program (FSP) graduates ($N = 267$). Families referred to FSP but who dropped out (most never attended the 10 session program) ($N = 93$) also were 4.4 times more likely to re-offend compared to FSP graduates. An intent-to-treat model comparing the combined group of FSP graduates and dropouts with the probation group indicated that a youth in the probation group was 8.1 times more likely to re-offend than a youth referred to the FSP. Results indicating better outcomes on recidivism for FSP graduates were significant for both male and female youths. Implications for policy and practitioners are discussed. © 2004 Wiley Periodicals, Inc.

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There is a continuing need for effective interventions with juvenile delinquents. Interventions with juvenile delinquents have included individual-based interventions (e.g., probation and counseling), drug prevention and treatment (Cunningham & Henggeler, 2001), family therapy (Alexander & Parsons, 1973; Gordon, Graves, & Arbuthnot, 1995; Henggeler, Schoenwald, & Pickrel, 1995; Liddle, 2000), and multiple families involved in intervention together (Quinn, 1999; Quinn, Bell, & Ward, 1997; Quinn, VanDyke, & Kurth, 2002). Empirically supported interventions are needed to maximize the limited available resources in providing services to youths. Family intervention studies with delinquent youth, such as those of Functional Family Therapy (Alexander, Barton, Schiaro, & Parsons, 1976; Alexander & Parsons, 1973; Alexander, Waldon, Newberry, & Liddle, 1990) and multisystemic therapy (MST) (Henggeler, Melton, & Smith, 1992), have generated empirical evidence showing the importance of the inclusion of the family in treatment. This substantive work drew on the theory building of foundational family systems principles summarized by Hoffman (1981), as well as the social-learning applications by Patterson and colleagues (Chamberlain & Rosicky, 1995; Patterson, 1975). These studies, largely with samples of serious and chronic offenders, have provided evidence for the use of single-family intervention to curb recidivism rates and strengthen families.

Despite the use of these approaches, family intervention is not a mainstream-service delivery option for many juvenile courts or juvenile justice departments. This absence of consistent family intervention is due to many reasons, including budget constraints that prevent staffing of family intervention, challenges in convening families to intervention, and the temptation to use a traditional or customary response, such as probation, which is viewed by some as an inexpensive intervention that serves as a *wake-up call* to youths. However, probation has not been demonstrated adequately as a viable response to delinquency to curb recidivism, nor does it address family influences known to influence delinquency.

This study examined the relative merit of a multiple-family group intervention (MFGI) as compared to the common practice of probation in many juvenile justice organizations and courts. Given the empirical support for the association of family relationships, parenting style, and family type with delinquency (Henry, Tolan, & Gorman-Smith, 2001; Jacobsen & Crocket, 2000), the reason for testing the merit of a MFGI is to examine whether families engaging collaboratively to generate support and healthier family relationships has use in curbing recidivism and building greater cost effectiveness. The MFGI was designed to build on these established family influences on at-risk youth behavior by incorporating multiple-family support from the community, examining parenting practices, and providing experiences to promote family cohesion.

THE NEED FOR INTERVENTION WITH FIRST-TIME OFFENDERS

It is important, given the cost and hardship to families and communities, to establish effective interventions that reduce the likelihood of continued delinquent behavior. A recent study by the Office of Juvenile Justice and Delinquency Prevention (Kumpfer & Alvarado, 1998) stated that most existing programs focus on either prevention in early childhood or remediation of the "serious and chronic" offenders. Examples of effective family intervention approaches for juvenile delinquency are Functional Family Therapy (Alexander et al., 1990) and a multisystemic intervention with serious and

chronic juvenile offenders using home-based treatment (Henggeler et al, 1992). These evidence-based models meet the criteria of being empirically supported adolescent treatments (Kazdin & Weisz, 1998) and are interventions for those youths that have been engaged in a pattern of delinquency or problem behavior for a relatively long period of time.

However, less attention has been given to early intervention. Prevention programs have been found to be most effective with at-risk youths compared to all youths in a population (Allen & Philiber, 2001). A program of early intervention to prevent future problem behaviors for at-risk youths, such as juvenile first-time offenders, may prevent repeat offenses. The recidivism rate for juvenile offenders can be as high as 90% within a 12-month period (Snyder, 1998). Given that the majority of juvenile offenders offend more than once, research on early intervention that curbs this rate could have benefits to the lives of youths, as well as economic benefits by reducing the cost of further treatment or case management, or eventually, incarceration. Currently there are no major studies examining or demonstrating effective intervention with juvenile *first-time* offenders. While some studies have reported effectiveness with serious chronic offenders, such as MST (Borduin et al., 1995), "to date, no studies have been published demonstrating the effectiveness of MST with first-time juvenile offenders" (Hinton, Sheperis, & Sims, 2003, p. 171).

First-time juvenile offenders are youths who have entered the juvenile justice system, with the explicit meaning being that they have fallen into society's net for the first time with a claim that a societal proscription has been violated. Examples of such violations are assault, truancy, shoplifting, criminal trespass, and drug and alcohol use. This first-time event becomes an opportunistic moment to harness family intervention resources.

Youths receive some type of disposition (e.g., diversion or adjudication) for the first time: dismissal, informal probation, an intervention (e.g., counseling), or incarceration (Woolredge, 1998). According to Yoshikawa (1995), the greatest need for dealing with juvenile delinquency is prevention because prevention programs for juvenile delinquency can provide a savings of thousands of dollars for juvenile courts, the Justice Department, and the *potential* victims. One major component of reducing delinquency, then, is preventing recidivism of first-time juvenile offenders. The intervention program evaluated in this study provides an opportunity to examine the usefulness of prevention/early intervention to prevent further behavior problems and cost.

RECIDIVISM STUDIES OF FIRST-TIME OFFENDERS

The idea of secondary prevention deals with the youth that has entered the juvenile justice system and is at greater risk for recidivism than the *typical* youth (Lipsey & Derzon, 1998). Preventing delinquency, in this context, involves reducing the likelihood of re-offense by those youths just entering the system. Recidivism provides an unobtrusive measure of treatment outcome for juvenile delinquents. It does not measure whether delinquent behaviors have ceased. However, examining re-offense patterns does assess whether the youths can function within society and outside of the juvenile justice system (Ulrici, 1983). This criterion provides a pragmatic, as well as political, strategy for responding to society's concerns of safety and institutional burden.

A variety of studies have used recidivism as an outcome marker (Alexander et al., 1976; Klein, Alexander, & Parsons, 1977; Minor, Hartmann, & Terry, 1997; Woolredge,

1998). All of these studies shift attention toward less court involvement (punitive) and more family/community types of intervention. Woolredge's (1998) detailed study on the effects of twelve court actions on recidivism showed that community treatment and family involvement were the most effective at reducing recidivism. In addition, studies of family intervention for juvenile offenders with demonstrated efficacy use recidivism as a viable outcome marker (Alexander et al., 1976; Borduin et al., 1995; Henggeler et al., 1992; Klein et al., 1977; Quinn & Vandyke, 2001; Quinn et al., 2002).

PROBATION: A NEGATIVE CONSEQUENCE

The juvenile court was established in 1899 as an entity separate from the criminal court. As a separate court system of justice for young people, it focused on prevention and remediation of delinquent behavior (Lemov, 1994). In its inception, juvenile court was intended to provide solutions in the best interests of the youth. These solutions were limited only by the creativity of the judge and the effectiveness of the intervention (Bazemore & Umbreit, 1995). Juvenile judges eschewed sanctions in preference for treatment. Slowly, the court changed into a punitive system where the youth received a type of mandated sentencing similar to that in adult court. In many communities, momentum is building for punishing juvenile behavior due to the juvenile judges' uncertainty of effective treatments for which to refer juvenile offenders and as a response by society to perceived threats to public safety and civility in the community.

Probation tends to focus on the individual and less on the contextual forces that maintain behaviors and constrain alternative solutions. Probation officers sometimes are involved with the school systems, but more in terms of the juvenile's behavior pertaining to crime than with the relationships in the juvenile's life. Lipsey and Wilson (1998), in a meta-analysis of 200 intervention studies, stated that probation had a weak or no effect in reducing recidivism of serious offenders. Building on a previous study (Lipsey and Wilson, 1983), they contended that the most effective interventions involved family, individual behaviors and cognition, and community (neighborhoods, school, and peers). Others have criticized the entire juvenile justice system as punitive, adversarial, and limiting community involvement. The juvenile is seen as deficient with crime as an individual act with individual responsibility (Bazemore & Umbreit, 1995). Probation, as part of this system, sets the context as the court/community against the juvenile. In terms of behavioral techniques, probation is punishment (i.e., consequence) for past behaviors and frequently neglects establishing new structures that promote positive alternatives.

AN ALTERNATIVE APPROACH: MULTIPLE-FAMILY GROUP INTERVENTION

Multiple-family group intervention (MFGI) and individual and family interventions with juvenile delinquency have similar conceptual frameworks as they pertain to targeted change characteristics, namely fostering changes on various family functioning dimensions such as communication, parental monitoring, and cohesion. However, MFGI has an additional dimension that is unique to its structure in that families offer the opportunity to challenge, confront, support, and provide alternatives to one another. Laqueur (1980) stated that working with multiple families in a group setting uses a wide range of families' experiences. Families are able to confront, support, and witness the success and failures of others. The family group format provides a new

context where alternative family processes can develop and hopefulness can be fostered. Interventions that include the multi-family context may provide more opportunities for identifying and maintaining alternative behaviors.

While little is known about the effectiveness of MFGI for at-risk youths, Chamberlain & Rosicky (1995) performed a meta-analysis of family therapy interventions with juvenile delinquents. Their study showed that for single-problem families where delinquency was the only factor, family therapy was an effective intervention for reducing juvenile-delinquent behavior. However, families with multiple stressors required an intervention that involved multiple systems in the youth's life (Dickey, 1995). First-time offenders and their families often have many difficulties, and therefore they require interventions that address numerous contexts: family, peer, and community (Yoshikawa, 1994). Clinicians need to provide competent and cost-effective care that has support based on empirical research. Multiple-family group intervention is positioned uniquely to provide services to more families for less cost compared to other interventions such as probation or individual family therapy.

Multiple-family group intervention developed historically out of two necessities: to provide a cost-saving intervention for psychiatric inpatients, and to decrease distrust by family members of medical staff (Laqueur, 1976). It is cost effective for family members compared to family therapy and is cost effective for the community compared to hospitalization or incarceration (Chamberlain & Rosicky, 1995). Multiple-family group intervention was the logical historical transition from individual focus to group and family etiologies and therapies (Strelnick, 1977).

Multiple-family group intervention has been used as a generic intervention for a variety of problems, including chronic mental illness (Gonzalez, Steinglass, & Reiss, 1989, McFarlane, 2002; McFarlane, Link, Dushay, Marchal, & Crilly, 1995) and dually diagnosed adolescents (Kymissis, Bevacqua, & Morales, 1995). In interventions with various populations, the focus is on increasing positive parenting practices, improving family communication, and creating a community of shared experiences. The first book devoted to this approach, based on Laqueur's work, that extends our understanding of multiple-family group work and examines the usefulness of the model was offered recently by McFarlane (2002). The model is relevant for youths and families who often lack a sense of community. The culture, and the view held by some interventionists that strip the context from treatment, can be most responsible for isolation of family members from each other (Doherty, 1995). Multiple-family group intervention for juvenile delinquency provides an intervention that includes the youth, the family, and other families from the community. This community-building context allows for innovative and alternative interactional behaviors within and between families that can be applied to their daily lives.

Adolescents and their families working in the context of a group of families provide an often-needed sense of *community* for youths. The presence of a community-building group dynamic fosters a sense of agency for adolescents and families, the vision of a future that can be better if family members help each other. In the MFGI, several adults can influence each youth, which strengthens self-validation (Quinn, 2003). Multiple-family group intervention traditionally has had three phases of treatment: group formation and trust/emotional relief; resistance to treatment; and group-involvement/growth (Carlson, 1998; Frager, 1978; Laqueur, 1980). During the first phase, the members, through self-disclosure, realize that they share similar situations and struggles. There is hope in sharing a struggle and witnessing change. Their *resistance* to make behavioral changes characterizes phase two, when families begin to expose their deep hurts and anxieties. Family members typically say to each other, "I

want to change, but until you change and do what I need, I cannot change." Phase three involves the families teaching each other by modeling, sharing experiences, and translating those experiences to guide future behavior. During this time, families begin to address systemic problems and recognize alternative options. They start to help each other, within and between families, and to embrace the concept of simultaneous human behavior change.

Two brief examples might serve to illuminate the benefits of a family group intervention. In the Family Solutions Program, parents sometimes bring an attitude to the first session of, "I didn't do the crime, why do I have to do the time?" Their anger and frustration abates when they discover that other parents need help and they are placed in a position of needing to support one another, or the angry parent encounters another parent in the group who is glad to attend and views the program as an opportunity to become a more effective parent. This attitude can become contagious as other family members begin to experience the program as uplifting and focus on developing a better-functioning family or greater hope for the future. Another benefit is the learning that occurs as families offer their solutions to addressing the challenges of parenting youths. In one group, a mother discussed her frustration with her stepdaughter and husband, who was a truck driver and away from home throughout the week. Another mother in the group heard her story and said, "You know, I had a very similar situation about a year ago. Could I get your phone number and call you this week and tell you how I handled it. Things are much better for me now." Family groups provide multiple sources of insight, encouragement, and solutions.

A challenge specific to MFGI with juvenile delinquents is that some researchers caution that interventions solely with delinquent peers can produce iatrogenic effects (Chamberlain, Eddy, & Fisher, 1998; Dishion, McCord, & Poulin, 1999). They urge that the focus should be on limiting a delinquent's interaction with other delinquents so that deviance training can be reduced or avoided. Thus, it is an important concern that *better* delinquents are not created through the group process. However, the very nature of an MFGI uses the shared experiences of these youths and families to find new solutions to their difficulties from the other families. These youths are not separated from their parents, unlike summer camps or adolescent group-therapy approaches. Professionals and adults always are present in MFGI and serve to calibrate prosocial and developmental changes. While the element of *peer contagion* appears to be a property of intervention that requires careful consideration, it also is believed that consistent parental involvement in the intervention can negate or prevent such negative peer influence from taking hold (Smith, 2002). It is not a practical option to merge delinquent and nondelinquent youths in intervention programs, although it inherently could serve to buffer some of the potential deviance-training processes. The likelihood of fostering family group formation without including youths who share a delinquent status is impractical. It is unlikely that, even if more positive results were found for MFGI, treatment centers could organize routinely groups that would include a mix of delinquent and nondelinquent youth.

Authors reviewing the MFGI literature for at-risk youths state that:

1. further research is needed to determine MFGI's efficacy (Strelnick, 1977),
2. there is a dearth of empirical support (O'Shea & Phelps, 1985), and
3. there remains a great need for controlled, rigorous, scientific scrutiny (Carlson, 1998).

In Carlson's summary of outcome studies, she stated that MFGI was used only in conjunction with other interventions; thus, the efficacy of MFGI was an additive to other therapies. Some literature reviews have discussed the lack of quantitative research on MFGI as the reason for the limited use of MFGI as a form of intervention (e.g., Gritzer & Okun, 1983). McCord (1996) argued strongly for research on interventions: "In the absence of research evaluating intervention programs, researchers should not make claims about programs' likely results. It is a mistake to assume that knowledge about the effectiveness of restorative interventions follows from knowledge about causes" (p. 152). Instead of making the assumption that because an intervention is geared to the areas affecting etiology, research studies must confirm the efficacy of those interventions.

The purpose of the study was to follow this lead and test the effectiveness of a multiple-family group intervention for juvenile first offenders as compared to the traditional case disposition of probation, and a third group comprised of the dropouts of the multiple-family group intervention. A few of the dropouts of the Family Solutions Program never attended a session. An examination of race and sex differences and the influence of pretreatment variables on recidivism were conducted. Subsequent to these tests, an intent-to-treat model comparing all youths referred to the Family Solutions Program (FSP) with youths referred to probation was tested.

METHOD

Participants

The data collection occurred in juvenile courts of two counties, one of which implemented the FSP and one that did not. The Family Solutions Program is a multiple-family group intervention program of 10 sessions targeting juvenile first offenders. All juvenile first offenders were referred to the program from the juvenile court because of a first offense. Offenses included truancy, shoplifting, criminal trespass, assault, *unruly* or *ungovernable* (youth not managed adequately by parents or custodial adults), or drug or alcohol use or possession. The grant to support this project required that the budget allocation be applied to direct services; thus, a randomized design was not feasible. The longer the program was in operation, the more favorable were the impressions of the judges and court staff; therefore, a control-group assignment was not an acceptable evaluation method due to their ethical stance of being opposed to denying intervention and their preference to allow all youths to participate in the intervention program.

Before beginning the selected treatment, data were collected on the juvenile and family at the case-disposition hearing or adjudication in which the court officer and liaison from the FSP would meet in tandem with the family for processing, referral, and assessment. The targeted youth offender and a parent were present at each court adjudication, and each completed an assessment that included demographic information and family history of criminal involvement.

Four hundred and fifty-five first-time juvenile offenders and their parents (predominately mothers) participated in this study. The participants came from two counties in Northeast Georgia. The sampling for this study was a convenience sample from extant data spanning from 1993 to 2001 for MFGI and probation. Due to the non-random assignment to treatment, it is evident that the group demographics were different, particularly the racial makeup of probation (majority Caucasian) compared

to the intervention (majority African American). Therefore, ethnicity was used as a covariate in every analysis because of this difference. An attempt was made to find the closest matching sample to assess the alternative intervention of the FSP and the traditional intervention of probation; however, due to juvenile justice constraints and counties without other interventions as an option for first-time offenders, an adjacent county probation group was selected, which largely explains the racial difference between the FSP and probation groups.

A total of 360 participants were referred to the FSP by probation officers and judges who order first-time juvenile offenders and their parents to FSP as their obligation to the court. The graduates of the FSP (attended at least 9 of the 10 weekly two-hour sessions) consisted of 267 participants, while 93 participants dropped out of FSP. The completion rate was 74%. Of the 93 youths who did not complete the FSP, 27% never attended and another 40% attended 1 to 3 sessions. Only 37% of the dropouts attended 4 to 8 sessions. The majority of youths comprising the dropout group received no or minimal exposure to the intervention and, thus, serves essentially as a comparison group.

An initial comparison group of 107 adolescents in this study received probation in a different, but adjacent, county to the county in which first-offender youths were referred to the FSP. These participants were a convenience sample, selected because of their proximity to the other county in the sample and the fact that no other treatments such as FSP or counseling were provided for first-time juvenile offenders in this county. The case files provided information on the youth's age, gender, ethnicity, family criminal involvement, seriousness of first offense, status of probation completion, and recidivism. Since a comparison is conducted in this study between completers and dropouts of the FSP, it is appropriate to divide the probation group into similar categories. However, only twelve youths did not complete their probation requirements in this sample. Since this number was too small for analysis, it was decided to delete these cases from the sample and compare only the probation youths who completed their requirements. Thus, the total number of youths in the probation group is 95 youths for comparison analysis.

Procedure

At adjudication, a representative from FSP was available and administered the risk assessment. The risk assessment is a battery of instruments designed to assess at-risk status and assist in the facilitation and evaluation of the FSP (Quinn, Sutphen, Michaels, & Gale, 1994). A staff person explained the FSP intervention and received from each individual a signed consent form (Quinn, 1998). If a juvenile and family failed to attend the FSP, they were referred back to the court and, typically, were assigned to probation. In this study, these youths are considered dropouts, although in some ways they share characteristics of the probation comparison group in this study.

Treatment adherence was developed using an intervention manual that guides the group leaders and families through the FSP (Quinn, 1998). Group leaders also were provided training, including the conceptualization for managing a multiple-family group program, including group formation and trust-building, the working or action stage, and the termination stage (Becvar, Canfield, & Becvar, 1997; Gazda, Ginter, & Horne, 2001). An additional procedure, to decrease drift from the manualized treatment and assure that all FSP cycles (10 session programs) were delivered in the same manner, required all potential group leaders to assist as a group facilitator for at least

one cycle (a complete 10 session program) before becoming a group leader. As group facilitators, they would observe the group leader in each session to learn how to implement the activities for each session and manage family group processes. Each two-hour session is outlined in the 197-page manual in the following format: the importance of prevention/early intervention; why work with families; managing group processes; the referral process; session topics organized in 10 sessions with additional optional topics (goals and objectives, preparations before the session, materials needed, activities with specified time allotment for each activity, handouts and case vignettes); and evaluation forms.

Group leaders were required to have a college degree in a human services or social-science discipline. The FSP manual allowed all group leaders to become familiar with the contents of each of the ten sessions. In addition, training for future leaders required observations of group management of an experienced group leader before taking leadership. There was never a time during the FSP implementation when adults (including group leaders) were not present with the youths. Thus, deviance training via delinquent peer interaction was blocked due to the constant presence of adults, including both multiple parents and group leaders. The availability of college students (who volunteered or received academic credit) and community volunteers to serve as group facilitators helped the group leader manage group interaction and activity, and provided a vigilance that prevented opportunities for exclusive peer interaction.

The session topics addressed the major influences of developmental and family challenges or risk factors. Topics included group cohesion, family cooperation, building home-school partnerships, parenting skills (parental monitoring, communication), family contracting, education, decision making, community volunteering (youth cooking a meal at the homeless shelter, beautifying city parks and school playgrounds, playing bingo with seniors and bringing prizes), conflict resolution, and graduation. The same activities, role plays, and videotapes were implemented in each FSP cycle consisting on average of 6 families. The final session, graduation, concluded with a celebration, a potluck dinner held to acknowledge the achievement of program completion by families. The potluck provided the celebratory conclusion for the group that has served as a new *community* for the youths and families. At the dinner, family members were provided with a certificate of completion, the youths received a "What we like about you" card signed by all parents in the group, and small gifts (e.g., marking pens with a logo, store/restaurant gift certificates) acknowledging their accomplishments. An inspirational speaker was heard and families stood and gave testimonials providing an account of their group experience.

Completion of the FSP required attendance by a youth and parent and active participation in at least 9 out of the 10 sessions. Noncompliance typically occurred between adjudication and the first session or attendance at less than 4 of the 10 sessions. Many efforts were made to solicit the participation of each family referred to the FSP, including a meeting with an FSP representative at the court, a subsequent letter sent to the home, and a telephone call just before the first meeting. Group leaders attempted to recruit families who missed a session to return via telephone calls and appeals to probation officers.

While two different courts are included in the sample, the condition that the counties be adjacent to one another and in the same state provided parallel adjudication processes. A first-offender youth in either the FSP or probation groups was required to appear in front of the juvenile judge or court officer when a complaint was filed either by police officers, victims, parents, schools, probation officers, or

agencies. The youth and parent(s) were notified of the court date and could elect to have an attorney present. The youth must *admit* or *deny* the charges against them following the reading of their rights. An initial *deny* plea is remanded over for a formal trial. With an admit plea, the court disposes the case. In the probation group, *treatment as usual* for first-time offenders was between 3 to 24 months of probation and the cost of supervision fees (9-month supervision fees were \$560). Additional stipulations exist depending on the judge or court officer. A few examples of these additions from the county of the probation group include maintaining regular school attendance and payment of restitution, as well as supervision fees.

Measures

Recidivism. Data collection for re-offenses occurred once a month by a representative of the FSP. A master list of participants in FSP and probation were matched with the court's records. Permission was obtained from the juvenile court to view the records, and a protocol to adhere to university human-subject guidelines was approved annually over the course of the study. The data-collection procedure has been followed since the MFGI (FSP) was initiated; thus, youths were tracked from the time they were referred for a first-offense to the time they were no longer considered a minor by the legal system. Thus, while the time duration of minor status beginning at the onset of intervention was variable depending on the age of youth at first offense, *this duration is virtually the same for all three comparison groups*. The mean age for all three groups at inception of intervention was approximately 14 years of age; thus, this resulted in an average three-year span for each group, since at age 17 these youth are no longer considered minors.

Standard outcomes for measuring juvenile delinquency and recidivism have been police arrest, court reports, and probation reports (Lipsey, 1988). These outcomes only measure acts that are identified by law enforcement or juvenile justice. Self-reported delinquency has become increasingly popular to measure treatment effects. However, self-reports have the following problems: report accuracy, social desirability, and higher frequency of delinquent behaviors by all youth (Battin-Pearson, Thornberry, Hawkins, & Krohn, 1998; Lipsey, 1988). In addition, self-report data at follow up have validity problems due to the preponderance of geographical mobility in the sample, resulting in a skewed distribution.

Control Variables. This study dealt with two data artifacts: unequal effects of outside influences and a priori differences between groups (Fortune & Hutson, 1984). Pre-intervention variables were used as covariates to deal with possible differences across the three groups. *T*-tests and the literature on recidivism of juvenile offenders determined the variables selected as covariates. Previous studies (Lipsey, 1995; Minor et al., 1997; Stouthamer-Loeber & Loeber, 1988) identified five variables that are associated with recidivism: age at first offense, seriousness of first offense, family involvement in crime, gender, and ethnic background. These were used as covariates in the present study.

Seriousness of Offense. Juvenile crimes were recorded in the court and were categorized in this study as being either status or criminal offenses and were dummy coded. Status offenses were those in which a youth exhibited a behavior that would not be considered a crime if the youth was an adult. Examples of these crimes would be alcohol possession, truancy, and unruly. Criminal offenses were those behaviors exhibited that

would be crimes at any age, such as criminal trespass, assault, and shoplifting. Status offenses were considered to be less-serious crimes with the assumption that a continuation of such behaviors as an adult would not be considered crimes and thus would not require societal resources or raise safety concerns. Thus, they would not result in criminal charges, the assumption being that the more serious the crime the more likely a repeat offense (Lipsey & Derzon, 1998).

Family Crime. The item included in the family crime variable was whether one or more family members had been involved in crime. If family members are involved in criminal activity, the youth is more likely to offend and re-offend (Lipsey & Derzon, 1998). The following is the coding for the family crime variable: no crime = 0, some crime (e.g., an arrest, misdemeanor of one family member) = 1, and serious crime (e.g., misdemeanor of more than one family member, felony, jailed or imprisoned) = 2.

Analysis

Recidivism and participation in FSP are dichotomous outcome variables. A suitable technique for "multivariate modeling of categorical dependent variables" is logistic regression (DeMaris, 1995). Logistic regression was used with the dichotomous variable of recidivism and modeled the probability of recidivism as a function of intervention given possible alternative explanations.

Dichotomous dependent variables need constraint in the regression line, given that the value of the dependent variable is either 0 or 1. This approach provides the probability of an outcome remaining within the limits of a dichotomous variable. The results can be interpreted in two ways, as odds or as probability. Odds ratio provided the likelihood of re-offense compared to another variable, similar to the odds in sporting events. Probability predicts the likelihood of a *certain* result occurring, given a number of characteristics. The results in this study are reported as the odds of a youth re-offending, based on the recommended interpretation of DeMaris (1995), such that adolescents are about *X* times as likely for one group (e.g., Probation) as they are compared to another (e.g., FSP).

RESULTS

Differences Between Groups

There were significant differences in proportions of those who offended according to treatment. Family Solutions Program completers had a 19.9% repeat-offense rate, whereas the comparison groups had a much higher re-offense rate, 36.6% for FSP dropouts and 54.7% for those assigned to probation. In addition, preliminary analyses determined that there were differences among subgroups according to ethnicity, seriousness of offense, and recidivism (Table 1). The probation group consisted of a majority of Caucasian youths and the Family Solutions Program consisted of a majority of African-American youths. This is due to the two different, yet adjacent, counties included in the sample. Recidivism rates differed among the three groups and are analyzed further in logistical regression analysis.

There was a statistical difference among the three groups on level of risk based on proportion of those in each group who committed a status offense as opposed to a criminal offense [$(X^2(2, N = 455) = 8.87, p = .012]$. The percentage of youths who graduated from the FSP who committed criminal offenses (70%) as opposed to status

Table 1. Demographics: Frequencies, Means, and Standard Deviations by Treatment (N = 455)

Variable	Treatments			X ²	P
	Probation	Family Solutions Graduates	Family Solutions Dropouts		
	% (count)	% (count)	% (count)		
Sample Size (n)	21(95)	59(267)	20(93)		
Ethnicity				85.26	.000*
Caucasian	86(82)	37(98)	27(25)		
African American	14(13)	63(169)	73(68)		
Gender				3.06	.216
Male	64(61)	58(155)	52(48)		
Female	36(34)	42(112)	48(45)		
Recidivism				42.18	.000*
Recidivator	55(52)	20(53)	37(34)		
Non-recidivator	45(43)	80(214)	63(59)		
Seriousness of offense				8.87	.012*
Status offenses	22(21)	30(80)	42(39)		
Criminal offenses	78(74)	70(187)	58(54)		
	M(SD)	M(SD)	M(SD)	F	P
Age at initial offense					
Youth total	14.20(1.8)	13.80(1.7)	13.72(1.6)	2.33	.098
Male	14.03(2.0)	13.52(1.8)	13.46(1.7)	2.01	.136
Female	14.50(1.5)	14.19(1.6)	14.00(1.4)	1.06	.348
Family crime history	.28(.60)	.44(.74)	.46(.76)	2.22	.110

**p* < .05.

offenses was higher than the for youths who dropped out of the FSP (58%). The probation group had a rate of criminal offenses slightly higher (78%) than the FSP graduates. Thus, dropout does not seem to be related to seriousness of offense.

There were no differences among the three groups on history of crime in the family. The variable was treated as continuous, measuring more serious family crime, and therefore analysis of variance was conducted [$F(2, N = 455) = 2.218; p = .110$]. No differences exist among groups on history of family crime or gender.

Bivariate Analyses on Recidivism

Family criminal involvement, seriousness of initial offense (status vs. criminal offense), race, and gender were not associated with whether the first-time juvenile offender re-offended. The form of treatment was found associated with recidivism. Graduates of the FSP had lower proportions of re-offending (Table 2). The FSP graduates had the largest proportion of youth *not* re-offending (80.1%) compared to probation (45.3%) and dropouts (63.4%) [$X^2 (2, N = 455) = 42.184, p = .000$].

Logistic Regression: Total Sample

The variables in the model for recidivism were age at first offense, gender, ethnicity, family involvement in crime, seriousness of initial offense, and type of treatment. The

Table 2. Hypothesized Correlates of Recidivism (N = 455)

Variable	Percentage (Number)		X ²	p
	No re-offense	Re-offended		
Gender			.077	.837
Male (N = 264)	68.9 (182)	31.8 (82)		
Female (N = 191)	70.2 (134)	29.8 (57)		
Ethnicity			.289	.610
Caucasian (N = 205)	70.7 (145)	29.3 (60)		
African American (N = 255)	68.4 (171)	31.6 (79)		
Family Crime			.507	.776
None (N = 329)	69.3 (228)	30.7 (101)		
Moderate (N = 69)	72.5 (50)	27.5 (19)		
Serious (N = 57)	66.7 (38)	33.3 (19)		
Seriousness of 1st offense			.870	.351
Status offense (N = 140)	66.4 (93)	33.6 (47)		
Criminal offense (N = 315)	70.8 (223)	29.2 (92)		
Treatment			42.184	.00*
Probation (N = 95)	45.3 (43)	54.7 (52)		
Family Solutions (N = 267)	80.1 (214)	19.9 (53)		
FSP Dropout	63.4 (59)	36.6 (34)		

**p* < .05.

model chi-square [$X^2(7, N = 455) = 59.922$; $p < .000$] was significant with the following variables associated with the likelihood of a youth being a repeat offender: age at first offense, ethnicity, and the form of intervention.

The dependent variable, recidivism, is the natural log of the odds of a youth re-offending. The parameter estimates [found in Table 3 as $\text{Exp}(\beta)$] are interpreted as the estimated impact on the odds of a repeat offender being from a participant in that specific variable. For example, the age of the youth at first offense's Odds Ratio (OR) is 0.878. For each year of age decreased, the odds in favor of re-offending are 1.14 times as likely as those who are a year older. The $\text{Exp}(\beta)$ for age = .88 [i.e., age increasing and recidivism decreasing, $1/[\text{Exp}(\beta)]$ provides the Odds Ratio 1.14 for age decreasing and recidivism increasing].

The odds in terms of percentage are understood as follows: for every unit increase (e.g., one year) in the age, accounting for the other variables in the model, there was

Table 3. Logistic Regression Model for the Log Odds of Re-offending (Total) (N = 455)

Variable	β	Wald	p	$\text{Exp}(\beta)$
Youth's age (in years)	-0.130	4.085	.043*	0.878
African American (0 Caucasian)	0.908	10.658	.001*	2.479
Male (0 Female)	-0.008	0.001	.972	0.992
Family crime (0 none; 1 moderate; 2 serious)	0.083	.070	.791	1.272
Serious of initial offense (0 status; 1 criminal)	-0.408	2.833	.092	0.665
Treatment (0 Probation)				
Family Solutions grad	-2.231	47.217	.000*	0.107
Family Solutions dropout	-1.490	16.282	.000*	0.225
Constant	2.246	5.200	.023	9.451

Model $\chi^2 = 59.922$, $df = 7$, $p = .000$, * $p < .05$.

a 12% decrease in the likelihood that a youth would re-offend. The significance level of the logistic regression was based on the Wald statistic: "The Wald test is equal to the squared ratio of the coefficient to its standard error" (Pedhazur, 1997; p.723). Taking the square root of the Wald value provides the *t* ratio.

Using the Hosmer and Lemeshow Goodness-of-Fit Test, the χ^2 value is 11.598, with 8 degrees of freedom. Hosmer, Taber, and Lemeshow (1991) stated that "[the way of] assessing fit is to compare their [chi square] values with the degrees of freedom" (p. 1632). A smaller ratio of χ^2 to degrees of freedom is viewed as an indicator of a good fit. The rule of thumb (Pedhazur, 1997) is that the ratio be near or less than a 1:1 ratio to be considered a good fit.

The converted parameter estimates show that three of the covariates had significant associations with recidivism. The older the adolescents at the time of the first offense, controlling for other variables in the model, the less likely he/she is to re-offend with each year of age associated with a 12% lower likelihood of recidivism (1.00–0.88). Another way of stating this finding, the form used for each result reported in this section, is that for a year increase in age the odds in favor of no re-offense are 1.13 times as large as for the previous year.

A youth referred to probation was 9.3 times (0/1.107) more likely to re-offend than a youth referred to the FSP who completed the program. A youth who is in the probation group had a 4.4 times (1/0.225) greater chance of re-offending than a youth referred to the FSP but who did not complete it. Thus, in terms of OR, participants in probation were 9.3 times as likely to re-offend compared to the FSP graduates, and 4.4 times as likely to re-offend compared to youths who did not attend or complete the FSP. Thus, youths who did not attend or complete the FSP were 2.1 times as likely to re-offend compared to the FSP graduates (the ratio of the two ratios above; 9.3:4.4).

Contrary to the bivariate analysis on recidivism, using logistic analysis indicates that ethnicity was associated significantly with recidivism. A youth who is African American has a 2.48 times greater chance of re-offending than a Caucasian youth. While both Caucasian and African-American youths who completed the FSP were less likely to re-offend than those who dropped out, this finding indicates that race, as well as treatment, predicts re-offense rates.

Logistic Regression by Gender

Gender has been a common variable in examining juvenile delinquency, with boys considered a greater risk for juvenile delinquency and recidivism (Hagell & Newburn, 1996; Minor et al., 1997). A more recent interest is examining whether interventions for female juvenile first offenders are sensitive to their specific and unique developmental and psychological challenges in adolescence. The overall model revealed no gender differences in recidivism by treatment when accounting for other variables (Table 4). Separate analyses for males and females indicated a significant model χ^2 (both *ps* < .000), and both had a good fit between model and data. Using the Hosmer and Lemeshow Goodness-of-Fit Test for females and males separately, the χ^2 values were 7.151 for females and 7.003 for males, with 6 degrees of freedom. These values indicate a slightly better fit than for the logistical regression analysis for the total sample.

Females (N = 191). Female recidivism was associated with age at initial offense, seriousness of offense, and treatment. Interestingly, race was not significant in the model

Table 4. Logistic Regression Model for the Log Odds of Re-offending by Gender

Variable	B	Wald	p	Exp(β)
Female (N = 191)				
Youth's age (in years)	-.403	11.715	.001*	.688
African American (0 Caucasian)	.756	2.974	.085	2.130
Family crime (0 none; 1 moderate; 2 serious)	-.030	.013	.911	.971
Seriousness of offense (0 status; 1 criminal)	-.984	6.900	.009*	.374
Treatment (0 Probation)				
Family Solutions grad	-2.383	19.210	.000*	.092
Family Solutions dropout	-1.734	8.314	.004*	.177
Constant	6.660	14.192	.000	780.602
Model $\chi^2 = 40.506$, df = 6, $p = .000$				
Male (N = 264)				
Youth's age (in years)	.023	.081	.776	1.023
African American	1.179	9.358	.002*	3.250
Family crime (0 none; 1 moderate 2 serious)	.131	.449	.503	1.140
Seriousness of offense (0 status; 1 criminal)	.236	.467	.494	1.266
Treatment (0 Probation)				
Family Solutions grad	-2.254	27.304	.000*	.105
Family Solutions dropout	-1.348	7.617	.006*	.260
Constant	-.540	.202	.653	.583

Model $\chi^2 = 37.009$, df = 6, $p = .000$, * $p < .05$.

for females. A female one year younger in age at the initial offense is 1.49 (1/0.688) times as likely to re-offend compared to a girl one year her senior at initial offense. For females, the seriousness of offense was associated with recidivism. A female youth committing a criminal offense was 2.7 (1/0.374) times more likely to commit a re-offense compared to female youth who committed a status offense.

The Family Solutions intervention referral for youths who graduated was more effective for females at reducing recidivism than the probation comparison group. The OR in favor of *no* re-offense for female participants who completed FSP was 10.9 (1/0.092) times as likely than for those in probation. The probation group was 5.6 (1/0.177) times more likely to re-offend compared to FSP dropouts. Dropouts were 1.9 (10.9/5.6) times more likely to re-offend compared to FSP graduates.

Males (N = 264). Male first offenders have two factors associated with recidivism: race and treatment. Unlike the female group, age and seriousness of offense were not associated with re-offense. The ethnic difference was that African-American males were 3.25 times as likely to re-offend than were Caucasian males. While the FSP is significantly more effective than probation for all males, as well as females, it is less so for African-American males than for Caucasian males. Males placed on probation were 9.5 (1/0.105) times more likely to re-offend than males who completed the FSP. The probation group was 3.8 (1/0.260) times more likely to re-offend compared to the FSP dropout group. In addition, males who were referred to the FSP but dropped out were 2.5 (9.5/3.8) times more likely to re-offend than were the male graduates.

Intent-to-Treat Analysis. A final analysis was conducted using an intent-to-treat model in which all FSP referrals (graduates and dropouts) were compared to the probation

group. This analysis provides for the possibility that there were differences among families who dropped out, although there were no differences by age of youth or family history of crime that contributed to poorer outcome. For instance, level of motivation for making changes in the family may have differed between the groups. In addition, the exclusion of the dropouts from the completers may inflate the success of the intervention, which has important policy and cost-effectiveness implications.

Since the comparison groups of FSP completers and drop-outs were not distributed randomly but self-selected by family, there may be a difference between these two groups on recidivism that is not due to treatment, but to undetected differences such as initial motivation level. In addition, the exclusion of the dropouts from completers in comparison analysis with the probation group may inflate the results of the FSP effectiveness. Thus, an intent-to-treat analysis was conducted combining all FSP referrals in the court and comparing them to the court in which only probation was assigned.

Combining FSP dropouts and completers ($N = 360$) with the probation group ($N = 95$) on recidivism indicates that the difference in outcome remains substantial (Table 5). The two FSP groups combined showed a 27% recidivism rate, whereas the probation group recidivated at a 53% rate. Using logistic regression analysis, the results indicate that there is a statistically significant difference between the probation group and all youths, completers and dropouts combined, who were referred to the FSP by the court. The model chi-square $X^2(6, N = 455) = 52.222$; $p < .000$ was significant, with the following variables associated with the likelihood of a youth being a repeat offender: form of treatment (FSP vs. probation), age, and race. The Hosmer and Lemeshow Goodness-of-Fit Test indicates a χ^2 of 11.365, with 8 degrees of freedom for the total sample. Youth referred to probation were 8.1 (1/0.129) times more likely to re-offend than youth referred to the FSP. Also consistent with the three-group logistic regression analysis (Table 3), for every unit increase in age, a youth had a lesser chance of re-offending and an African-American youth had a higher probability of re-offense compared to a Caucasian youth.

Examining these two groups, the combined FSP graduates and dropouts versus the probation group, by gender indicated that, for both males and females, a referral to the FSP results in a lower probability of re-offense than a referral to probation (Table 6). The Hosmer and Lemeshow Goodness-of-Fit Test indicates a χ^2 of 13.236, with 8 degrees of freedom for females, and for males a χ^2 of 7.743 and 8 degrees of freedom. The fit was better in the analysis of males than for females. Similar to the

Table 5. Intent-to-Treat Model of Logistic Regression for the Log Odds of Re-offending (N = 455)

Variable	B	Wald	p	Exp (β)
Youth's age	-.128	4.031	.045*	.880
African American	.961	12.162	.000*	2.614
Male	-.047	.043	.835	.954
Family crime	.085	.301	.583	1.088
Seriousness of offense	-.459	3.690	.055	.632
Family Solutions Program	-2.048	42.600	.000*	.129
Constant	2.256	5.360	.021	9.543

Model $\chi^2 = 52.552$, $df = 6$, $p = .000$, * $p < .05$.

Table 6. Intent-to-Treat Model for the Log Odds of Re-offending by Gender

Variable	B	Wald	p	Exp(β)
Female (N = 191)				
Youth's age	-.397	11.583	.001*	.672
African American	.828	3.672	.055	2.290
Family crime	-.041	.023	.879	.960
Seriousness of offense	-1.041	7.882	.005*	.353
Family Solutions Program	-2.205	17.670	.000*	.110
Constant	6.601	14.178	.000	736.033
Model $\chi^2 = 38.172$; df = 5, $p = .000$				
Male (N = 264)				
Youth's age	.018	.052	.819	1.018
African American	1.184	9.645	.002*	3.268
Family crime	.125	.418	.518	1.133
Seriousness of offense	.151	.199	.656	1.163
Family Solutions Program	-2.020	23.911	.000*	.133
Constant	-.399	.114	.735	.671

Model $\chi^2 = 31.244$; df = 5; $p = .000$; * $p < .05$.

three-group comparison analysis, age and race also were significant factors on recidivism in the two-group comparison. For females, a youth referred to probation had a 10.9 (1/0.110) times greater chance to recidivate as those referred to FSP. Age and seriousness of offense were significant factors on recidivism. For males, a youth referred to probation had a 7.7 (1/0.133) times greater chance to recidivate than a youth referred to the FSP. Race was also a significant factor for males, but not age, seriousness of offense, or history of family crime.

DISCUSSION

Recidivism as a Marker of Intervention Effects

The rates for probation and dropouts were consistent with findings of about 400 studies with juvenile delinquents (Lipsey, 1995). Lipsey (1995) stated that recidivism usually occurred within 6 months following treatment and had a 45% re-offense rate, whereas probation had a 50% rate of re-offense. The FSP proportions for re-offense were lower than findings in the literature. Some of the differences in rates could be that the juveniles in this study were first-time offenders, whereas juveniles in Lipsey's study ranged from first-time offenders to serious frequent offenders (Lipsey, 1995). It is encouraging that the FSP had such a low rate of re-offenses. The FSP not only deals with adolescents within the context of their families, it also promotes a sense of community within a group of families sharing similar challenges. There may be an additional advantage to FSP in that siblings who participate could benefit from the program, potentially reducing the offense rate for those other than the targeted youth.

The extant data used as outcome in this study were official measures (i.e., probation/court records) of the youth's delinquency. While it is understood that arrests represent a small proportion of crimes youths commit, these court records are a valuable indicator as they provide a response to concerns of judges and courts regarding the

overwhelming demands on their time and responsibilities and their capability to provide adequate services. Furthermore, three meta-analyses using court records to measure recidivism have demonstrated significant treatment effects (Lipsey, 1988). In a recent report on two projects sponsored by the Office of Juvenile Justice and Delinquency, prevention models were analyzed using both self- and court-recorded delinquency. The results demonstrated that the amount of variance explained was greater for the self-reported delinquency outcome; however, the court-recorded delinquency outcome had a similar pattern (Battin-Pearson et al., 1998).

The FSP was designed to reduce recidivism in first-time juvenile offenders by altering conflictual patterns in the family, increasing problem-solving skills, promoting hope for the future, improving parental supervision, improving school functioning, increasing family cohesion, and increasing community involvement (Quinn, 1999; Quinn et al., 1997; Quinn et al., 1994; Quinn et al., 2002). It has been discussed (Lipsey, 1988) that only 3% of delinquent acts end in the juvenile justice system. While delinquent behaviors go undetected, there is real value in cost effectiveness if a given intervention tends to curb re-offenses because it reduces caseloads for juvenile-court personnel and reduces law-enforcement demands. The findings in this study provide support to place those with juvenile offenses in treatments other than traditional probation.

In this study, youths who completed the FSP were significantly less likely to re-offend compared to youths placed on probation. Youths on probation were 9.3 times more likely to re-offend than were FSP participants. Furthermore, given that the recidivism rate for the sample was higher for African-American youths and for those who were younger, and that the probation group consisted of primarily Caucasian youths, the result that the probation group has a much higher rate of re-offense than the FSP graduates makes the superiority of the FSP an even stronger case.

It appears that probation may be a less-effective means of changing adolescents' behavior related to delinquency. From these results, it seems that a MFGI intervention is a better option than probation. Results of this study make it evident that an intervention focusing on the context of the juvenile, including the family, is more effective than probation at limiting re-offense.

Gender and Race Differences

One common distinction made regarding juvenile delinquency is that males are more frequent offenders. Snyder (1998) stated that for 1997 only 26% of juvenile arrests were female. This sample had 40% of the juveniles being female. The FSP was more effective, regardless of gender, at reducing recidivism for first-time offenders than the other treatments. The FSP, when accounting for the other variables, lowered the likelihood of re-offense by 9.5 and 10.9 times when compared to probation for males and females, respectively. Male and female offenders differed on predictors other than treatment that influenced re-offenses and, therefore, refinements in treatment by gender require further development.

African-American males are at higher risk of re-offense than Caucasian males as likelihood of recidivism is 3.3 times greater for African-American males than for Caucasian males. Interpretation of this result is difficult. Embedded within the construct of ethnicity are a myriad of possible influences, including racial and socioeconomic assumptions. Leiber and Jamieson (1995) studied the decision-making process within the juvenile justice system in conjunction with issues of race. Their results indicated that socioeconomic status has an effect on the disposition of a juvenile.

Families with more resources are able to avoid adjudication by obtaining a lawyer and negotiating settlements. Another issue was whether implicit racism affected adjudication. This is more difficult to quantify and more studies must be done. The assumption is that African-American adolescents are more likely to enter the juvenile justice system and therefore are monitored at a heightened state compared to Caucasian juveniles. This tendency in the identification and arrest delinquency process could increase recidivism rates for African-American youths. In the present study, the recidivism rates for African-American and Caucasian male juveniles did not differ for the total sample: 31.6% and 29.3% re-offenders, respectively. Yet, given that outcomes by race were significant, research questions pertaining to how treatment effects are influenced by how Caucasian and African-American youths respond to interventions are worthy of future investigations.

For females, in addition to better treatment outcome for the Family Solutions graduations, age and seriousness of offense, but not race, had an association with recidivism for females. Females who committed criminal offenses were more likely to commit a re-offense. The female juvenile first-time offenders group indicated that age at first offense influences recidivism. The younger the females at the first offense, the more likely they were to re-offend. Some consideration might be given to the prospect of younger females who have committed criminal offenses to be assigned to an intervention program of a longer duration and session topics specific to female developmental concerns.

Regardless of age at initial offense, however, the group of Family Solutions graduates had a lower likelihood of re-offense for females compared to probation and dropouts. It is reasonable to argue that the juvenile court and those working with female offenders consider ordering or urging involvement in a multiple-family group intervention such as the FSP. In fact, fewer females than males dropped out of the FSP and the recidivism rate for females who completed the FSP was just 15%.

IMPLICATIONS FOR POLICY-MAKERS AND PROFESSIONALS

Working with Juvenile Offenders

The current cultural context in the United States possesses a heightened awareness of juvenile delinquency because of violent youth crime and victim tragedies. Parents, teachers, and the media continue to ask how to identify the potential delinquent juvenile before such tragedies. They urge the current juvenile justice system to provide the necessary intervention (e.g., probation, punishment, and treatment) to deter future crime once an offense has occurred. The results of this study suggest that the juvenile justice system consider family intervention for juvenile first-time offenders.

Professionals who develop interventions for juvenile offenders should consider the inclusion of the family and require its ongoing involvement in intervention to foster the desired behavior and systemic change. The focus of human service must be expanded to include the level of the family, school, and community in order to break the cycle of criminal behavior effectively (Quinn, 1996). This study's focus was on first-time juvenile offenders and the reduction of repeat offenses through an intervention involving the family (parent involvement) and community (e.g., school intervention, volunteering). The FSP was conceptualized to deal with prevention of further juvenile delinquency. Inclusion of the natural support system of the youth and family in the intervention creates a community setting that has the potential to engender hope and a sense of agency.

In her recent review, Carlson (1998) noted that multiple-family group intervention has improved student behavior and academic performance. Another attraction to this form of intervention is cost and time effectiveness. The professional group leader urges families to support and provide guidance to each other to locate multiple pathways to change. An important implication from this study is for program development to be collaborative with the context of identified *consumers*. Programs like Family Solutions for first-time juvenile offenders must build support from the school and juvenile justice systems (Quinn, 1999) because the collaboration is beneficial to all of these systems. Discussion with juvenile court judges (J. McDonald, personal communication, 2002) suggested that Family Solutions has reduced the cost of services for the juvenile justice department, relieving some of the time of the often-over-worked probation officers. In addition, juvenile-court staff report that even if youths who graduate from FSP re-offend, they and their families are more cooperative in the juvenile court the next time their cases are reviewed (K. Conkle, personal communication, 2002). This allows for more efficient case reviews and further family support.

FURTHER RESEARCH

This study suggests that a multiple-family group intervention is effective at reducing recidivism. However, a next step is to develop randomization strategies in comparing interventions for juvenile first-time offenders. A randomized design is necessary to substantiate these results and allow for the examination of clearer causal relationships among pre-treatment variables and outcome. In addition, empirical support for the mechanism by which change occurs is lacking. As evidence builds for the usefulness of a family group-intervention model, more attention needs to be given to the actual components or mediators that effect outcome such that efficiency and transportability of intervention is more likely. Individual family intervention has been supported empirically in reducing juvenile delinquency. The question remains of how much potency for behavior change is generated from the session content based on risk and protective factors as opposed to the potency of the process derived from the context of a community of families (multiple-family group) influencing each other that affects delinquent behavior.

Further studies also need to address systemic effects that may be occurring that this study did not consider (i.e., change in parent-adolescent communication, sense of autonomy and agency, school achievement, and behavior). The next stage of treatment effectiveness for the FSP would be to examine the mediators that affect outcome. Based on the research literature, these would include parental monitoring, discipline practices, family cohesion and communication, school performance and progress, community involvement (e.g., volunteering, church, school organizations, and athletics), and family-school relations. In addition, component analysis of the FSP could be undertaken to examine, and potentially enhance, efficiency of the intervention.

REFERENCES

- Alexander, J.F., Barton, C., Schiaro, R.S., & Parsons, B. (1976). Systems-behavioral intervention with families of delinquents: Therapist characteristics, family behavior and outcome. *Journal of Consulting and Clinical Psychology*, 44, 656-664.

- Alexander, J.F., & Parsons, B.V. (1973). Short-term behavioral intervention with delinquent families: Impact on family process and recidivism. *Journal of Abnormal Psychology*, 81, 219-225.
- Alexander, J.F., Waldon, H.B., Newberry, A.M., & Liddle, N. (1990). The functional family therapy model. In A.S. Friedman & S. Granick (Eds.), *Family therapy for adolescent drug abuse* (pp. 183-189). Lexington, MA: Lexington Books/D.C. Heath & Co.
- Allen, J.P., & Philiber, S. (2001). Who benefits most from a broadly targeted prevention program? Differential efficacy across populations in the Teen Outreach Program. *Journal of Community Psychology*, 29(6), 637-655.
- Battin-Pearson, S.R., Thornberry, T.P., Hawkins, J.D., & Krohn, M.D. (1998). Gang membership, delinquent peers, and delinquent behavior. In S. Bilchik (Ed.), *OJJDP: Juvenile Justice Bulletin*. Washington, DC: U.S. Department of Justice.
- Bazemore, G., & Umbreit, M. (1995). Rethinking the sanctioning function in juvenile court: Retributive or restorative responses to youth crime. *Crime & Delinquency*, 41, 296-316.
- Becvar, R.J., Canfield, B.S., & Becvar, D.S. (1997). *Groupwork: And social constructionist perspectives*. Denver, CO: Love Publishing Co.
- Borduin, C.M., Mann, B.J., Cone, L.T., Henggeler, S.W., Fucci, B.R., Blaske, D.M., & Williams, R.A. (1995). Multisystemic treatment of serious juvenile offenders: Long term prevention of criminality and violence. *Journal of Consulting and Clinical Psychology*, 63, 569-578.
- Carlson, C. (1998). Multiple family group therapy. In K.C. Stoiber & T.R. Kratochwill (Eds.), *Handbook of group intervention for children and families*. Boston, MA: Allyn & Bacon.
- Chamberlain, P., Eddy, J.M., & Fisher, P. (1998). The role of peer and adult relationships in treating chronic juvenile offenders. Paper presented at the Society for Research on Adolescents, San Diego, CA.
- Chamberlain, P., & Rosicky, J.G. (1995). The effectiveness of family therapy in the treatment of adolescents with conduct disorders and delinquency. *Journal of Marital and Family Therapy*, 21, 441-459.
- Cunningham, P.B., & Henggeler, S.W. (2001). Implementation of an empirically based drug and violence prevention and intervention program in public school settings. *Journal of Clinical Child Psychology*, 30(2), 221-232.
- DeMaris, A. (1995). A tutorial in logistic regression. *Journal of Marriage and the Family*, 57, 956-968.
- Dickey, M.H. (1995). MFT efficacy for marital distress & conduct disorders. *Family Therapy News*, 2, 15.
- Dishion, T.J., McCord, J., & Poulin, F. (1999). When interventions harm: Peer groups and behavior problems. *American Psychologist*, 54, 755-764.
- Doherty, W. (1995). *Soul searching: Why psychotherapy must promote moral responsibility*. New York: Basic Books.
- Fortune, J.C., & Hutson, B.A. (1984). Selecting models for measuring change when true experimental conditions do not exist. *Journal of Educational Research*, 77, 187-206.
- Fragar, S. (1978). Multiple family therapy: A literature review. *Family Therapy*, 5, 105-120.
- Gazda, G.M., Ginter, E.J., & Horne, A.M. (2001) *Group counseling and group psychotherapy: Theory and application*. Needham Heights, MA: Allyn and Bacon.
- Gonzalez, S., Steinglass, P., & Reiss, D. (1989). Putting the illness in its place: Discussion groups for families with chronic medical illnesses. *Family Process*, 28, 69-87.
- Gordon, D.A., Graves, K., & Arbuthnot, J. (1995). The effect of functional family therapy for delinquents on adult criminal behavior. *Criminal Justice and Behavior*, 22, 6-73.
- Gritzer, P.H., & Okun, H.S. (1983). Multiple family group therapy. In B.B. Wolman & G. Stricker (Eds.), *Handbook of family and marital therapy*. New York: Plenum.

- Hagell, A., & Newburn, T. (1996). Family and social contexts of adolescent re-offenders. *Journal of Adolescence*, 19, 5-18.
- Henggeler, S.W., Melton, G.B., & Smith, L.A. (1992). Family preservation using multisystemic therapy: An effective alternative to incarcerating serious juvenile offenders. *Journal of Consulting and Clinical Psychology*, 60, 953-961.
- Henggeler, S.W., Schoenwald, S.K., & Pickrel, S.G. (1995). Multisystemic therapy: Bridging the gap between university- and community-based treatment. *Journal of Consulting and Clinical Psychology*, 63(5), 709-717.
- Henry, D.B., Tolan, P.H., & Gorman-Smith, D. (2001). Longitudinal family and peer group effects on violence and nonviolent delinquency. *Journal of Clinical Child Psychology*, 30(2), 172-186.
- Hinton, W.J., Sheperis, C., & Sims, P. (2003). Family-based approaches to juvenile delinquency: A review of the literature. *The Family Journal*, 11(2), 167-173.
- Hoffman, L. (1981). *Foundations of family therapy*. New York: Basic Books.
- Hosmer, D.W., Taber, S., & Lemeshow, S. (1991). The importance of assessing the fit of logistical models: A case study. *American Journal of Public Health*, 81, 1630-1635.
- Jacobsen, K.C., & Crockett, L.J. (2000). Parental monitoring and adolescent adjustment: An ecological perspective. *Journal of Research on Adolescence*, 10(1), 65-97.
- Kazdin, A.E., & Weisz, J.R. (1998). Identifying and developing empirically supported child and adolescent treatments. *Journal of Consulting and Clinical Psychology*, 66(1), 19-36.
- Klein, N.C., Alexander, J.F., & Parsons, B.V. (1977). Impact of family systems intervention on recidivism and sibling delinquency: A model of primary prevention and program evaluation. *Journal of Consulting and Clinical Psychology*, 45, 469-474.
- Kumpfer, K.L., & Alvarado, R. (1998). Effective family strengthening interventions. In S. Bilchik (Ed.), *OJJDP: Juvenile Justice Bulletin*. Washington, DC: U.S. Department of Justice.
- Kymissis, P., Bevacqua, A., & Morales, N. (1995). Multi-family group therapy with dually diagnosed adolescents. *Journal of Child and Adolescent Group Therapy*, 5, 107-113.
- Laqueur, H.P. (1976). Multiple family therapy. In P.J. Guerin (Ed.), *Family therapy: Theory and practice*. New York: Gardner Press.
- Laqueur, H.P. (1980). The theory and practice of multiple family therapy. In L.R. Wolberg & M.L. Aronson (Eds.), *Group and family therapy*. New York: Brunner/Mazel.
- Leiber, M.J., & Jamieson, K.M. (1995). Race and decision making within juvenile justice: The importance of context. *Journal of Quantitative Criminology*, 11, 363-388.
- Lemov, P. (1994, December). The assault on juvenile justice. *Governing*, 26-31.
- Liddle, H.A. (2000). *Multidimensional family therapy: A 12-week intensive outpatient treatment for adolescent cannabis users*. Washington, DC: Center for Substance Abuse Treatment.
- Lipsey, M.W. (1988). Juvenile delinquency intervention. In H.S. Bloom, D.S. Cordray, & R.J. Light (Eds.), *Lessons from selected program and policy areas*. San Francisco, CA: Jossey-Bass.
- Lipsey, M.W. (1995). What do we learn from 400 research studies on the effectiveness of treatment with juvenile delinquents? In J. McGuire (Ed.), *What works: Reducing re-offending—guidelines from research and practice*. United Kingdom: John Wiley & Sons Ltd.
- Lipsey, M.W., & Derzon, J.H. (1998). Predictors of violent or serious delinquency in adolescence and early adulthood: A synthesis of longitudinal research. In R. Loeber & D.P. Farrington (Eds.), *Serious and violent juvenile offenders: Risks factors and successful interventions*. Thousand Oaks, CA: Sage.
- Lipsey, M.W., & Wilson, D.B. (1983). The efficacy of psychological, educational, and behavioral treatment: Confirmation from meta-analysis. *American Psychologist*, 48, 1181-1209.
- Lipsey, M.W., & Wilson, D.B. (1998). Effective intervention for serious juvenile offenders: A synthesis of research. In R. Loeber & D.P. Farrington (Eds.), *Serious & violent juvenile*

- offenders: Risk factors and successful interventions (pp. 313–345). Thousand Oaks, CA: Sage.
- McCord, J. (1996). Family as crucible for violence: Comment on Groman-Smith et al. (1996). *Journal of Family Psychology*, 10, 147–152.
- McFarlane, W.R. (2002). *Multifamily groups in the treatment of severe psychiatric disorders*. New York: Guilford.
- McFarlane, W.R., Link, B., Dushay, R., Marchal, J., & Crilly, J. (1995). Psychoeducational multiple family groups: Four-year relapse outcome in schizophrenia. *Family Process*, 34, 127–144.
- Minor, K.I., Hartmann, D.J., & Terry, S. (1997). Predictors of juvenile court actions and recidivism. *Crime & Delinquency*, 43, 328–344.
- O'Shea, M.D., & Phelps, R. (1985). Multiple family therapy: Current status and critical appraisal. *Family Process*, 24, 555–582.
- Patterson, G.R. (1975). *Families: Applications of social learning to family life* (rev. ed.). Champaign, IL: Research Press.
- Pedhazur, E.J. (1997). *Multiple regression in behavioral research: Explanation and prediction* (3rd ed.). Fort Worth, TX: Harcourt Brace College Publishers.
- Quinn, W.H. (1996). Expanding the focus of intervention: The importance of family/community relations. In P. Adams & K. Nelson (Eds.), *Reinventing human services*. New York: Aldine De Gruyter.
- Quinn, W.H. (1998). *Family solutions: A group program for youth offenders and their families*. Athens, GA: The University of Georgia.
- Quinn, W.H. (1999). The family solutions program: A collaboration of the University of Georgia and the Athens/Clarke County Juvenile Court. In T.R. Chibucos & R.M. Lerner (Eds.), *Serving children and families through community–university partnerships* (pp. 89–100). Boston: Kluwer Academic.
- Quinn, W.H. (2003). Multiple family group intervention and assessment: Issues and strategies. In K. Jordan (Ed.), *Handbook of couple and family assessment*. Nova Science Publishers.
- Quinn, W.H., Bell, K., & Ward, J. (1997). Family solutions for juvenile first offenders. *The Prevention Researcher*, 4, 10–12.
- Quinn, W.H., Sutphen, R., Michaels, M., & Gale, J. (1994). Juvenile first offenders: Characteristics of at-risk families and strategies for intervention. *Journal of Addictions and Offender Counseling*, 15, 2–21.
- Quinn, W.H. & Van Dyke, D. (2001). At-risk youth in the United States: 'current status', family influences, and the Family Solution Program. In I. Pervova (Ed.), *People, time and society* (pp. 66–85). St. Petersburg, Russia: St. Petersburg University Press.
- Quinn, W.H., Van Dyke, D.J., & Kurth, S. (2002). A brief multiple family group model for juvenile offenders (pp. 226–251). In C.R. Figley (Ed.), *Brief treatments for the traumatized*. Westport, CT: Greenwood Press.
- Smith, E.P. (2002). Possible conditions in multiple family groups which deter iatrogenic effects. Paper presented at the Conference on Peer Contagion, Washington, DC, October 28–29.
- Snyder, H.N. (1998). Juvenile arrests 1996. In S. Bilchik (Ed.), *OJJDP: Juvenile Justice Bulletin*. Washington, DC: U.S. Department of Justice.
- Stouthamer-Loeber, M., & Loeber, R. (1988). Parents as intervention agents for children with conduct problems and juvenile offenders. *Child and Youth Services*, 11, 127–148.
- Strelnick, A.H. (1977). Multiple family group therapy: A review of the literature. *Family Process*, 16, 307–325.
- Ulrici, D.K. (1983). The effects of behavioral and family interventions on juvenile recidivism. *Family Therapy*, 10, 25–36.

- Woolredge, J.D. (1998). Differentiating the effects of juvenile court sentences on eliminating recidivism. *Journal of Research in Crime and Delinquency*, 25, 264-300.
- Yoshikawa, H. (1994). Prevention as cumulative protection: Effects of early family support and education on chronic delinquency and its risks. *Psychological Bulletin*, 115, 28-54.
- Yoshikawa, H. (1995). Long-term effects of early childhood programs on social outcomes and delinquency. *The Future of Children*, 5, 51-75.