

6152

JOURNAL
— OF —
EMOTIONAL,
— AND —
BEHAVIORAL
DISORDERS

OCTOBER 1994

Volume 2, Number 4

Pages 193-264

A PRO-ED PUBLICATION

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The Journal of Emotional and Behavioral Disorders (ISSN:1063-4266) (USPS 010-359) is published quarterly by PRO-ED, Inc., 8700 Shoal Creek Boulevard, Austin, TX 78757.6897. Second class postage paid at Austin, Texas, and additional mailing offices.

POSTMASTER: Send address changes to Journal of Emotional and Behavioral Disorders, 8700 Shoal Creek Boulevard, Austin, TX 78757.

SUBSCRIPTION RATES: U.S./Canada, one year: Individual, \$35; Institutional, \$70. Foreign, one year, \$95. U.S. dollars only. Single copies, \$10.

BUSINESS CORRESPONDENCE: Subscription inquiries, subscription orders, change of address, and so forth should be addressed to PRO-ED Journals, 8700 Shoal Creek Boulevard, Austin, TX 78757.6897; 512/451-3246 (allow six weeks for address change).

ADVERTISING: Direct inquiries and correspondence to Journal Advertising Sales, PRO-ED, 8700 Shoal Creek Boulevard, Austin, TX 78757.6897.

AUTHOR INFORMATION: The *Journal of Emotional and Behavioral Disorders* is a multidisciplinary publication containing articles on research, practice, and comments related to individuals with emotional and behavioral disorders and to the professionals that serve them. It includes original research reports, reviews of research, descriptions of practices and programs, and discussions of key applied issues that are of interest to the wide range of disciplines engaged in the field. Original contributions, typewritten and double-spaced, should be forwarded along with five copies to either editor: Michael H. Epstein, Department of Educational Psychology, Counseling, and Special Education, Northern Illinois University, DeKalb, IL 60115-2854; Douglas Cullinan, Department of Curriculum and Instruction, North Carolina State University, Raleigh, NC 27695-7801. The *Journal of Emotional and Behavioral Disorders* is a refereed publication. Reviewers typically serve on rotational terms. The *Journal of Emotional and Behavioral Disorders* follows the format outlined in the *Publication Manual of the American Psychological Association* (3rd ed.). The viewpoints expressed by the authors and advertisers are their own. The editors reserve the right to edit all material submitted to be published.

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Guest Editors' Comment: *It has been our pleasure to serve as guest editors of this special series concerning research on services for children and adolescents who have serious emotional disabilities and their families. We would like to thank the editors, Michael H. Epstein and Douglas Cullinan, for their leadership and support in making this information available to the field. Research in the area of children's mental health services is in its infancy. The need to share information about*

issues concerning methodology and measurement as well as initial results is critical to the development and advancement of the field. We believe this journal issue describing research supported by the Center for Mental Health Services will supply much needed information and insights into the often challenging area of research on children's mental health services and will stimulate future efforts.—KK, AJD, DLS

Building the Research Base for Children's Mental Health Services

KRISTA KUTASH, ALBERT J. DUCHNOWSKI, AND DIANE L. SONDEIMER

THE MENTAL HEALTH SYSTEM'S response to children and adolescents with serious emotional disabilities and their families is in a period of transition: A shift in both conceptualization and practice is now in process. The course of this shift can be described as episodic and uneven, with more change apparent in the last few years than previously (Duchnowski & Kutash, 1993). Recent changes include a recognition that generating empirically based knowledge can assist in improving the service delivery systems for these children and adolescents and their families. This article provides a brief overview of the changes in the mental health system's response to this population, with an emphasis on developments in service delivery system and service demonstration research and evaluation efforts.

PARADIGM SHIFT

Jane Knitzer (1993) outlined several major dimensions of caring for children and youth with serious emotional disabilities that have changed in the last decade, resulting in a paradigm shift in

The recent history of research on the service delivery system for children and adolescents who have serious emotional disabilities and their families is summarized. The article provides an overview of the changes in the response by the children's mental health system to this population, with an emphasis on developments in service delivery system and service demonstration research and evaluation efforts. The role of research is examined in terms of its critical importance in improving the system of care for these children and their families.

the children's mental health field. First, the view of the roles of families in etiology and treatment has shifted from blame and cause to building on strengths and developing partnerships between parents and professionals. One result has been the emergence of a new national parent-run organization, the Federation of Families for Children's Mental Health. In partnership with professionals, the federation provides leadership, information, and advocacy for addressing the unique needs of these children and youth and their families. Originally started in 1987 as a steering committee of 28 members, the federation is now established in all 50 states.

Another shift has occurred in the choice of treatment environment. Traditionally, a child in need of intensive services was placed in a residential treatment center or psychiatric facility. Cur-

rently, intensive treatment does not need to be based exclusively in residential settings, but instead can be delivered in a natural environment by "wrapping services around the child." This has resulted in two separate but interrelated service developments—family preservation efforts and individualized wraparound services. The latter practice, developed in North Carolina (Behar, 1985), uses a strategy in which services are tailored to the needs of the individual child and family, rather than requiring them to fit into existing services or programs. Family preservation services are defined by Yelton (1991) as "short term, in-home, intensive, crisis intervention services" having an ecological perspective and a family-based focus (p. 7).

The traditional options of children's mental health services, limited to office-

based outpatient therapy and restrictive residential care, are being replaced by an emerging model of care, such as the System of Care (Stroul & Friedman, 1986), that includes a range of services, linkages among services, the capacity to provide individualized services, and interagency collaboration. The newest, and possibly the most important, change has been the attempt to increase cultural sensitivity through articulating the dimensions of a culturally competent service delivery system in which systems, agencies, and practitioners respond to the unique needs of populations whose cultures are different from those that might be called "dominant" or "mainstream" American (Cross, Bazron, Dennis, & Isaacs, 1989).

ROLE OF RESEARCH

The role of research in improving systems of care for children is not always direct or easily discernable in the public policy arena. As stated by Saxe, Cross, and Silverman (1988), "public policy toward children's mental health problems has lagged far behind current knowledge about the course and treatment of mental disorders and the risk factors associated with them" (p. 804). It is noteworthy that Stroul and Friedman (1986) have afforded research an important role in the development of their model of a comprehensive array of services organized into a system of care. This model is designed "to be a guide, based on the best available empirical data and clinical experience to date. It is offered as a starting point ... as a baseline from which changes can be made as additional research, experience and innovation dictate" (p. 26). In our view, the role of research in improving the system of care is to create and transform knowledge into action by systematically describing the children and families and the services they receive, testing a complex array of factors influencing services for children and their families, and ultimately prescribing within the context of a system specific services that are effective under

certain conditions for specific children and their families.

Within the descriptive aspect of research, who is being served, how they are being served, and the gaps in current service delivery are examined. This may lead to expanded services as well as the development of innovative services, which, in turn, need to be described. After systematically describing the status quo, testing the efficacy of services and systems becomes critical. The effectiveness of a system of care for children and adolescents can be examined at two levels (Burns & Friedman, 1990). The first begins with the more traditional program evaluation strategies of examining and describing feasibility, acceptability, and general usefulness of an intervention. Models and designs recently have been disseminated (see Bickman, Heflinger, Pion, & Behar, 1992; Kutash, Duchnowski, Johnson, & Rugs, 1992; Stroul, 1993) and have been used to describe programs within the Mental Health Services Program for Youth funded by the Robert Wood Johnson Foundation, as well as the demonstration project located at Ft. Bragg, North Carolina. The second level of study requires a controlled experiment in a natural environment and typically takes the form of a clinical trial with randomized assignment of subjects.

The ultimate role of research is to prescribe very specific interventions under optimal conditions of effectiveness. As proposed by Saxe et al. (1988), "the important question may not be about the overall effectiveness of child therapy, but about the effectiveness of (a) what therapy, (b) under what conditions, (c) for which children, (d) at which developmental level, (e) with which disorder(s), (f) under what environmental conditions, and (g) with which concomitant parental, familial, environmental, or systems interventions" (p. 803). This strategy can be expanded to all components of a system of care such as therapeutic foster care, day treatment, and residential care. It is a very broad view that takes into account the cautions proposed by others (e.g., Burns & Friedman, 1990) to exam-

ine and evaluate services for children as a holistic process functioning within a system of services.

Thus, the role of research may be viewed in terms of describing and testing not only the components within a system of care but also the paradigms noted previously by Knitzer (1993), so that these components and principles become the foundation of an improved service delivery system for children and their families. The process to ensure this outcome already has begun; for example, the federal government has offered leadership through a variety of service demonstration and research initiatives.

THE FEDERAL RESPONSE

Development of Service Systems

In 1984, the National Institute of Mental Health (NIMH) launched the modestly funded Child and Adolescent Service System Program (CASSP). The purpose of CASSP was to improve the system of care for children and families at the community level. The initiative was funded for \$1.5 million, with grants given to 10 states; currently, all 50 states have been awarded CASSP grants. The influence of CASSP on the children's mental health system has been substantial and greater than anticipated, even by those who developed the initiative (Burns & Friedman, 1990; Knitzer, 1993). Although the focus of CASSP was primarily on the development of service delivery systems, through intergovernmental agreements, the NIMH and the National Institute of Disability and Rehabilitation Research (NIDRR)—a division of the Office of Special Education and Rehabilitative Services (OSERS)—established two centers to conduct research and training activities on this population. These centers are at the Florida Mental Health Institute of the University of South Florida and at Portland State University in Oregon. One of the major accomplishments of the centers has been their contributions to an increase in the infrastructure of researchers focused on children's mental health services.

IMPROVING RESEARCH CAPACITY

While a foundation for the development of service systems was being laid by CASSP activities, increased attention was focused on this population by the publication of two reports: one on children's mental health services that Congress commissioned the Office of Technology and Assessment (OTA) to produce (U.S. Congress, Office of Technology Assessment, 1986) and one requested of the Institute of Medicine (IOM) by the NIMH on research related to this population (National Academy of Sciences, 1989). Both reports stressed the need to generate and use empirically based knowledge to improve service delivery to this population.

In response to the IOM report, Congress asked the NIMH to develop a plan detailing a method in which basic clinical and services research in the area of children's mental health would be expanded to meet the nation's needs. The National Plan for Research on Child and Adolescent Mental Disorders was released in 1990 by the National Advisory Mental Health Council (U.S. Department of Health and Human Services). This plan noted the inadequate knowledge base available to guide the establishment and maintenance of responsive and effective systems for service delivery to and care of this population. The result was development of a strategy based on three broad goals: to stimulate basic and clinical research, to develop career opportunities in child mental health research, and to provide leadership and coordination for sustaining the progress of research in its treatment and prevention applications. The plan made it clear that the nation was "doing far too little to develop the scientific knowledge needed to treat or prevent" emotional and behavioral disabilities in children and adolescents (p. iv).

This document was followed by publication of the Implementation of the National Plan for Research on Child and Adolescent Mental Disorders (National Institute of Mental Health, 1991). The purpose of this announcement was to expand the spectrum of research on

child and adolescent mental disabilities to include a special focus on areas listed in the National Plan and to build on the scientific capacity to conduct research. Although clinical services research and service systems research were listed as priority areas, no specific provisions were made for funding service demonstration projects.

FUNDING FOR SERVICE DEMONSTRATION PROJECTS

An initial indication of the interest in this type of research occurred in December 1988, when NIMH issued a targeted research announcement calling for proposals dealing with mental health services for children. Twenty-nine proposals were submitted for consideration, with seven eventually being funded in 1990. In that same year, the process for initial requests concerning application for Child and Adolescent Mental Health Service System Research Demonstration Grants was published. In April 1991, this initiative became a standing program announcement (PA-91 -40) with a purpose of stimulating investigator-initiated research demonstration projects (R-18s) on state and local-level service systems for children and adolescents with or at risk for serious emotional or mental disabilities and their families. This research was expected to contribute to the establishment and maintenance of effective mental health service delivery systems for this population. One of the major factors differentiating this announcement from earlier demonstrations was that these studies were expected to use the most rigorous research design possible as appropriate to the proposed demonstration. The research demonstration projects were to be based on the theories and outcomes of prior research and would test particular approaches in providing, organizing, and/or funding services through experimental studies of service interventions applied to other sites (Sondheimer, 1991). In general, these studies involved implementing and assessing the effectiveness of one or more service interventions. The articles in this special issue represent the first re-

ports of research on service demonstration funded through this program announcement under the auspices of the Child, Adolescent, and Family Branch of the Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration (SAMHSA).

CURRENT ARTICLES

The three research articles and three program description articles in this special issue encompass a broad range of intervention models. They extend from a program employing parent paraprofessionals to an intensive home-based family preservation model. In addition, a diversity of target populations are examined, including children identified for early intervention services, serious juvenile offenders, and homeless children at risk for emotional problems.

Although they deal with distinctively different target populations, all six of these models offer interventions tailored to the individual needs of the child and, where appropriate, his or her family. Each also is true to the spirit of the paradigm shift and offers a very positive outlook for effective service delivery in the near future. As Burns notes in the final article of this issue, these investigators are breaking new ground in both the clinical and research arenas. They have had to develop the intervention as well as the experimental design and then conduct the research under difficult conditions in natural settings. Their work will supply to other researchers in this new field important markers that will guide them over the considerable methodological barriers that currently exist.

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

DAVID G. SCHERER, MICHAEL J. BRONDINO, SCOTT W. HENGGELER,
GARY B. MELTON, AND JEROME H. HANLEY

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

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.

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; Lounsbury, 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; Lounsbury, 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; Lounsbury, 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). Socioecological 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.

M&systemic 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 2.2% 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 3 7.1% of the fathers, 46.3% of the mother figures, and 3 1.6% 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 Bamberg 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 treat-

ment; 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 ne-

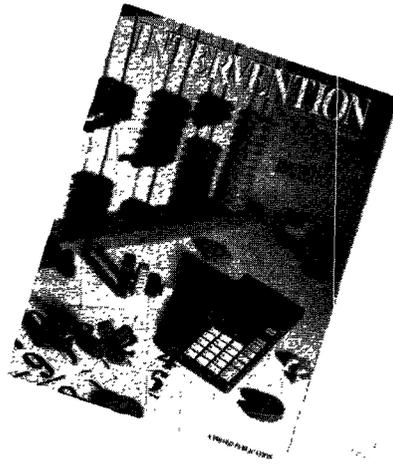
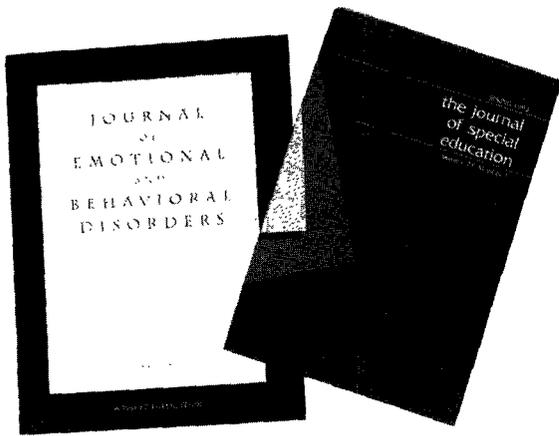
gotiations to improve both parent and child self-efficacy. To accomplish these goals, MFP therapists may meet individually with family members, conjointly with parents or with parent-child dyads, or with the family as a whole.

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.**
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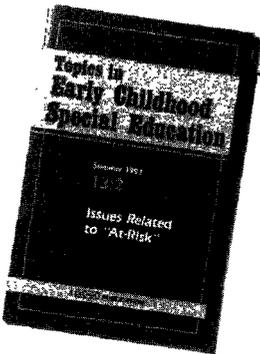


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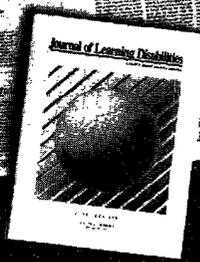
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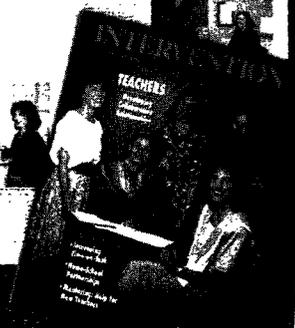
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MFP therapists often work to open teacher-parent lines of communication so that appropriate academic support and behavioral expectations can be arranged and consistently reinforced at home and school. Furthermore, MFP therapists work to increase parental 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

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).

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.

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 su-

pervisors. 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 $2 \times 2 \times 3$ (Condition \times Site \times Time) repeated-measures design with immediate pretest, posttest, and 6-month follow-up measures, only Condition \times 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 \times Time) repeated measures analysis of variance (ANOVA). Responses to the FAM III and BSI were analyzed using a $2 \times 2 \times 2$ (Condition \times Time \times Respondent) ANOVA because the measures are responded to by the adolescents and their parents. Unless otherwise noted, the results reported are for the Condition \times 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 \times 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 \times 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 \times 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 \times Respondent \times 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	<i>n</i>	Pretest		Posttest		Simple main effect <i>F</i> values	
		Mother	Child	Mother	Child		
RBPC:							
<i>Socialized aggression</i>							
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		
<i>Conduct disorder</i>							
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:							
<i>General distress index</i>							
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	
<i>Somatization</i>							
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	
<i>Interpersonal sensitivity</i>							
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	
<i>Depression</i>							
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	
<i>Obsessive/compulsive</i>							
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		
<i>Staying out</i>							
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:							
<i>Task accomplishment</i>							
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 mea-

surement procedures so that the effects of MFP can be more accurately portrayed.

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Authors' Note

Preparation of this article was supported by Grant No. 5HD5SM48136 from the Center for Mental Health Services, SAMHSA, to the South Carolina Department of Mental Health.

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Improving Adjustment Outcomes for Foster Children with Emotional and Behavioral Disorders: Early Findings from a Controlled Study on Individualized Services

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AS THE NUMBER OF REPORTS of child abuse and neglect has increased, the foster care system has been challenged to meet quantitative and qualitative standards of child care. Between 1974 and 1989, reports of child abuse and neglect in the United States increased from approximately 60,000 to 2.4 million (U. S. Department of Health and Human Services, 1990). From 1984 to 1989-1990, the number of foster homes decreased 27%, whereas the percentage of children needing foster placements increased 48% (Terpstra & McFadden, 1993).

Recent estimates have placed the prevalence of emotional and behavioral disorders (EBD) at 14% to 20% of all children in the United States; conduct disorders, as a specific type of behavioral disability, affect 13% and 22% of all female and male adolescents, respectively (Brandenburg, Friedman, & Silver, 1990). Estimates of children in the foster care system who are in severe to critical need of mental health services have ranged from 40% to 62% (Boyd, 1992; Groves, 1993). Another 23% of the foster care population, although not evincing overt behavior problems, appear to have difficulties in social competence that are highly related to school performance (Boyd, Struchen, & Panacek-Howell, 1989, 1990; Groves, 1993; Widom, 1989). These data pro-

This study was a community-based, controlled experiment to evaluate the efficacy of the Fostering Individualized Assistance Program (FIAP), which was driven by permanency (i.e., a stable placement in a supportive family) and family-focused values and involved the wrapping of services around children, based on their individual needs and those of their families. The services and supports were intensely case managed to ensure that these could be adjusted as children's situations and needs changed. The study involved a comparison of 132 children in foster care with, or at risk for, emotional and behavioral disorders, who were randomly assigned to the FIAP program or to a group that received standard-practice foster care. A description of the FIAP intervention and a report of preliminary results that support the efficacy of the FIAP strategy in improving the emotional and behavioral adjustment of children in foster care are presented.

vide a context for understanding the risks for children and families in the nation's social service system.

Over the past several decades, foster care has been expected to be a major solution to the plight of children who were neglected, abused, or abandoned by their families of origin (Friedman, 1989). Despite many attempts toward meeting the mandates (e.g., permanency planning, preventing out-of-home placements) of the Adoption Assistance and Child Welfare Act of 1980 (P. L. 96-272), it has been widely asserted that the foster care system is a part of the problem besetting these children (e.g., Bryant, 1993; Daly & Dowd, 1992; Schwartz, 1991). There also has been a call for the children's service system to adopt alternative values and strategies in order to provide for the protection, nurturance, and development of children and to ensure the integrity of their

families (e.g., Boyd, 1992; Friedman, 1989; Knitzer & Yelton, 1990).

In order to serve the increased number of foster children, a return to orphanages has been called for by some critics of the current service system (see Terpstra & McFadden, 1993); other program developers have insisted on trying alternative ways of meeting child and family needs. These alternative strategies include professionalized care (e.g., therapeutic foster care), intensive family preservation and reunification models, and other forms of individualized, and often family-centered, locally controlled, case-managed, integrated services (e.g., Boyd, 1992; Clark et al., 1992; Friedman, 1989; Hawkins, Almeida, & Samet, 1989; Knitzer & Yelton, 1990; VanDenBerg, 1993). Another group of professionals has advocated for the variously defined and illusive "best interests of the child" (e.g., Lambiase & Cumes, 1987; Solnit, 1987).

At best, the field has been in some confusion and disagreement as to what really works and is cost effective and accountable.

In 1989, the Intensive Family Preservation Services Research Conference was held to propose a research agenda for the 1990s. As suggested in the final report (Wells & Biegel, 1990), family preservation programs have been widely replicated during the past decade, but too few of the important questions surrounding this type of intervention have been thoroughly studied. A subsequent call for research on alternative systems of care (e.g., clinical case management, home-based treatment) was articulated by Burns and Friedman (1990), who emphasized the need for research in guiding service innovation and policy in children's mental health. The need for similar research in child welfare is evident (e.g., Boyd, 1992; Knitzer & Yelton, 1990).

In addition to the encouraging results connected with therapeutic foster care (e.g., Jones, 1990), individualized family-focused, case-managed approaches have been suggested by several practitioners and researchers as appearing to have a reasonable chance of working effectively in the treatment of children with EBD. Evidence supporting the feasibility and effectiveness of these individualized strategies is emerging from programs on family preservation, family reunification, community reintegration, and educational systems reform (Boyd, 1992; Clark et al., 1992; Duchnowski & Kutash, 1993; Eber & Stieper, 1992; Olson, Lonner, & Whitbeck, 1992; Smith, Attkisson, Dresser, & Boles, 1992; VanDenBerg, 1993).

Although it may appear obvious that child welfare services should include a focus on preservation and reunification, these features generally have not been incorporated into services for children residing in out-of-home placements. During 1988, it was estimated that 62% of children in out-of-home care were reunited with their families ("Keeping families together," 1993). The same report suggested that this figure is an underestimate: a survey of providers and

administrators estimated that over 90% of all children in out-of-home care ultimately return home, even after transitional stays in family foster care or in independent living. If valid and lasting, these estimates can only enhance the rationale for models of service delivery that emphasize family-focused permanency planning (Allen, Brown, & Finlay, 1992; Goerge, 1990; Lewis & Callaghan, 1993).

In response to the challenges of foster care and to calls for additional research in the area of family-focused, individualized interventions for children with, or at risk of, EBD, the Fostering Individualized Assistance Program (FIAP) study was designed to investigate the effects of an individualized, case-managed, collaborative intervention with these children in the child welfare system (Clark & Boyd, 1990, 1992). This interim report provides preliminary outcome data for a randomly selected group of children in foster care who received individualized care services and a comparable group who were supported by practices standard to the foster care system.

METHOD

Subjects and Setting

Children in the state foster care system were eligible for inclusion in this study if they were (a) in temporary custody of the state, due to having been abused or neglected; (b) 7 years to 15 years old; (c) living in a regular foster home or in an emergency foster shelter facility; and (d) having behavioral and emotional disturbances, or at risk of such, as defined by screening indicators (Boyd et al., 1989, 1990; Sullivan, Henley, & Williams, 1988). Foster care caseworkers periodically completed a brief screening form for all children on their caseloads who were within this age range and who did not have a primary diagnosis of mental retardation. An at-risk screening form instructed the caseworkers to indicate the presence or absence of behavioral and situational indicators. For inclusion in the at-risk pool, a child had to exhibit, within the 2 months

prior to the screening, at least 2 of 18 behavioral indicators (e.g., harm to self or other, use of drugs and/or alcohol, engagement in abnormal sexual behavior) and had to meet at least 1 of 7 situational indicators (e.g., failed home placement, placement in a more restrictive setting in the past 6 months).

Children from the at-risk pool were selected by a computer-generated random-number system and assigned to the FIAP group or the standard practice (SP) control group. To compensate for a predicted higher attrition rate within the SP group (e.g., due to extended runaways or voluntary dropouts), approximately 50% more subjects were randomly assigned to the SP group than to the FIAP group. All subjects were phased in to the study over a 15-month period. The pace and schedule with which subjects were included was determined by the capacity of the FIAP case managers (i.e., family specialists) to initiate new cases.

A total of 132 foster children participated, with a gender distribution of 39.4% females and 60.6% males. The ethnic distribution was 61.4% White, 35.6% African American, and 3.0% Hispanic. At the time of assignment to the study, the subjects had spent an average of 2.6 years in out-of-home placements (i.e., adjudicated dependent) and had an average annualized rate of 3.8 placement changes, across a range of settings varying from foster home and emergency shelter care to psychiatric hospital units and detention centers. The FIAP and SP groups did not differ statistically on any of these descriptive variables.

At entry to the study, all of the subjects were residents of either a county encompassing a large urban area or a largely rural county with a few small towns. The per capita incomes for the two counties were \$16,044 and \$14,246, and the high school graduation rates were 82.8% and 73.1%, respectively (Weitzel, Friedman, Shanley, & Levine, 1993). The interventions for these subjects were delivered in the context of the children's homes (i.e., foster, biological, relative, adoptive), schools, and communities.

Standard Practice Foster Care

All of the children entering this study, whether assigned to the SP group or the FIAP group, were recipients of the standard practices of the foster care system. The term standard practice refers to the prevailing care, support, and services that the state system provides to its children who have been adjudicated as dependent and placed in the foster care system. These children may be in *foster* homes housing up to 12 other foster children or in group emergency shelter facilities for extended periods, or may be transferred to one of a broad range of group home, residential treatment, detention, or other private child-care facilities.

The statutes regarding the child dependency system mandate that the state be responsible for meeting the welfare needs of all of its children. However, not all services and supports for children in foster care are "entitlements" guaranteed by the state. Services such as outpatient counseling, respite care, home-based interventions, and crisis counseling for foster parents are not entitled as are the more basic services of safety and out-of-home placements. Although some improvements in allocations for mental health and related services did occur during the course of this study, there continues to be inadequate funding for specialized services, as well as insufficient numbers of professionals to address the broad array of unique services required by most children in foster care and, in particular, children with EBD and those who are at risk of losing their placements due to maladjustments.

All children in the study had permanency plan statements in their child welfare case records. However, these plans often appeared to exist only to "meet the letter of the law," instead of serving functional purposes. This was often evident when foster care caseworkers who were questioned about their children's permanency plans did not know or remember what was designated.

Intervention Overview

The basic goals of the FIAP model were to: (a) stabilize placement in foster care

and develop viable permanency plans, and (b) improve the behavior and emotional adjustment of the children receiving FIAP services. These goals were achieved through four major intervention components: strength-based assessment, life-domain planning, clinical case management, and follow-along supports and services. These four components were implemented by the FIAP family specialists who served as family-centered clinical case managers and home-based counselors, collaborating with foster care caseworkers, other providers (e.g., teachers, therapists, scout leaders), foster parents, and natural families. Family specialists followed and served their children across all settings, providing individually tailored services for them, as needed (Burchard & Clarke, 1990).

Each family specialist held a bachelor's or master's degree and had between 3 years to 12 years of experience working with troubled youth and families within treatment programs such as family preservation, therapeutic foster care, and group homes for children with EBD. These specialists were selected for their expertise and commitment to children and families. Each specialist carried about 12 active cases and up to 10 maintenance-level cases that were monitored and reactivated when necessary. The specialist and his or her supervisor met at least monthly to discuss the cases.

Strength-based Assessment. Strength-based assessment focuses on the strengths and potentials of the children and their families while recognizing the problems that exist in their lives. Although the philosophy upon which this assessment operates does not discount the usefulness of traditional psychological assessment information, it "asserts that strengths and capacities are the building blocks for change and should receive primary emphasis" (Duchnowski & Kutash, 1993).

As children entered the study, they were assigned to one of the four family specialists, who initiated their cases by assessing the need for mental health and related services for the children, their biological families, and to some

extent, even their foster families. This assessment process involved studying the child welfare case records and interviewing the child's foster care caseworker, foster parents, biological parent(s), teacher, guidance counselor, and other adults (e.g., provider agency therapist) who were relevant to the child's situation. The family specialists attempted to gather information from each of the relevant adults to provide an understanding of the child and the family's past and current problems, but, more importantly, to learn about their past successes and present strengths and potentials.

As the external case records were reviewed and the relevant adults interviewed, the specialists framed their search for strengths, needs, and potentials across several life domains that relate to basic human needs that are typical for individuals of this age (VanDenBerg, 1993). These domains were

1. residence;
2. family or surrogate family;
3. social competencies and relationships;
4. education and/or vocation;
5. health and medical care;
6. psychological well-being and emotional support;
7. legal and/or social system assistance;
8. safety knowledge and security from harm;
9. community involvement, mobility skills, and transportation resources; and
10. cultural, ethnic, and spiritual interests and involvement.

The specialists attempted to meet each child's relevant adults in their own settings, to make it convenient for these individuals. Efforts were made to provide opportunities for meeting and observing the child in the foster home (or emergency shelter), during home visits with the family of origin, at school, and in other situations involving activities such as recreation or peer interactions.

These many and varied contacts during the assessment process gave the specialists opportunities to: (a) get to know

the children and relevant adults, as well as their circumstances; (b) begin developing personal and professional relationships with these individuals; and (c) acquaint them with the roles that they might play as support team members. Assessment work also provided the specialists with much of the information needed for the planning process that would guide the team toward a proactive service plan.

Life-Domain Planning. A FIAP team, composed of as many of the relevant adults as would participate, was established for each child. Each team typically met monthly, depending on the changing needs of the child and circumstances regarding natural, adoptive, extended, and/or foster families. The team's goal was to formulate and revise, as necessary, a life-domain plan addressing child and family priority needs within each of the domains. This method included an emphasis on formulating, revising, and/or processing the most viable permanency plan through the child welfare system and the courts.

The family specialist typically served as the facilitator for the initial team meetings, with the goal of gradually transferring this responsibility to a parent, other relative, adoptive parent, or case manager who would play a consistent role in the child's life on a long-term basis. The facilitator's role was to: (a) guide the meeting, encouraging members to listen to and respect each other's points of view, particularly the input of those who were closest to the child on a daily basis (e.g., foster parents, biological parents, relatives, and teachers); (b) formulate or revise the life-domain plan; and (c) bring topics to a level of consensus that would lead to fulfillment of this action plan.

Following each team meeting, the specialist (or facilitator) contacted the relevant adults who were not able to attend the meeting and discussed, by phone or in person, what had evolved. Their input and assistance were solicited in accomplishing the tasks that the team had identified as important to the implementation of the life-domain plan. The specialist then sent to all team

members a copy of the plan with the specified tasks, responsible persons, and target dates.

It is important to note that, for all FIAP children, attention was given to matching them to settings that took advantage of their individual interests and strengths. This is not to say that initial plans addressed all aspects of these children's needs, but exposure to, and success with, these life experiences were designed to set the stage for these youths to tackle other areas of skill development.

Clinical Case Management. The FIAP model emphasizes the provision of intensive, individualized services and supports in the context of the child's home and community settings, to the extent possible. The specialists and other professionals associated with FIAP clients attempted to work with families at times and in locations that were convenient to the family members (e.g., evening hours or while transporting a child).

In their role as home-based counselors, the specialists often instituted child counseling, family preservation interventions, or family therapy. These services were initiated to ensure that the children and adults began these services with professionals whom they already knew and to avoid delays due to funding and the bureaucratic approval process. Because of the specialists' caseloads, they could only occasionally continue time-demanding interventions for extended periods. Thus, services that required such levels of involvement were initially set up with other professionals, or gradually transferred to them, as funding and appropriate providers were secured.

In their case management roles, the specialists coordinated and monitored services that they brokered. They used available services and supports of the social services systems (e.g., child dependency, mental health, juvenile justice), the educational system, community provider agencies (e.g., adoptive parent support groups), and community service organizations (e.g., Big Brothers/Big Sisters). Services included

provision of a mentor for a child after school and on weekends, family systems therapy, grief counseling, joint sibling visits or therapy, and vocational training for youth or parents.

The specialists also facilitated and/or provided some services and supports that were not eligible expenditures within traditional funding mechanisms, but were critical to the life-domain plan for a child or family. Flexible funding (Dollard, Evans, Lubrecht, & Schaeffer, 1994) with appropriate accounting and audit trails was available, averaging \$200 per month per case for the first 6 months and \$75 for each of the next 12 months. This flexible funding enabled the specialists to address such critical needs as obtaining child abuse counseling with a qualified therapist; purchasing a refrigerator for a mother in order for her to qualify for family reunification; purchasing a flute, bicycle, or computerized game for children who wanted to pursue their interests; or arranging for a tutor to assist a child with schoolwork.

In their role as case managers, the specialists had primary responsibility for actively involving, and communicating with, all relevant adults on an ongoing basis. Initially, the specialist was responsible for ensuring that all team members clearly understood their roles and tasks and for following up with them to ensure completion. The specialists also tracked the children's and families' progress across all the targeted areas of the life-domain plan. In addition, they were responsible for periodically bringing the team together to review case status and revise the plan, as necessary, to ensure that clinical goals were being addressed and that necessary supports and services were in place.

Another major aspect of the specialists' activities related to advocacy for their children and families. This was evidenced in activities ranging from consistent and viable involvement with, and input from, both foster and biological parents to bringing an issue to a court hearing in order to impel the child welfare system to address some critical needs regarding a child's permanency plan.

Follow-Along Supports and Services.

The FIAP model encouraged family specialists to link children and families to natural supports within their homes, schools, and community settings, whenever possible. For example, although a specialist initially might have recruited a Big Brother for an adolescent who needed more recreational involvement and mentoring, this role was often shifted to a cousin or uncle as the child moved into a permanency setting in closer proximity to his extended family. The use of natural supports involved situations in which the specialist was gradually able to establish a biological parent as the child's case manager to deal with issues such as therapy, school, or transportation needs.

One of the goals pursued with many families was to assist parents to become empowered to address, and advocate for solutions to, issues related to their rights and needs and those of their children, and the provision of essential services and supports. Family specialists frequently worked with youths, and with foster, biological, and/or adoptive parents to teach and encourage self-advocacy.

As the specialists and FIAP teams were successful in addressing critical life-domain needs, children were moved from active case status to a maintenance status. However, the specialist did continue tracking and monitoring these children and families in attempts to prevent or remediate new or recurring serious problems.

Measurement and Data Collection

Child outcome data were collected across a number of important domains and from multiple sources by trained interviewers. This information was systematically gathered from the children, caregivers (i.e., foster, biological, or adoptive parent or agency staff), foster care case records, computerized placement records, and school cumulative folders.

Emotional and Behavioral Adjustment. The Child Behavior Checklist (CBCL; Achenbach, 1991a) and the Youth Self-Report (YSR; Achenbach, 1991b) are measures for describing the

behavior of children from the perspective of the caregivers and the youths themselves. These instruments provide a total problem score, eight problem subscales (withdrawn, somatic complaints, anxious/depressed, social problems, thought problems, attention problems, delinquent behavior, aggressive behavior), and two syndrome groupings (internalizing and externalizing). The internalizing score is based on the problem subscale scores of withdrawn, somatic complaints, and anxious/depressed, and the externalizing score is based on the problem scores of delinquent behavior and aggressive behavior. Standardization of the CBCL and YSR was done using children who were geographically matched, clinically referred and nonclinically referred, and representative of national socioeconomic, ethnic, regional, and urban/suburban/rural factors.

Out-of-home placement information was available through the foster care client records and computerized tracking system used for payments. Placement days for each child were tracked across settings, such as foster home, therapeutic foster home, group home, group shelter care facility, residential treatment center, and psychiatric hospital. Overnight and extended runaways (AWOLs) were also tracked within this database. These data also were cross-checked with information obtained by the research data collectors when the children and caregivers were interviewed.

The state maintained records of charges against juveniles; these records did not include out-of-state offenses. The number of days a youth was incarcerated was collected from placement records and the project's interview questionnaires for both child and caregiver, which included questions regarding placement history. The Child and Caregiver Interview Questionnaires that included these items were adapted from a questionnaire developed and used by the National Adolescent and Child Treatment Study (Silver et al., 1992).

Data Collection and Management. The research interviews with the chil-

dren and caregivers were conducted in the field by trained, supervised interviewers at study entry and at 6-month intervals. When children moved further than 75 miles from the research office, the interviews were conducted using the Telephone Interview Process established by the Florida Research and Training Center on Children's Mental Health (Prange et al., 1992). The child interviews generally took from 45 to 75 minutes; the caregiver interviews typically took from 30 to 60 minutes. All interviews were conducted on a voluntary basis and included the appropriate provisions for informed consent and the rights of subjects. Subjects and caregivers were given a cash gratuity for participating in each interview (i.e., children—\$15, caregivers—\$20). The information was collected, managed, and analyzed by research personnel and was not shared with FIAP personnel, except in the aggregate across all subjects.

Data from the interviews and records were entered by trained data-input personnel into specifically tailored databases. Independent reliability checks were made randomly on 20% of each data set. If fewer than 1% of the digits were incorrect, the reliability level was considered acceptable; however, if a larger proportion of the digits were found to be incorrect, another 20% of that data set were checked. This process continued until two consecutive 20% checks yielded the acceptable reliability rate. Throughout this process, data entry errors were corrected from the raw data forms as the errors were identified.

Experimental Design and Statistical Analyses

The FIAP study used a repeated measures, between-groups design with at-risk foster children randomly assigned to continue in the SP group or participate in the FIAP group. Both groups were given the care and treatment practices standard in foster care, with the FIAP group receiving additional individualized services.

Several types of analyses were used to explore group differences on emotional and behavioral adjustment, in-

cluding child and caregiver measures of psychopathology (i.e., CBCL, YSR), placement changes, number of run-aways, incarceration, and serious criminal charges. First, a multivariate repeated measures analysis of variance (MANOVA) was performed on Waves 1 (entrance to study) and 4 (18 months later) for the CBCL and YSR scores, to evaluate differences between FIAP versus SP youth on the combined raw scores for all eight problem subscales. Second, a preplanned univariate repeated mea-

asures **analysis of variance** (ANOVA) for each subscale problem was done for these waves to explore specific FIAP versus SP differences. Third, to determine if FIAP and SP children placed in permanent settings (i.e., biological, adoptive, relative home at Wave 4) showed differential adjustment, univariate repeated measures ANOVAs were performed on CBCL and YSR internalizing and externalizing syndrome *T* scores. Fourth, ANOVAs and chi-square tests were conducted to deter-

mine if FIAP and SP subjects differed on number of placement changes, run-aways, felony charges, and days incarcerated, prior to and after their entrance to the study.

Four separate chi-square tests evaluated differences between subjects for whom Wave 4 interview data were available ($n = 109$) and those for whom it had not yet been collected or who were not available to be interviewed ($n = 23$). The tests compared gender, race (White, other), status (FIAP, SP),

TABLE 1
CBCL Mean Scores for Wave 1 and Wave 4 by Group

Subscale and group ^a	Wave 1		Wave 4		Time F	Group x Time F
	M	SD	M	SD		
Externalizing					7.00**	2.23
FIAP	69.32	9.51	64.57	10.32		
SP	67.90	12.09	66.58	10.18		
Aggression					6.57**	1.59
FIAP	19.32	9.61	15.57	8.38		
SP	18.89	9.92	17.61	8.83		
Delinquency					7.44**	.41
FIAP	7.53	4.15	5.89	4.17		
SP	7.15	4.98	6.13	4.03		
Internalizing					6.04*	2.78
FIAP	65.02	10.85	59.64	10.83		
SP	60.79	11.54	59.76	10.48		
Anxious/depressed					6.72**	.44
FIAP	9.83	6.41	7.76	4.93		
SP	8.15	5.43	6.92	4.39		
Somatic complaints					7.74**	2.54
FIAP	2.19	3.53	1.06	1.77		
SP	1.66	2.44	1.35	1.71		
Withdrawn					5.58*	8.79**
FIAP	6.00	3.37	4.15	3.18		
SP	4.48	3.22	4.69	3.41		
Other subscales						
Attention problems					3.81*	4.91**
FIAP	9.21	5.77	7.17	4.31		
SP	7.77	4.59	7.90	5.23		
Social problems					6.93**	.63
FIAP	5.49	3.25	4.47	2.53		
SP	5.35	3.27	4.81	3.08		
Thought problems					43.84**	1.73
FIAP	3.85	3.03	1.32	1.66		
SP	3.19	3.21	1.50	1.95		

Note. $n = 47$ in FIAP (Fostering Individualized Assistance Program) group; $n = 62$ in SP (standard practice) group; CBCL = Child Behavior Checklist; Wave 1 = Interviews conducted at entrance to study; Wave 4 = Interviews conducted 18 months later.

^aThe externalizing and internalizing syndrome factors were based on *T* scores. The problem subscale factors were based on raw scores.

* $p < .05$. ** $p < .01$.

and age (median split). A significant difference in the relative frequency was found only for age, $\chi^2(1, N = 131) = 5.45, p < .05$, with the youths for whom interview data were available being younger than those who had not been interviewed at Wave 4.

EVALUATION

Emotional and Behavioral Adjustment

Among the FIAP ($n = 47$) and SP ($n = 62$) subjects with complete CBCL caregiver interviews, a repeated measures MANOVA testing for Group, Time, and Group \times Time effects was conducted on the eight CBCL problem subscale scores. No significant multivariate effect for Group (FIAP vs. SP) was found for the CBCL problem scores at Wave 1. Significant multivariate pre-post effects for Time, $F(8, 100) = 5.99, p < .01$ and Group \times Time, $F(8, 100) = 2.17, p < .05$, were found. The multivariate Group \times Time interaction showed an overall positive treatment effect for FIAP children that indicates greater improvement in emotional and behavioral adjustment over time, compared to SP children. The significant effect for Time shows that both groups improved significantly over the 18-month period.

The CBCL subscale and syndrome mean scores and standard deviations for both groups at Waves 1 and 4 are presented in Table 1. Compared to the SP group, the FIAP group evidenced greater improvement based on primary caregiver reports of emotional and behavioral adjustment. Results from the repeated measures ANOVAs on CBCL problem subscale scores for Time and Group \times Time also are presented in Table 1. These analyses revealed significant effects ($p < .05$) for all of the subscale factors for Time. Both groups showed significant improvement on the individual problem scores during the 18-month period between Waves 1 and 4. A significant Group \times Time interaction was found for both withdrawn ($p < .01$) and attention problems ($p < .05$). These interaction effects suggest greater im-

provement in the FIAP children in comparison to the SP children.

Among the FIAP ($n = 46$) and SP ($n = 61$) subjects with complete YSR interviews, a repeated measures MANOVA testing for Group, Time, and Group \times Time effects was conducted on the eight YSR problem subscale scores. There was no significant multivariate effect for Group or Group \times Time. A significant multivariate repeated measures effect for Time was found, $F(8, 98) = 14.75, p < .01$. The Time effect showed an overall positive treatment effect for both FIAP and SP groups.

YSR syndrome and subscale mean scores and standard deviations for both groups at Waves 1 and 4, as well as the univariate repeated measures F values, are presented in Table 2. Results from univariate analyses revealed significant effects ($p < .01$) for Time on all factors. Both FIAP and SP subjects showed significant improvement on all problem subscale scores.

Children in Permanency Homes.

An analysis of children's home adjustment after placement in permanent settings (i.e., biological, adoptive, or relative home) was limited to 22 youths (FIAP $n = 12$; SP $n = 10$) who were in these placements by Wave 4. Youths who were officially away without leave (i.e., extended runaway) were excluded from this analysis. Repeated measures univariate ANOVAs were conducted with these groups on the CBCL internalizing and externalizing T scores. As shown in Table 3, this analysis revealed a significant Group \times Time interaction for internalizing, $F(1, 20) = 4.66, p < .05$, which indicates greater emotional adjustment for the FIAP children in permanency placements. Of the 22 youths in permanency home settings at Wave 4, 19 completed the YSR interview (FIAP $n = 10$; SP $n = 9$). Repeated measures univariate ANOVAs for externalizing and internalizing YSR T scores for these children demonstrated a significant Group \times Time interaction for externalizing scores, $F(1, 17) = 4.95, p < .05$. This interaction suggests that there was a significant improvement in

the behavioral adjustment of the FIAP children in permanency placements in contrast to the SP group.

Placement Changes and Runaways

A repeated measures ANOVA was conducted to explore differences on number of annualized placement changes between FIAP and SP subjects. No significant effects on changes prior to study entry were found for Group (FIAP vs. SP) or Group \times Time. A significant effect for Time, $F(2, 116) = 6.25, p < .01$, was found that showed improvement for both groups over the first 18-month period of the study.

Two separate chi-square tests were used to evaluate before and after study-entrance differences between FIAP and SP youth on number of annualized runaways. Because these distributions were skewed, data were categorized into three groupings, each representing 33% of the distribution (i.e., none, 1 or 2, and 3 or more runaways). A significant difference was found between SP and FIAP subjects, $\chi^2(2, N = 130) = 5.89, p < .05$, only for runaways after entrance to the study. This group effect showed significantly different relative frequencies of runaways, with the FIAP group having less runaways than the SP group.

Detention/Jail and Felony Records

Of the 132 children in the study, district records showed that 18 (FIAP $n = 8$; SP $n = 10$) had at least 1 day of incarceration after their entrance into the study. A one-way ANOVA on the number of days of incarceration prior to study entrance showed no differences between the FIAP and SP groups.

After entrance to the study, 8 of the 18 youths had less than 2 weeks of incarceration, usually as runaways or for misdemeanor offenses, such as retail theft. For the 18 youths, the mean proportion of each individual's total time spent incarcerated since entrance to the study was analyzed in a one-way ANOVA. A significant difference was found between SP and FIAP subjects, $F(1, 16) = 6.25, p < .05$. This Group effect showed less time spent in incarceration for this subgroup of FIAP youth in contrast to the SP subgroup.

TABLE 2
YSR Mean Scores for Wave 1 and Wave 4 by Group

Subscale and group ^a	Wave 1		Wave 4		Time F	Group x Time F
	M	SD	M	SD		
Externalizing					24.74**	3.30
FIAP	58.46	11.17	51.37	12.87		
SP	59.87	12.33	56.57	11.28		
Aggression					20.83**	2.44
FIAP	12.93	7.00	9.09	6.67		
SP	13.74	7.19	11.85	6.61		
Delinquency					11.37**	.01
FIAP	4.65	3.32	3.61	2.74		
SP	5.59	3.94	4.61	3.20		
Internalizing					77.04**	.01
FIAP	58.37	11.09	49.98	11.24		
SP	60.66	11.38	52.48	10.71		
Anxious/Depressed					44.96**	.12
FIAP	9.46	6.37	5.89	5.49		
SP	10.72	6.30	6.79	5.29		
Somatic complaints					80.37**	.06
FIAP	4.87	3.83	2.11	2.87		
SP	5.44	3.55	2.52	2.51		
Withdrawn					9.93**	.13
FIAP	4.72	2.49	3.93	2.30		
SP	5.38	3.16	4.39	2.32		
Other subscales						
Attention problems					17.99**	1.37
FIAP	6.70	3.73	4.76	3.45		
SP	6.66	3.78	5.56	3.46		
Social problems					17.15**	.49
FIAP	4.93	2.95	3.98	2.55		
SP	5.59	2.86	4.25	2.81		
Thought problems					53.34**	.47
FIAP	3.52	3.38	1.46	2.26		
SP	4.54	2.89	2.05	2.02		

Note. *n* = 46 in FIAP (Fostering Individualized Assistance Program) group; *n* = 61 in SP (standard practice) group; YSR = Youth Self-Report; Wave 1 = Interviews conducted at entrance to study; Wave 4 = Interviews conducted 18 months later.

^aThe externalizing and internalizing syndrome factors were based on T scores. The problem subscale factors were based on raw scores.

***p* < .01.

Analyses regarding felony charges were computed using only those youths 13 years of age or older at Wave 1. Juvenile justice records showed 24 subjects had been charged with one or more felonies after study entrance, (FIAP *n* = 9; SP *n* = 15). A one-way ANOVA revealed a significant difference between SP and FIAP subjects, $F(1,23) = 4.77$, $p < .05$. This Group effect showed proportionally fewer felony charges (i.e., assault, aggravated assault, grand larceny, auto theft) for this FIAP subgroup in comparison to the SP subgroup. A

one-way ANOVA on the number of felony charges prior to study entry yielded no difference between FIAP and SP subjects.

SYNTHESIS

Even at this interim point, the findings of this study suggest somewhat better adjustment outcomes for foster children with EBD who are served by an individualized services approach than for an equivalent group of children in standard practice foster care. Based on the

caregiver measure of psychopathology, the FIAP children improved significantly more from Wave 1 to Wave 4 on the withdrawn and attention problem subscales than did the SP children. This finding is strengthened further by a multivariate difference across all the problem subscales, with FIAP children having evidenced lower pathology scores than the SP children. When the comparisons between FIAP and SP from Waves 1 to 4 were based on the child's self-report of psychopathology, they showed no significant difference.

Of the children in designated permanency home placements, the FIAP subsample showed significantly better emotional and behavioral adjustment than the SP subsample. The FIAP children in permanency placements showed significantly more improvement on internalizing from the caregivers' perspective and on externalizing from the children's perspective.

The finding of greater emotional and behavioral adjustment for FIAP children, particularly as it relates to the externalizing syndrome, is further strengthened by the fact that the FIAP children were significantly less likely than children in the SP group to run away, engage in serious criminal activity, or be incarcerated. The results regarding the greater efficacy of the FIAP model in improving foster children's adjustment occurred even though both groups improved over time, at least as shown by adjustment outcome measures.

This study's interim results support moderate superiority of the FIAP group on measures of psychological functioning, runaways, severe criminal activi-

ties, incarceration, and adjustment in stable home placements. However, results of the majority of tests regarding subscales of psychological functioning and the number of placement changes were found to be nonsignificant between the two groups. A limitation of this study concerns the assessment of change in psychological functioning across time as a simple measure of a before and after effect (i.e., Waves 1 and 4). This type of repeated measures analysis cannot account for the complex individual process of change taking place over the course of this study (Willett, Ayoub, & Robinson, 1991). Future statistical evaluations will involve a growth curve analysis across all seven waves of data in an attempt to encompass a more complex, individualized assessment of change over time.

The FIAP study contributes to an emerging body of research regarding the evaluation of the efficacy of individualized systems of care as applied to children with EBD (e.g., Bickman, 1993; Cross, Fallon, Gardner, Adnopolz, & Saxe, 1992; Henggeler, Melton, &

Smith, 1992; Wells & Biegel, 1990). The positive impact of an intervention that focuses on creating an emotionally supportive environment for children by strategic family and system interventions makes sense clinically (e.g., Henggeler et al., 1992). The FIAP study involved a controlled experiment evaluating the progress of two equivalent groups of children, one exposed to standard practice treatment and the other to an individualized system of care. Although exposing both groups to a form of "treatment" makes it less likely that outcome differences between them will be found, this type of comparison is considered essential for determining the most effective strategies for serving this population of children and families (Burns & Friedman, 1990).

The treatment of children with EBD in therapeutic foster homes has been documented to be at least as effective as more restrictive treatment programs and more effective than no treatment or regular foster care comparisons (Hawkins et al., 1989; Jones, 1990). However, there are more children re-

TABLE 3
CBCL and YSR Scores by Group for Youth in Permanency Home Settings

Subscale and group ^a	Wave 1		Wave 4		Time F	Group x Time F
	M	SD	M	SD		
CBCL						
Externalizing					2.38	.44
FIAP	65.92	9.60	60.17	10.74		
SP	70.00	7.59	67.70	9.92		
Internalizing					.06	4.66*
FIAP	64.08	8.91	56.83	13.45		
SP	56.20	10.17	62.00	8.83		
YSR						
Externalizing					17.79**	4.95*
FIAP	58.90	10.68	49.20	11.93		
SP	58.33	11.20	55.33	10.28		
Internalizing					9.38*	1.08
FIAP	56.30	10.67	46.60	8.06		
SP	61.56	10.35	56.78	12.44		

Note. For CBCL data, $n = 12$ in FIAP (Fostering Individualized Assistance Program) group; $n = 10$ in SP (standard practice) group. For YSR data, $n = 10$ in FIAP group; $n = 9$ in SP group; CBCL = Child Behavior Checklist; YSR = Youth Self-Report; Wave 1 = Interviews conducted at entrance to study; Wave 4 = Interviews conducted 18 months later.

^aThe externalizing and internalizing syndrome factors were based on T scores.

* $p < .05$. ** $p < .01$.

quiring treatment than can be accommodated by even these less-restrictive types of residential treatment programs (Boyd et al., 1989, 1990; Knitzer & Yelton, 1990). Thus, the application of an individualized system of care to these children in their current foster care placement may hold merit, particularly if it can also increase the likelihood of achieving reunification or other forms of permanence. The goals of the FIAP study were consistent with this thesis (Clark & Boyd, 1990, 1992).

This study has been conducted against an emerging backdrop of changes in the state's regulations and policies regarding children in custody of the state. For example, state statute required that children remain in temporary custody no longer than 18 months, yet this regulation was scarcely ever met until well into this study period. At the time of entry into this study, 74% of the subjects in both groups already exceeded that provision. However, consent decrees to two lawsuits seeking a much fuller range of services, as well as a reduction in lengths of stay for children in out-of-home placements, successfully captured the attention of state policymakers and many child welfare administrators. During the last 9 months of the study period, the foster care system in the study counties experienced an increase in resources, such that caseloads for foster care caseworkers decreased approximately 30% on average. Funds also were appropriated to increase the number of adoption caseworkers, as well as the number of attorneys available to process termination of parental rights, in order to make more children eligible for adoption earlier. These changes in the study's context may, in part, explain the improvements that occurred on some measures in both groups over time. However, despite the dramatic increase in resources available to foster children in these counties, the FIAP methods provided by the family specialists continued to demonstrate greater gains for the FIAP children's emotional and behavioral adjustment.

The findings from the midpoint of this study are supportive of the phi-

losophy and results of other studies examining individualized system-of-care strategies (Duchnowski & Kutash, 1993; Evans, Newton-Logsdon, Armstrong, Huz, & Rahn, 1992; Stroul, in press; VanDenBerg, 1993). However, a more definitive conclusion regarding the efficacy of the individualized intervention being employed within the FIAP study will require longer-term follow-up to assess the stability of permanency placements and the adequacy of the emotional and behavioral adjustment across home, school, and community settings.

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Authors' Notes

The authors wish to express their appreciation to Karen Donohue, Mark Rose, and

Richard Foster for their expertise and assistance in data analysis; to Julia Conklin, Julie Hartman, Kristin Knapp, Octavio Salcedo, Amy Thatcher-Benza, Mary Todd, and Kristi Weiner for their dedication and sensitivity as interviewers and data collectors; to Sharon Lardieri for her assistance in training the interviewers; and to Tom Andrews, Yolanda Boronell, Roxanne Fixsen, Richard Hartsfield, and Mary Ann Kershaw, whose competence, creativity, perseverance, and caring with children and families made this study possible.

The FIAP study, a collaborative research demonstration project between the Florida Mental Health Institute at the University of South Florida and the Florida Health & Rehabilitative Services Department, was funded in large part by the Child and Family Support Branch of the National Institute of Mental Health (Grant No. 1-R18-MH47910) and the Child, Adolescent, and Family Branch of the Center for Mental Health Services (Grant No. 9 HD5 SM51328-04).

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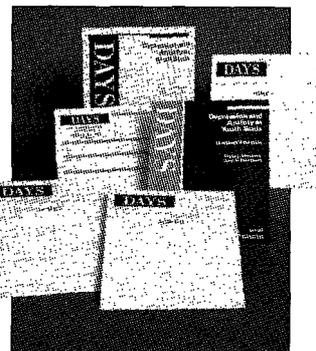
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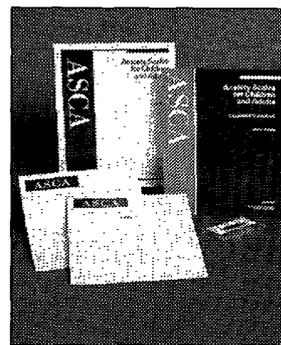
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Effectiveness of Intensive Case Management for Homeless Adolescents: Results of a 3-Month Follow-Up

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HOMELESSNESS IN THE UNITED States has become one of the most intractable social problems of the last decade. Although estimates vary as to the size of the homeless population, there is broad consensus that the numbers are growing, with no abatement in sight (Jones, Levine, & Rosenberg, 1991). Special issues of the *American Psychologist* and the *Journal of Social Issues* provide overviews of research programs that shed light on psychological issues relevant for this population (Jones et al., 1991; Shinn & Weitzman, 1990). From such research, a portrait of the characteristics and needs of the homeless is beginning to emerge. Although there are approximately 1.5 million homeless adolescents in this country (Rotheram-Borus, Koopman, & Ehrhardt, 1991), they are barely present in this portrait, and they remain the most understudied group among the homeless (Institute of Medicine, 1988).

Variably referred to as "runaways," "throwaways," or "street kids," homeless adolescents on their own usually come from conflict-laden, violent, and dysfunctional families (National Network, 1985; Rothman & David, 1985) and many, if not most, have experienced physical abuse, neglect, and/or sexual abuse (U.S. Department of Health and Human Services, 1986). Many of these youths have had lengthy, unsuccessful histories of contact with social service systems, including multiple placements in foster care and resi-

This article describes the Seattle Homeless Adolescent Research Project (SHARP), a research demonstration program with a goal of implementing and evaluating an intensive mental health case management program for homeless adolescents. This new program, Project Passage, is based on nine primary components: (a) assessment, (b) planning, (c) linkage, (d) monitoring or tracking, (e) advocacy, (f) counseling or the therapeutic relationship, (g) treatment teams, (h) crisis service, and (i) flexible funds. Case load was limited to no more than 12 cases, so that adolescent-centered, individualized services could be delivered. Youths were randomly assigned to Project Passage or a "regular" case management program. A 3-month follow-up found that both groups demonstrated significant improvements in mental health outcomes and social adjustment; however, youths in Project Passage evidenced lower levels of aggression and greater satisfaction with their quality of life.

dential treatment programs (Greater Boston Emergency Network, 1985; New York State Council on Children and Families, 1984; Rothman & David, 1985).

The limited research examining homeless adolescents clearly suggests that this is a population at risk for a myriad set of emotional problems because of their precarious position and high rates of abuse and neglect. The most commonly reported effects of such experiences are fear and anxiety, depression, post-traumatic reactions, sexual problems, drug and alcohol abuse, poor school adjustment, and delinquent acting-out and aggressive behaviors (Browne & Finkelhor, 1986; Conte, 1985). Within a New York City sample, 24% of youths using a runaway shelter reported previous suicide attempts (New York State Council on Children and Families, 1984). Another New York City sample was found to have psychiatric profiles comparable to that of adolescents attending a psychiatric clinic (Shaffer & Caton, 1984). This is not

surprising, given that a Los Angeles study found that almost a quarter of homeless youths had received inpatient mental health treatment at some time (Robertson, Koegel, & Ferguson, 1989). In another Los Angeles sample, 84% were found to be depressed, while 18% had attempted suicide (Yates, MacKenzie, Pennbridge, & Cohen, 1988).

A recent position paper of the Society for Adolescent Medicine noted that homeless youths are a multi-problem population (Farrow, Deisher, Brown, Kulig, & Kipke, 1992). Emotional and behavioral problems typically co-exist with substance abuse and physical health problems. A study surveying youths in 16 shelters throughout the country found that close to 70% were regular problematic alcohol users (van Houten & Golembiewski, 1978). In a study of New York City shelters, 20% of the youths surveyed said they drank to intoxication at least once a week (Shaffer & Caton, 1984). Those most likely to get drunk weekly were also seen as more

"disturbed." The most comprehensive study of alcohol use among homeless adolescents was conducted in Hollywood, California (Robertson, et al., 1989). Results indicated that the prevalence and severity of alcohol abuse and related problems among this population was quite high. Based on DSM-III guidelines, almost half (48%) met criteria for alcohol abuse or dependence at some time in their lives. More than 20% met criteria for both abuse and dependence. Comorbidity of alcohol abuse and emotional problems was also significant. About 10% of these youths qualified for a dual diagnosis of alcohol abuse and major depression (Robertson, 1989).

Significant physical health or medical problems found among homeless youths include elevated rates of sexually transmitted diseases; ear, nose, and throat problems; and infectious diseases (Kipke, 1991, cited by Farrow et al., 1992). It has also been suggested that homeless youths are at risk for HIV infection. Approximately 4% are estimated to be HIV positive, a rate 2 to 10 times higher than those found in other adolescent samples (Rotheram-Borus et al., 1991).

Despite the seriousness of these problems, homeless street youths often fail to receive services because of a non-responsive service system ill-prepared to meet their needs (Farrow et al., 1992). They have been described as "victims of piecemeal interventions" (Kurtz, Jarvis, & Kurtz, 1991). Homeless youths need intensive services that are integrated into a continuum of care. Furthermore, because homeless youths seldom fit into traditional molds, services must be flexible and forgiving, allowing youths to "try and fail and try again," just as they would be allowed to do within a family context (Kurtz et al., 1991, p. 236). Rotheram-Borus and Bradley (1991) noted that an additional barrier to their effective treatment is the limited clinical skills of youth workers at most agencies that serve them. They noted that although many youth workers are talented professionals, few have professional mental health training.

A research demonstration project was launched to provide intensive mental health case management to this group in Seattle. This intensive intervention was designed to provide more responsive, individually tailored services that are adolescent centered, culturally sensitive, and community based. The intent was to fully use existing community resources and create more flexibility within the system to meet the needs of this population. The intensive mental health intervention will be described and data from the first 3 months of the follow-up evaluation will be presented here. The larger research demonstration project is referred to as the Seattle Homeless Adolescent Research Project (SHARP); the actual intervention is called Project Passage because it attempts to help homeless youths negotiate the transition into adulthood.

PROGRAM SETTING

SHARP is a collaborative effort of YouthCare, a community agency that has been providing alternative services to street kids; Seattle Mental Health Institute, a community-based mental health center experienced in providing multisystem youths with case management services; the Psychology Department of the University of Washington; King County Mental Health Division; and the State of Washington's Division of Mental Health. An oversight committee, comprised of representatives from these agencies and Seattle Children's Home, which provides residential treatment to children and adolescents, met regularly to review the project. The committee consulted with project staff and assisted in the coordination of service systems and project direction. This committee facilitated communication and interagency collaboration among the different systems serving homeless adolescents.

The treatment site was the Orion Multi-Service Center in downtown Seattle. Orion Center's drop-in programs serve homeless, runaway, and street-involved youths between the ages of 11 and 20. Orion offers a drop-in room, free meals, food and clothing

banks, health services, a school program, and recreation programs. A drug and alcohol counselor also is available, and group sessions on topics such as self-esteem, sexuality, parenting, and job skills are offered.

Through Orion, homeless adolescents also are eligible for case management (later referred to as regular case management or services-as-usual). Orion case managers provide a range of services that may include assessment, treatment planning, linkage and advocacy, and case monitoring. They have a great deal of experience and skills in working with homeless youths, but few have advanced degrees and/or formal mental health training. As such, the extent of formal assessment and treatment planning available through services-as-usual is limited. Orion "regular" case managers may have as many as 20 to 30 active cases at one time.

Orion is one of eight programs operated by YouthCare, which was founded in 1974 to improve the quality of life and encourage healthy maturation in runaway, homeless, and street-involved youths. Kurtz et al. (1991) stated that in each community a "designated agency must assume the role of watching over and pleading the case of these vulnerable youth" (p. 236). In Seattle, YouthCare has been this agency, and has developed and refined programs based upon current needs and trends relating to homeless street youths.

TARGET POPULATION

The target population for Project Passage is homeless youths. For purposes of this project, all homeless youths were considered at least at risk for serious emotional disturbance. They were defined as those young persons, ages 13 to 21, who had no stable residence, had no viable home to return to, and were not physically in the custody of the state. It is estimated that there are up to 2,000 such youths at any given time in King County, with the majority in Seattle (Schram, 1987). In order to be eligible for services through Project Passage, homeless youths also had to be (a) interested in receiving some type of ser-

vice or treatment, (b) willing to participate in the evaluation research and sign a consent form, and (c) planning to stay in the greater Seattle area for at least 6 months.

Participants and Recruitment

Study participants were recruited through Orion. Eligible youths who indicated an initial interest were taken through an extensive informed-consent procedure. If they agreed to participate, they were randomly assigned to Project Passage or Orion regular case management, which was the "treatment-as-usual" control condition. Random assignment was accomplished by preparing a stack of sequentially numbered envelopes and placing in each a card with a matching number and group assignment. Random assignment was to the group, not to an individual therapist. Those few youths who declined to participate in Project Passage (fewer than 5%) were assigned to Orion treatment-as-usual.

Descriptive data collected from the first 229 youths recruited through Orion indicated that they were primarily male (57%), with a mean age of 16.5 years. The sample was culturally diverse, with 59% White, 22% African American, 8% Hispanic, 7% Native American, and the remainder Asian, Pacific Islander, or other ethnicities (4%). Compared to Seattle demographics, this is an overrepresentation of ethnic minority youths. On average, youths reported that they had been homeless for 7.6 months. Mean age at the time of their first episode of homelessness was reported as **14.6** years. Thirty percent reported at least one previous foster home placement; for those who has been placed in foster care, the mean number of placements was 3.2, with a maximum of 13 previous placements. Expressed reasons for leaving home focused on family violence, conflict, or abuse. When youths were offered the opportunity to mention up to four reasons for leaving home, they reported the following: physical abuse (29%), family conflict (25%), family violence (23%), family drug use (19%), neglect (15%), and sexual abuse (12%). Eleven percent mentioned that

a problem of their own contributed to their leaving home.

PROJECT PASSAGE: AN INTENSIVE CASE MANAGEMENT PROGRAM

Youths in Project Passage were assigned to an intensive mental health case manager who was responsible for providing them individualized services continuously from admission to termination. Case load for each intensive case manager did not exceed 12 active youths.

Goals and Philosophy

Project Passage services attempt to: (a) increase youths' daily living and/or coping skills and abilities; (b) increase youths' self-esteem and reduce their level of risk-taking behaviors (e.g., involvement in prostitution, unsafe sex, delinquent activities, etc.); (c) provide support and advocacy for youths in their environment; and (d) change the environment by increasing youths' access to needed resources, including, but not limited to, appropriate housing, health services, and educational/vocational training. Central to this approach is the recognition that homeless adolescents typically require services from more than one agency. It is the role of the case manager to serve as the unifying factor in service delivery (Behar, 1985). The case manager typically helps the adolescent access the various service systems that he or she needs and acts to facilitate communication between the different service providers involved with the adolescent. For homeless youths, these services typically include mental and physical health, residential, vocational, educational, and income maintenance.

Intensive case management is not time limited, and contacts are over an extended period of time. All intensive case managers have a master's degree or equivalent mental health training so that they can offer assessment, treatment planning, and mental health counseling at professional levels. Given the resistance of homeless youths to mental health services in traditional set-

tings, the ability to provide these mental health services in house is an important component of the intervention. A Seattle Mental Health Institute clinical supervisor provides supervision and direction for the intensive case management team.

Components

The Project Passage model draws from: (a) a literature review of case management programs that have worked with homeless adults, (b) principles of adolescent development, (c) the literature on effective treatment approaches for victims of child abuse and neglect, (d) the long-time experience of YouthCare staff and of other Seattle service providers who have been actively working with homeless adolescents, and (e) the formal mental health training of Seattle Mental Health Institute staff. It includes six key components drawn from the Ventura County Children's Mental Health Demonstration Project (1986); assessment, planning, linkage, monitoring or tracking, advocacy, and counseling or the therapeutic relationship. Three additional components-treatment teams, crisis service, and flexible funds-are incorporated into Project Passage.

Assessment. Intensive case managers spend a significant amount of time with youths, often doing everyday things with them. In addition to the formalized assessments gathered from hospitals, courts, or prior treatment facilities, case managers also collect information informally. This includes observing youths in their milieu, which may be the school room or the dinner table. For intensive case managers, assessment is ongoing as case manager-adolescent relationships develop and case managers observe how adolescents adapt to normative and non-normative life transitions. This information is then used in ongoing treatment planning.

Treatment Teams. Treatment teams, an integral part of treatment planning, are composed of service providers or representatives from service systems involved with the adolescent.

For example, within Orion Center itself, an adolescent might have a treatment team of educational, medical, and mental health specialists in addition to the case manager. Many youths have larger treatment teams that include providers outside the YouthCare/Orion system such as probation officers, attorneys, gang prevention caseworkers, state service providers, family, and other concerned adults. Generally, youths are present at team meetings and they are allowed to place someone of their own choosing on their team. Often they choose a peer from their "street family" or perhaps a foster parent who can provide them with emotional support.

Teams meet with the youths and their support system members to develop and monitor treatment plans. These teams usually meet quarterly, although they may meet as often as once a week. This team approach assures continuity of services and decreases the splitting and manipulation of service providers that often occurs when serving adolescents.

Treatment Planning. Treatment planning begins soon after the initial assessment and is tailored according to the three treatment phases described in the next section. It is individualized and adolescent centered. The case manager's role is to facilitate services around the adolescent, rather than the adolescent fitting into a pre-set plan. These plans are structured around the youth's life domains (i.e., housing, social, cultural, educational/vocational, psychological, legal, health, and family). For example, most early treatment plans focus on securing basic needs—shelter, food, clothing—for youths.

Although the individual case manager is responsible for developing treatment plans, as treatment teams come together, all members are involved in the planning processes. After the initial treatment phase, such plans are expanded to include relationship, family, and more interpersonal issues. Treatment monitoring is provided by the clinical supervisor, who meets with each case manager weekly for 1 hour. Individual case managers also receive

1.5 hours of group supervision each week.

In all cases, the youth's cultural background, history within the service system, and developmental level are taken into account when devising and implementing the treatment plan. Youths are terminated from services when they complete treatment and have become self-supporting or able to live with family, move away or disappear, or are sufficiently stabilized that they can be transferred to less intensive community resources.

Linkage. Project Passage case managers have developed an extensive network of contacts with agencies in the greater Seattle area that provide services to youths or young adults. In line with the treatment plan, youths are linked to appropriate services, such as vocational training or alcohol and drug abuse counseling. These service providers then become part of the treatment team.

Many homeless youths have had negative experiences with service providers, and vice versa. The case manager works with the youths to repair such relationships and with other service providers to obtain flexible and alternative services. By providing transportation to services and emotional support, the case manager can help the youths "hook in" to these services. For example, to facilitate a link to foster care, a youth may be allowed to plan a "runaway" to a shelter 1 day a week.

Monitoring and Tracking. An integral part of what intensive case managers do is monitor and track these youths, some of whom may move 15 to 30 times in the course of treatment. Although the treatment teams are an effective formalized way to monitor youths, case managers often use their relationship with the informal network of homeless youths for this purpose. Because intensive case managers cultivate longstanding and trusting relationships with youths, when they put the word out on the street, the youths are likely to check in.

Advocacy. Intensive case managers spend a significant amount of time advocating for a youth's basic entitlements, such as food and housing, medication for mental illness, documentation of learning disabilities so that special education can be provided, and prenatal care. Advocacy may also involve attending court trials and working with placement providers.

Crisis Service. Project Passage offers 24-hour crisis service. Typically, this involves talking with a youth who has called in. However, it may also involve calling an ambulance or police officer out to a youth who has been hurt or victimized, having a youth hospitalized, or supporting a young woman through childbirth.

Flexible Funds. Project Passage case managers have access to unrestricted funds to meet the needs of these youths. This money has been used to purchase bus passes, schoolbooks, school pictures, food handler's permits, uniforms, shoes, diaper services, breast pumps, picture identification, birth certificates, medication, and transportation (e.g., bus, train, or plane tickets). These funds also pay for individual and group recreational activities (e.g., movies, camping trips, skiing). The clinical supervisor is the gatekeeper of these funds, and case managers must document the need and use of the monies in the youth's treatment plan. In this way, case managers can meet the physical and emotional needs of their clients.

Therapeutic Relationship. At the core of the treatment model is the therapeutic relationship. Recognizing that homeless youths typically do not go to Orion for therapy, but instead go to shoot pool, eat a meal, and take a break from the streets, case managers develop their relationships with youths slowly. They meet them in the youth's world—at the pool table or the doorway where they sleep. Although an array of services is made available, the youths choose how, when, where, and *if* they want a specific service.

A key element in building a therapeutic relationship is communicating to youths that their safety is of paramount importance. Thus, youths must check in their weapons upon entering Orion, they must be reasonably drug and alcohol free in meetings with case managers, and they must wear seatbelts when in YouthCare cars. This communicates to them that case managers care about them and will keep them safe. Eventually, most youths come to trust their case managers and begin to talk about their past and present problems.

Program Phases

There are three phases to the adolescent's involvement in the intensive case management system. Although these phases are designed to promote competency in specific skill areas, they are completely flexible and have been altered repeatedly to meet the needs of the individual youth. Movement from one phase to the other depends upon the progress and strengths of each youth.

Phase 1. The primary goal of this phase is that the adolescent develop a trusting relationship with the case manager. This is accomplished in various ways, including, but not limited to, one-to-one counseling, recreational activities with the case manager, and school or day treatment program attendance. Family counseling is initiated for those youths with families willing, able, and available to participate. When this is not possible, which is often the case, the youths are allowed to select their own family system for involvement in their "family" counseling sessions. This is often their "street family" or support network.

Phase 2. The primary goal of this phase is that the adolescent develop appropriate relationships with peers while maintaining continuous involvement with the case manager. Additional activities for the adolescent may include therapeutic group work on issues such as sexual victimization and self-esteem, wilderness experiences with the case manager and other youths, community service projects or events that require a

cooperative effort on the part of the adolescent involved, and so forth.

Phase 3. The primary goal is that the adolescent develop an understanding of his or her relationship to the community at large. Activities include preparation for employment in the community and regular attendance at a school program.

EVALUATING EFFECTIVENESS

For the evaluation of Project Passage, a variation of the pretest-posttest control group design (Kazdin, 1992) was implemented. In this design, two groups of participants were assessed before and after the intervention. In the study, homeless youths at Orion were randomly assigned either to Project Passage or regular case management, rather than using a no-treatment or no-services control, which raises a number of ethical concerns. The theoretical underpinnings guiding Project Passage and regular case management are not appreciably different because the former evolved from the latter; however, the programs do differ in various fundamental respects. The most salient are the case load sizes

per case manager, the amount of supervision and resources available to case managers, and the educational backgrounds of case managers. These differences are summarized in Table 1.

Assessment Intervals

Baseline assessments of youths were completed in the week following intake and group assignment. Assessments were conducted quarterly (e.g., every 3 months) throughout the next year. This choice of assessment interval was guided by the finding that homeless adolescents at Orion typically remain in treatment for about 6 months (Wurzbacher, Evans, & Moore, 1991). Therefore, most youths are assessed at least once while in treatment and at multiple follow-up points. The methodological desirability for repeated assessments versus the practical constraints related to the cost of each assessment necessitated a compromise in frequency.

Data Collection Procedures

Data were collected during face-to-face interviews with study participants. Over the course of the study, the interview team consisted of 2 men and 6 women, all of whom had previous youthwork or

TABLE 1
Key Differences Between Project Passage Intensive Case Management and Regular Case Management

	Intensive	Regular
Caseload	Maximum: 12	Minimum: 18, maximum: 30
Supervision	Individual: 1 hr./wk. Group: 1.5 hr./wk.	Individual: as needed Group: sporadic
Consultation	Psychologist group: 1 hr./wk. Psychiatrist group: 1.5 hr./mo.	Group: 1.75 hr./mo. Not available
Drop-in coverage ^a	10% time	40% time
Flexible funds	Available	Not available
Educational qualifications	Master's degree in social services	Bachelor's degree plus 4 years of experience

^aThis indicates how much time case managers are required to provide coverage for drop-in youths at Orion Center.

interview experience. Additional training and supervision was provided by PhD-level staff. All interviews took place in private areas, generally within Orion Center, but also in local restaurants or parked cars.

The baseline assessment took between 2 to 4 hours to complete. Because of its length, it was usually conducted over two sessions in the same week. Quarterly follow-up interviews took about an hour to complete. For their participation, youths were paid \$25 for the lengthy two-part first assessment and \$15 for the first quarterly interview.

Interviews included open- and closed-ended questions addressing their reasons for leaving home, residential history, history of contact with service providers, and developmental history. They also were asked to complete a self-report booklet consisting of a series of forced-choice-format questionnaires.

Psychological and Social Adjustment Measures

Basic demographic information such as age and ethnicity was obtained during an initial life history interview. All other measures were contained in a self-report booklet completed by the youth in the presence of the interviewer. The measures chosen were age-appropriate for a broad adolescent sample and relatively easy to read and complete. All had demonstrated reliability and validity.

The Youth Self-Report (YSR; Achenbach, 1991) is a 120-item inventory used to assess self-reported competencies and behavioral problems in youths ages 11 years to 18 years. In this study, only the section yielding problem indices was analyzed. This section consists of a list of 103 items such as "I argue a lot" and "I feel that no one loves me." Youths respond by circling 0 if the item was not true, 1 if the item was *somewhat* or sometimes *true*, and 2 if the item was very true or often true. The YSR assesses problems on two general dimensions, externalizing (i.e., "I get in many fights") and internalizing (i.e., "I am too fearful or anxious"). A total score and eight subscale scores for specific syndromes are also derived.

Depression was assessed separately using the Reynolds Adolescent Depression Scale (RADS; Davis, 1990; Reynolds, 1987). The RADS contains 30 items (e.g., "I feel happy," "I feel worried") to which youths respond on a 4-point scale ranging from 1 = *almost never* to 4 = most of *the* time. Items on the RADS were developed on the basis of their congruence with specified clinical symptomatology for depression. Higher scores indicate more depressive symptoms. In a series of studies conducted by the author, Cronbach's alpha ranged from .90 to .94. The RADS is correlated highly ($r = .83$) with the Hamilton Rating Scale, the Beck Depression Inventory, and the Center for Epidemiological Studies Depression Scale ($r_s = .83, .73, \text{ and } .74$, respectively).

The Problem Behavior Scale (PBS; Mason, Cauce, Gonzales, Hiraga, & Grove, in press) is a 14-item questionnaire that measures the degree to which a youth displays an "antisocial problem behavior syndrome" (Jessor, 1992). This conceptualization of problem behavior is based on factor-analytic studies suggesting that many types of problem behavior, such as drug use, stealing, and school failure, cluster together. On a 1 (never) to 7 (very often) scale, adolescents note how frequently they engage in behaviors such as "vandalize/trash property" or "sell drugs." This scale has been found to have high internal reliability ($r < .85$) within a group of normal adolescents and acceptable validity in a normative sample of African-American youths (Mason et al., in press). The PBS was adapted to include two additional items, "trade sex for food or money" and "trick for food or a place to stay," which are considered of significance for this population. Conversely, two other items (e.g., "missed school without parent's permission" and "stayed out past midnight") were dropped because they were perceived to be inappropriate for homeless youths.

Adolescent alcohol and psychoactive substance use was assessed using the Personal Experience Screening Questionnaire (PESQ; Winters & Henley, 1987), an 18-item questionnaire designed as a screening instrument for substance

abuse. The scale assesses the frequency of substance use in various situations (e.g., "How often have you used alcohol or other drugs ... at home? ... with older friends?" etc.) and symptoms of alcohol and drug abuse (e.g., "How often have you ... used alcohol or drugs secretly so nobody would know you used? ... been upset about other people talking about your using or drinking?"). The scale also asks respondents to rate how often they have had alcoholic beverages, marijuana or hashish, or hard drugs others than marijuana on a 7-point scale ranging from *newer* to 40+ times. The time framework for responses is the previous 3 months. Cronbach's alpha for the PESQ is very high, $r_s > .90$ (Winters, 1992).

The Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965, 1979) consists of 10 items such as "I take a positive attitude toward myself" and "At times I feel I am no good at all," and asks the respondent for his or her endorsement (1 = strongly *agree* to 4 = strongly *disagree*). Cronbach's reliability coefficient has generally been found to be above .80.

The Life *Domains Scale* (LDS; Baker & Intagliata, 1982) provides an assessment of satisfaction with the quality of life in 15 domains. Youths are asked to rate on a scale (1 = very *unhappy* or very *dissatisfied* to 5 = very *happy* or very *satisfied*) how they feel about "the place you're staying at overnight," "the clothing you wear," "your friends," "how you spend your day," "the food you eat," "your health," "the people you live with," and so forth. Internal reliability has been found to be acceptable ($r < .70$).

Results

Evaluation results are based on data collected from the first 115 adolescents who completed the first quarterly follow-up assessment conducted at the end of the first 3 months of treatment (see Note). Fifty-five participants were assigned to Project Passage and 60 to regular case management. Results of a discriminant function analysis indicated that they did not significantly differ from the overall pool of participants on any

TABLE 2
Means and Standard Deviations on the Youth Self-Report
at Baseline and 3-Month Follow-up

	Intensive		Regular	
	Baseline	3 Months	Baseline	3 Months
Syndrome (raw scores)				
Withdrawn	5.7 (2.6)	5.4 (3.0)	5.5 (2.7)	5.5 (2.7)
Somatic complaints	4.3 (3.8)	3.5 (3.0)	4.4 (3.7)	3.4 (3.3)*
Anxious/depressed	10.0 (6.6)	8.3 (5.6)	9.6 (6.1)	8.7 (5.7)*
Social problems	4.2 (2.6)	3.8 (2.4)	4.0 (2.8)	3.9 (2.6)
Thought problems	4.4 (3.3)	4.1 (3.0)	4.2 (3.0)	4.2 (2.9)
Attention problems	7.6 (2.9)	6.9 (3.1)	6.6 (3.8)	6.7 (3.3)
Delinquent	8.1 (3.7)	6.7 (3.3)	7.2 (3.5)	6.5 (3.4)*
Aggressive	13.1 (6.0)	11.6 (5.9)	13.0 (6.6)	13.2 (6.2)**
Dimensions (raw scores)				
Internalizing	19.3 (10.5)	16.6 (9.0)	18.8 (11.1)	17.0 (9.2)*
Externalizing	21.2 (8.0)	18.3 (7.6)	20.2 (9.1)	19.6 (8.6)**
Total problems (t scores)	61.9 (9.2)	58.7 (9.1)	60.4 (12.2)	59.2 (10.5)

Note. Multivariate significant effect of time for syndromes, $p < .05$. The statistical analysis was conducted on raw scores, as recommended by Achenbach (1991). The means and SDs of the individual syndromes and of the summary internalizing and externalizing dimensions are presented in raw scores (SDs are in parentheses). For illustrative purposes, T scores are presented for total problems. A score of 50 is average, and a score of **70** (or more) is considered clinically significant.

*Time effect, $p < .05$. **Group \times Time effect, $p < .10$.

of the **measures of psychological and social adjustment previously described** ($p < .10$).

Group Comparisons. The mean scores and standard deviations by group on the YSR problem behavior scales at baseline and at the 3-month follow-up are presented in Table 2. A 2 (Group) \times 2 (Time) repeated measures multivariate analysis of variance (MANOVA) was conducted on YSR syndrome scores in order to assess changes in behavior problems over time and differential patterns of change between treatment groups. The MANOVA revealed a significant multivariate time effect, indicating that over the 3-month period there was a significant overall reduction in behavior problems across treatment group, Wilks's lambda = .82, approximated $F(8, 101) = 2.81$, $p < .01$. There was no significant Group or Group \times Time multivariate effect.

Follow-up univariate analysis of variance (ANOVA) on each individual scale revealed a Group \times Time effect, suggesting an overall reduction in behavioral problems across groups on

subscales measuring somatic complaints, $F(1, 108) = 8.34$, $p < .01$; anxiety/depression, $F(1, 108) = 9.02$, $p < .01$; and delinquent behavior, $F(1, 108) = 10.37$, $p < .01$. No other significant Group, Time, or Group \times Time effects were indicated. Nonetheless, a Group \times Time trend, indicating greater reduction on the aggression subscale for the intensive case management group, $F(1, 108) = 2.94$, $p < .10$, was detected.

Repeated measures ANOVAs on the YSR internalizing and externalizing domains revealed a Time effect, indicating an overall reduction in internalizing and externalizing behavior problems across groups, $F(1, 108) = 11.41$, $p < .01$, and $F(1, 108) = 6.24$, $p < .05$, respectively. The Time effect on externalizing was somewhat modified by a Group \times Time trend, suggesting greater reduction in problem behavior for youths in the intensive case management group, $F(1, 108) = 2.95$, $p < .10$. No Group \times Time effect was detected on the internalizing domain.

Mean scores and standard deviations by group on the other five indices of psychological and social adjustment are presented in Table 3. Repeated mea-

asures ANOVAs indicated that there was a significant Time effect between the baseline and the 3-month follow-up assessment across group on measures of depression, $F(1, 103) = 10.87$, $p < .001$; problem behavior, $F(1, 112) = 8.17$, $p < .01$; substance use, $F(1, 103) = 13.10$, $p < .001$; and self-esteem, $F(1, 103) = 7.30$, $p < .01$. In each case, the change was indicative of less severe or fewer problems and better adjustment from baseline to the 3-month follow-up. No overall Time effect was detected on the quality of life measure, but a Group \times Time trend, indicating increasing satisfaction for youths in Project Passage, was detected, $F(1, 112) = 2.83$, $p < .10$.

SYNTHESIS

As the number of homeless and street youths in this country continues to increase, it is exceedingly important to identify and develop programs that effectively serve this hard-to-reach, multiproblem population. In general, the mental health and social adjustment of homeless youths receiving case management services through Orion Center improved over the first 3 months, regardless of whether they were in regular case management or intensive mental health case management. A significant multivariate effect on the YSR suggested an overall decrease in problem behaviors for both groups in the 3 months following intake. More specifically, the number of somatic complaints, anxious/depressed symptoms, and delinquent and aggressive behaviors on the YSR was less than at baseline.

In addition, significant decreases in symptoms of depression, problem behavior, and substance use were found, along with increases in self-esteem. These uniformly positive results are highly encouraging and may demonstrate that homeless youths can and do benefit from both case management programs, at least in the short run. However, given our design, it is not possible to rule out the possibility that these youths would have improved without any treatment whatsoever.

There was some indication that youths in Project Passage improved more

than those in regular case management. In terms of self-reported aggression, general externalizing behaviors, and satisfaction with quality of life, there was a trend for youths assigned to Project Passage to improve more than youths in regular case management. This trend will be important to monitor as the evaluation continues to track youths for another 9 months. The cost of intensive mental health case management is much greater because more highly trained case managers serve fewer youth. This greater cost will be difficult to justify, given the few differences in outcomes detected thus far. However, it is quite possible that small differences at 3 months will become large differences at the end of a year. Continued follow-up is clearly necessary.

In interpreting these differences between both types of case management, it is important to note that Orion's "regular" case management is in itself quite comprehensive and innovative. Developed as part of an NIMH demonstration grant in 1983, Orion Center was recently described as one of the nation's "flagship" programs for homeless and runaway youths (Pires & Silber, 1991).

It is also worth noting that when two interventions are housed at the same site, compensatory equalization of treatment and treatment diffusion or imitation can introduce threats to the internal validity of evaluation studies

(Cook & Campbell, 1979). In other words, any benefits that result from the "experimental" intervention may extend over into the "control" intervention. For example, if an intensive mental health case manager develops a special arrangement with a community agency for one of her youths, it is quite likely that a regular case manager will know about this and build upon that new link, if appropriate, for one of his or her youths. In this way, the regular group also may benefit from the presence of intensive mental health case managers at Orion. Ethnographic style interviews with case managers in both groups may help to ascertain to what extent this may have occurred. In retrospect, it would have been valuable to take baseline assessments of services provided to youth in Orion regular case management prior to the introduction of Project Passage.

Although these preliminary results suggest that both groups of homeless youths are improving, it does not help us understand why. Two of the most plausible mechanisms for change are (a) youths improve because they are receiving appropriate community-based services, or (b) youths improve because they develop a positive relationship with a supportive case manager. Both of these possibilities will be examined in a planned process evaluation that should clarify the results. As we struggle to provide children and youths with needed

services that are cost effective, the results of research demonstration projects such as these should prove helpful in designing efficient and useful mental health delivery systems.

This study is significant in that it is the first to formally assess the effectiveness of mental health-related services to homeless youths. Indeed, a thorough computerized search identified only one study that followed homeless youths across time, and that study focused exclusively on HIV-related behaviors (Rotheram-Borus et al., 1991). Nonetheless, this study is limited in two major ways. First, the nature of the design does not permit us to unequivocally credit youths' improvements during the 3-month period to the case management interventions. It is possible that maturation, or other factors, may have been responsible for the changes detected. Second, the follow-up period was limited to 3 months, which does not provide a long-enough treatment or assessment framework for us to feel comfortable that the trends toward greater improvement in Project Passage are stable or clinically significant.

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TABLE 3
Means and Standard Deviations on the Other Self-Reported Measures at Baseline and 3-Month Follow-up

Measure	Intensive		Regular	
	Baseline	3 Months	Baseline	3 Months
RADS (depression)	66.4 (16.3)	61.3 (15.2)	68.7 (15.1)	65.0 (14.6)*
PBS (problem behavior)	2.3 (0.9)	2.1 (0.9)	2.2 (0.9)	1.9 (0.8)*
PESQ (substance abuse)	28.8 (10.8)	25.4 (8.9)	32.3 (14.0)	27.0 (9.7)*
RSES (self-esteem)	1.9 (1.7)	1.7 (1.7)	2.1 (1.7)	1.6 (1.6)*
LDS (quality of life)	3.4 (0.6)	3.6 (0.8)	3.5 (0.5)	3.5 (0.7)**

Note. Standard deviations are given in parentheses. Lower scores on self-esteem indicated greater self-worth. Scores above 77 on the depression scale are considered clinically significant. Clinical cut-offs not reported for other scales. RADS = Reynolds Adolescent Depression Scale; PBS = Problem Behavior Scale; PESQ = Personal Experience Screening Questionnaire; RSES = Rosenberg Self-Esteem Scale; LDS = Life Domains Scale.

*Time effect, $p < .05$. **Group \times Time effect, $p < .10$.

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Authors' Notes

1. The first two authors contributed equally to this manuscript.
2. The authors wish to thank advisory board members John Whitbeck, Rosie Orezkovich, Robert Jones, and Anne VanderStoep; research team members Yvette Lohr, Richard Hill, Lori Miller, Cindy Mix, and Mark Jenkins; and the clinical team, Catherine Pagano, Karin Kallander, Sarah Wallace, Carl Meinecke, Sue Lederman, Steve Wilson, and Lori Holloway, for their contributions above and beyond the call of duty. This research was supported by NIMH/SAMSHA Grant No. HD5 SM48087.

Nose

The exact *n* in each analysis varies from 104 to 115 due to missing data on some measures. Results presented here are considered preliminary because the study is still ongoing.

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Development and Evaluation of Treatment Foster Care and Family-Centered Intensive Case Management in New York

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OVER THE PAST 15 YEARS, A number of national studies on children's mental health services have concluded that major changes need to be made in how services are planned for, provided to, and delivered to children and adolescents with serious emotional disturbance (SED) and their families. Knitzer (1982) decried the overreliance on inpatient care as well as the failure of state mental health authorities to take responsibility for developing and funding family-centered, community-based programs and services. Several other reports also have focused national attention on children with SED. For example, the Office of Technology Assessment's report on children's mental health problems and services (Dougherty, Saxe, Cross, & Silverman, 1987) reached conclusions similar to Knitzer's, and Cole and Poe (1993) reiterated the need to move to an individualized care approach.

In 1984 the Child and Adolescent Service System Program (CASSP) was created to provide states with technical assistance and financial aid to foster the restructuring of their systems of care by redirecting public resources from inpatient and residential programs to community-based services. Like other states, New York has benefited from CASSP funding, technical assistance, and philosophical leadership. The New York State Office of Mental Health (the state mental health authority) is guided by a set of core principles in the development and delivery of services to children and their families, one of which is that the family is the most desirable

In response to a national call for states to shift from an overreliance on restrictive treatment modalities to community-based systems of care and to the needs identified by the families of children with serious emotional disturbance (SED), the New York State Office of Mental Health has developed Family-Centered Intensive Case Management (FCICM) as part of a research demonstration project. FCICM is intended to empower and support families with children with SED. Staffed by a case manager and parent advocate, FCICM includes respite care, flexible service money, parent support groups, and behavior management skills training. In this study, which had positively controlled experimental conditions, children who were referred for treatment foster care in three rural New York counties were randomly assigned to FCICM or treatment foster care. The present article compares and contrasts the program elements of FCICM and the treatment foster care models, provides an overview of the research design and methods, describes the children and families served, and examines program implementation issues.

setting in which to raise children and that clinical practice, policy direction, and funding must support the rearing of children in family and family-like settings (New York State Office of Mental Health, 1992). These principles were operationalized by the establishment of community-based services such as treatment foster care, psychiatric emergency services, and intensive case management programs that were child centered and family focused. Although these programs were positively received by providers and parents, early experiences convinced policymakers that a number of additional individualized supports (e.g., respite and peer support groups) would be necessary if children were to remain in family settings.

To address the need for continued expansion of services for children with SED and their families, as well as to add to the research knowledge base (Friedman & Duchnowski, 1990; Saxe, Cross, & Silverman, 1988), the New York State Office of Mental Health applied for a research demonstration grant from the National Institute for

Mental Health (Evans, 1990). The office's proposal was designed to compare the child, family, and service system outcomes of New York's treatment foster care program-Family-Based Treatment (FBT)-to those of a newly established modality-Family-Centered Intensive Case Management (FCICM)-in three rural counties. Rural areas were selected as research sites because of the paucity of available resources to support families caring for children with SED. Once awarded, the grant funds enabled the researchers to develop a program model and research plan to enhance local resources and test whether relatively inexpensive supportive services could be effective in keeping children with SED in their own homes.

Established in 1988, FBT was one of the first community-based programs to be implemented by the New York State Office of Mental Health. Its goal is to provide training, support, and respite for treatment (foster) families caring for a child with SED in the community (Armstrong & Evans, 1992). A family specialist provides training and support

to a cluster of five treatment families and one respite family. Whenever possible, children are reunited with their families as treatment goals are met.

FCICM was designed to support families (see Note 1) with services that paralleled and supplemented those available to treatment families in FBT. The development of FCICM was influenced, in part, by families' demands for the same level of intensive support and services offered to treatment parents and reflected the growing strength and influence of parents of children with SED on both national and state levels. State policy-makers were told by parents that this type of support would increase the likelihood that they would be able to keep their children at home.

Even though the concept of tailoring services to the individual needs of each child and family was one of the original CASSP values (Stroul & Friedman, 1986), it has taken several years for professionals to translate the values of individualized care into programs. The development of FCICM is one application of an expanding knowledge base on individualized care, which is characterized by four key service elements: case management/case coordination, wraparound services, flexibility of funding and services, and interagency collaboration (Katz-Leavy, Lourie, Stroul, & Zeigler-Dendy, 1992). FCICM uses an individualized care framework, which incorporates these elements, and is implemented through a team comprised of a case manager and a parent advocate who has raised a child with SED. The team is committed to doing "whatever it takes" to support a group of eight families in caring for their children. The resources and services the team provides for families include behavior management skills development, support groups, in-home and out-of-home respite care, sibling recreational groups, and expenditure of flexible service dollars. In addition, case managers access concrete services needed by families to support them as a family unit.

This article will (a) describe both program models and their implementation as part of a research demonstration project, (b) report on the

characteristics of children and families served through December 1993, (c) describe the evaluation used to assess the model outcomes, and (d) highlight our experiences in working with the salient aspects of FCICM.

METHOD

Research Design

To test the assertion that a child's parents can provide care as effectively as treatment parents, a research demonstration comprised of integrated program and evaluation components was developed. The research used a positive, controlled randomized design in which children, ages 6 years to 12 years, referred to FBT were randomly assigned either to FBT or FCICM. Repeated measures of functioning and symptoms were taken at 6-month intervals, including 6 months postdischarge. The logic model for the research, the domains of interest, and their hypothesized relationships are presented in Figure 1.

The model indicates that the characteristics of the service system, families, children, and providers of services interact and influence the behaviors of and services offered by case managers, family specialists, and parent advocates. The resulting behaviors and services are believed to affect system outcomes such as differential costs, expenditures of flexible service dollars, and hospitalization rates. Hypothesized family outcomes include improved adaptability and cohesion among FCICM families, improved self-esteem among FCICM siblings, and greater confidence in the use of behavior management skills by FCICM parents as compared to parents with children in FBT. It was expected that these family outcomes and the services directly provided to children would result in symptom reduction and improved functioning of children. The child outcomes from both interventions were likely to be quite similar during enrollment and at discharge because both programs are intensive, community-based interventions focused on support and behavior management. However, because of the family supports provided

in FCICM, it was expected that children enrolled in this intervention would maintain the level of functioning they had at discharge, whereas children enrolled in FBT would not necessarily maintain level of functioning at the same point. Because of the intensive supports provided to the family of origin and because the target child in FCICM remains at home rather than being removed and reintegrated, the siblings in FCICM families were expected to evidence fewer problems and greater self-esteem at the postdischarge follow-up.

Instrumentation

The Client Description Form for Children and Adolescents (New York State Office of Mental Health, 1991b) and the Baseline Supplemental Form (New York State Office of Mental Health, 1991a), two instruments that elicit information on the demographic characteristics, behavioral and functional status, treatment history, strengths, and unmet needs of each child and family, were used. The child's status in the areas of role performance, thinking, behavior toward others/self, moods and emotions, substance use, and family resources was measured using the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1990), which was completed by the case manager or family specialist. CAFAS levels range from 0 to 30: 0 = *average—no* disruption of functioning; 10 = *mild—significant* problems or distress; 20 = *moderate-major* or persistent disruption; 30 = *severe-severe* disruption or incapacitation. Higher CAFAS scores indicate greater levels of functional impairment.

The Child Behavior Checklist (CBCL; Achenbach, 1991a), which was completed by parents, and the Teacher Report Forms (TRF; Achenbach, 1991b), have nearly identical formats that include 118 problem behavior items with three responses (not true, *somewhat* or sometimes true, and very true or often true). These items are summed to form a total problem T score and numerous subscales (e.g., anxiety). On both the CBCL and the TRF, T scores in excess of 63 are considered to be in

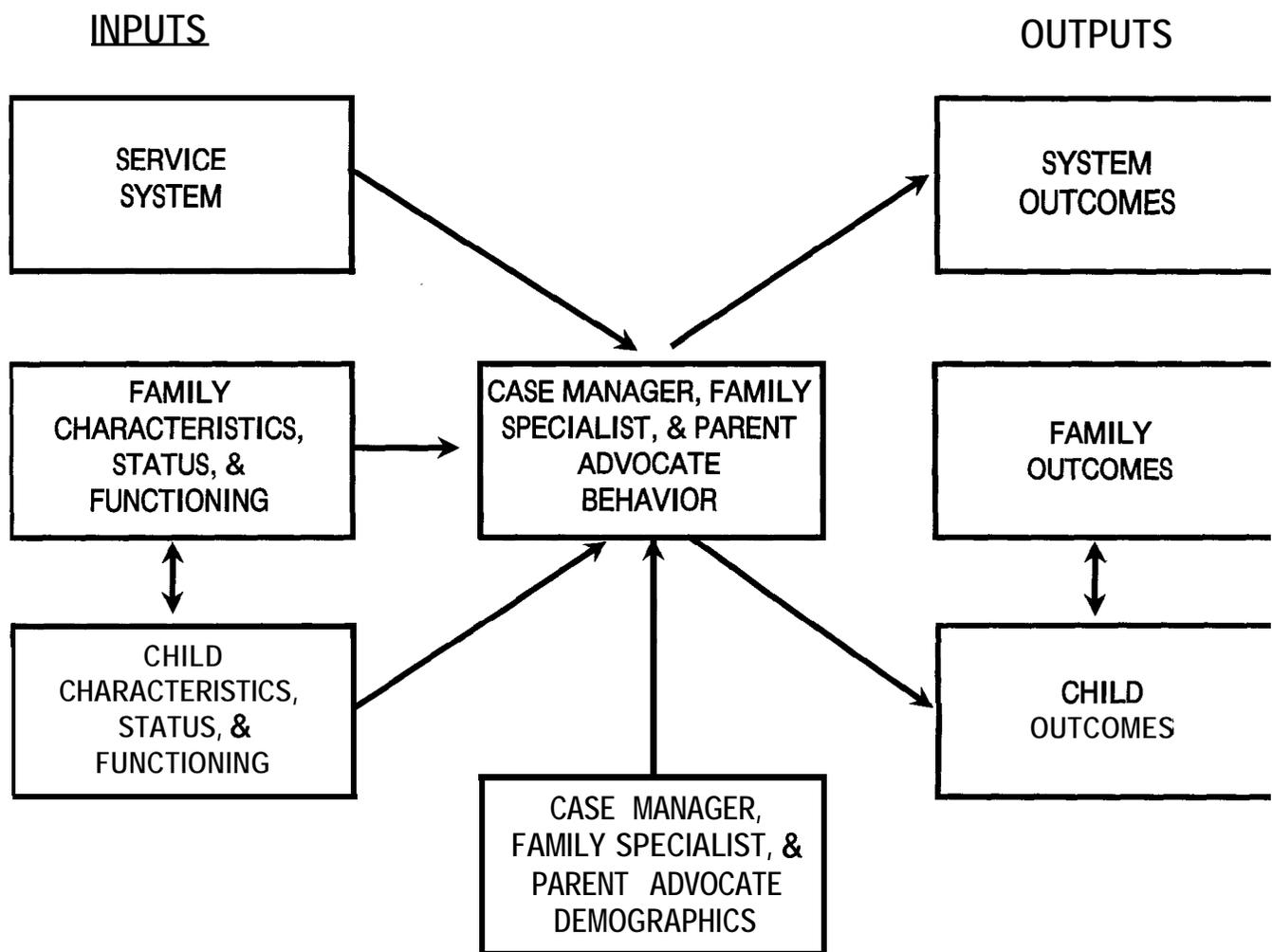


FIGURE 1. Logic model for the research showing the domains of interest and hypothesized relationships.

the clinical range. The Piers-Harris Children's Self-Concept Scale (Piers, 1984), a measure of a child's self-image and self-esteem, is composed of 80 items, and was administered to children ages 8 years and older. A total raw score is calculated by summing all of the items, with greater scores indicating higher levels of self-esteem. Finally, family adaptability and cohesion were measured by the Family Adaptability and Cohesion Scales III (FACES III; Olson, Portner, & Lavee, 1985). This instrument comprises two scales, with 10 adaptability items (e.g., "Children have a say in their discipline") and 10 cohesion items (e.g., "Family togetherness is very important"). It was administered to all family members over 12 years old. Midrange family adaptability and cohesion scale scores were considered most

positive, whereas scores at either high or low extremes were considered unfavorable (see Note 2).

Intake and Eligibility Criteria

FBT and FCICM staff and a local referral committee screened families for project inclusion. Referral to FBT is usually based on a child's need, either for a period of specialized care during the transition from more restrictive residential care to family living when remaining at home is not feasible, or for the facilitation of successful adoption. Local mental health providers, social services, and schools made the majority of referrals (54%); an additional 41% came from parents, either independently or in conjunction with other human service providers, and the remaining 5% came from other referral sources. The

determination of eligibility for the study included a review of psychological, psychiatric, educational, general health, family/social histories, and FBT intake criteria (New York State Office of Mental Health, 1990). FBT intake criteria incorporated the New York State Office of Mental Health criteria for SED of (a) a DSM-III-R diagnosis, exclusive of mental retardation, developmental disability, or organic disorder; (b) a history of psychiatric hospitalization, several crisis-related contacts with mental health services, and/or out-of-home placements related to psychiatric impairment; and (c) the risk of imminent hospitalization or other restrictive placement. For research purposes, two criteria were added to ensure comparability between groups. First, children had to be between the ages of 6 years and 12

years. Second, the families could not be involved in active child protective cases, thus ensuring safe living environments for children assigned to FCICM or FBT. A child was not eligible for the project if family with whom he or she could live (for FCICM) or return to (for FBT) was not available.

After examination of referral information, each family met with both the FCICM case manager and the FBT family specialist. If the family decided to participate, the child was screened by the intake committee for eligibility. An assignment to FCICM or FBT then was made by the research team, witnessed parental consent and child assent were obtained, and the child was enrolled in the program (see Figure 2).

Description of Children and Families

As of the end of 1993, 39 children had been randomly assigned and enrolled in either FCICM (n = 15) or FBT (n = 24). Some children were only recently enrolled in the intervention, and staggered return and analysis of data are reflected in the numbers given. Enrollment data available for the 39 children demonstrated a substantial level of need among them and their families. At the time of enrollment, there were no significant differences between participants in either intervention (see Table 1).

Children ranged in age from 5 years to 12 years. Thirty-five enrolled children (90%) were boys. Racial and ethnic characteristics of the sample reflected the geographic areas where the interventions were delivered: 32 (82%) were white, 2 (5%) were Native American, 2 (5%) were African American, and 3 (8%) children were of mixed racial/ethnic background. Disruptive behavior disorders, such as attention-deficit hyperactivity disorder, were the most common category of primary diagnosis (n = 27, 69%). Twenty-three (59%) of the children were educated in either special education or day-treatment classes. Children were found to be functionally impaired in an average of 2.4 of 5 areas (SD = 0.9), with the greatest degree of impairment reported in social relationships (n = 34, 87%) self-direc-

tion (n = 29, 74%), and cognitive/communication functioning (n = 20, 51%). In the areas of self-care and motor skills, 7 (18%) and 4 (10%) children, respectively, had difficulty with these areas.

Assessments of child functioning (n = 39) from CAFAS are presented in Table 1. The majority of children were rated as having major/persistent disruption in their behavior toward others (n = 30, 77%), in their moods and emotions (n = 28, 72%), and in age-appropriate role performance (n = 29, 74%). The area of least disruption in functioning was in thinking, where only 12 children (31%) were reported as experiencing major or persistent problems or distress.

On average, ratings provided by parents completing the CBCL described the children as clinically needy. The mean total problem T score for children (n = 36) was 72 (SD = 7.9), well

within the clinical range. On the major CBCL subscales for internalizing and externalizing problems, mean T scores of 67 (SD = 9.8) and 73 (SD = 10.3), respectively, were observed. Both of these scores fall in the clinical range.

At enrollment, unmet service needs for children were reported to be greatest in the areas of recreation (n = 30, 79%), mental health (n = 20, 51%), education (n = 15, 38%), dental (n = 13, 33%), and medical (n = 9, 23%). In the mental health area, the greatest need was reported for respite care (n = 14, 36%). Clinic services (n = 13, 33%), adjustment to daily living skills training (n = 13, 33%), psychotropic medication management (n = 3, 8%), and day treatment (n = 1, 3%) were also identified as needed.

For 21 enrolled families (56%), FCICM case managers or FBT family specialists identified poverty as inter-

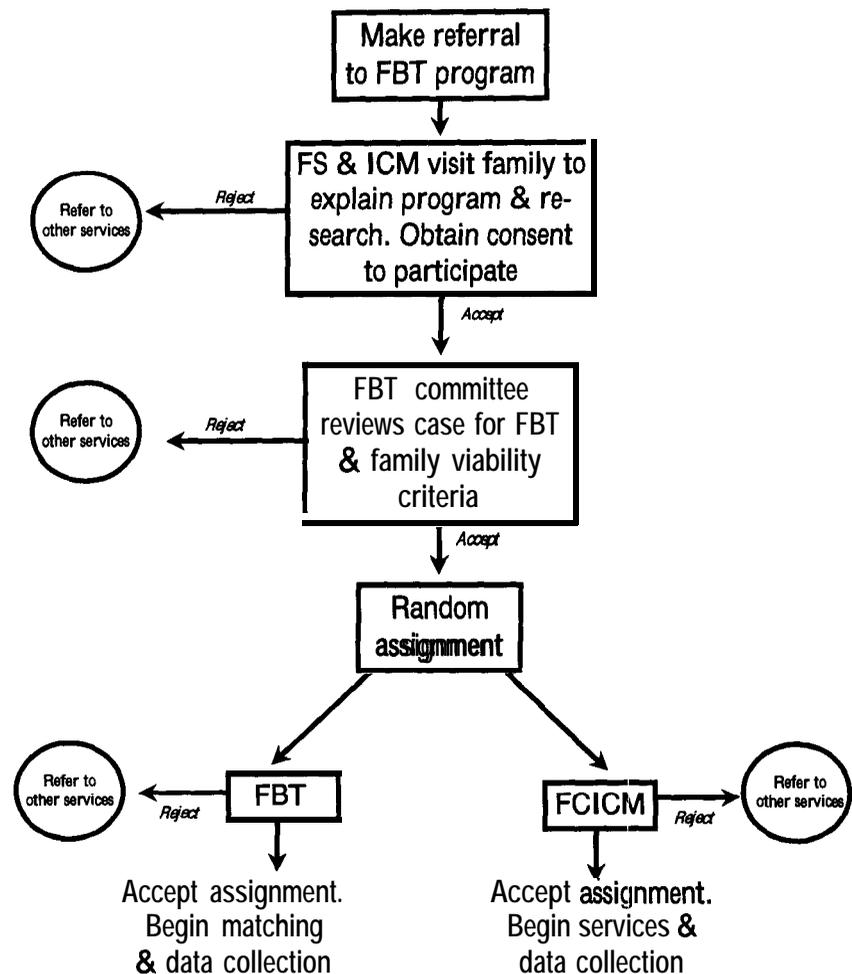


FIGURE 2. Flow chart for the referral process used to assign children to treatment conditions.

TABLE 2
Comparison of FBT and FCICM Program Components

Attribute	FBT	FCICM
Target population	Children with SED currently out of home or at risk for restrictive placement	Children with SED currently out of home or at risk for restrictive placement
Program focus	Child	Child and family
Program goals	To provide a family-like treatment foster home and to prepare the child for return to the family	To support families in caring for their children at home
Intake	Interagency committee	Interagency committee
Staff	Family specialist	Case manager-parent advocate team
Staff availability	24 hours a day/7 days a week to professional families	24 hours a day/7 days a week to families
Cluster	5 professional families and 1 respite family	8 families and 2 respite families
Planned & emergency respite	For professional families	For families
Behavior management skills training	For professional families	For families
Needs assessment	For identified child	For families
Linkage to needed services	For identified child	For families
Monetary resources	Support identified child	Support child and family
Home visit frequency	Regularly to professional families; occasionally to families	Regularly to families
Advocacy focus	Child	Child, family, and service system
Parent support	To professional and respite families in a group setting	To families on a group and parent-to-parent level

Note. FBT = Family-Based Treatment program; FCICM = Family-Centered Intensive Case Management program.

acting as an advocate for the child and his or her parents. The family specialist provides support and training to the treatment and respite parents and works with families to prepare them for reunification. Each family specialist receives 8 days of orientation and training focused on the FBT philosophy, recruitment and training of treatment families, and strategies for working with families. An integral part of this is training in the Parent Skills Training curriculum (Snodgrass, 1986).

Treatment and respite families are responsible for meeting the physical and emotional needs of the children as well as providing structure, implementing behavior management plans, and working with the children toward the attainment of clinical goals. The treatment families are involved in all aspects of treatment planning and implementation, and monitoring of children's progress. Respite families provide planned and emergency out-of-home

respite care. They have ongoing involvement and familiarity with the children in their clusters and promote continuity of treatment goals through the behavior management plans.

Through 1993, four family specialists provided services across the three sites. All were white and non-Hispanic; three were women; and, on average, they were hired at the age of 34.5 years (range 31 years to 39 years). Three specialists had bachelor's degrees, most in nonclinical psychology; the fourth had a postbaccalaureate degree. All family specialists had prior experience in children's mental health, with an average of 5.5 years of experience in outpatient children's mental health services, including case management. Only one staff change occurred among the family specialists across the three sites.

Family Role. Family specialists maintained contact with the child's family of origin and included them in some

training sessions. Although the family was involved in many decisions affecting the child, they were not the primary caretaker. Throughout a child's stay in FBT, family specialists worked with the family to develop the skills and resources needed to facilitate their child's return home. As discharge approached, the child spent more time with his or her family and typically made visits of increasing duration. Family specialists supported the family and child during this period of reunification.

Treatment and Respite Parent Training and Support Groups. Treatment and respite families in FBT received Parent Skills Training. This curriculum is designed for use with surrogate parents in treatment foster care programs and includes modules on setting expectations and goals, identifying and providing reinforcers and consequences, recognizing and acknowledging positive behaviors, and facilitating

a child's adjustment. The training was delivered over the course of 6 weeks in groups composed of treatment and respite parents. Respite parents also might have received additional training tailored to respite providers. Training and ongoing support were provided through monthly group meetings of treatment and respite parents. Some sites also held recreational events for children in conjunction with group meetings to alleviate childcare problems. Sites also held several intergenerational social events (e.g., holiday parties) each year.

Funding. FBT treatment parents received monthly retainers and per diem payments to compensate them for their work and to cover the expenses of additional family members. Funding at \$1,000 per child per year was also provided on a child-specific basis. These funds were available to meet important needs, including clinical supports, social-recreation supports, or economic costs. Management of these funds varied by site. In some cases, treatment parents bought items for the children and were reimbursed, in others, monthly or quarterly disbursements were paid, with reconciliations made afterwards.

In the first 6 months of enrollment in FBT, the greatest proportion of child-specific funds were for economic costs (52%), clinical supports (13%), and social-recreational supports (12%). Crisis supports (9%), other expenses (predominantly holiday and birthday) (8%), medical/dental (5%), and school supports (1%) accounted for the remaining expenditures.

FCICM Program Model

The FCICM model acknowledges that families need a comprehensive array of services and supports to help them keep their children at home. FCICM's development was based on intensive case management principles, individualized care philosophy, and FBT cluster features (see Table 2) and the program was enriched through the additional resources of advocacy by, and parent-to-parent support from, a parent advocate who had raised a child with SED.

FCICM is distinguished from both FBT and the intensive case management program by its emphasis on the family's central role in accomplishing treatment goals for the child. It builds on the core features of assessment, linkage, and advocacy that are part of New York State's intensive case management program. FCICM involves more teaching, skills building, family support, and direct therapeutic intervention, which are made possible by lower caseloads and the involvement of the parent advocate. The behavior management skills training offered in FCICM also allies more closely with a therapeutic or personal strengths model (Solomon, 1992), rather than the extended broker model that characterizes New York's intensive case management program.

Families enrolled in FCICM had access to planned and emergency respite care, flexible service dollars for items such as home repair and recreational opportunities, and parent-to-parent support from the parent advocate and family support groups. The case manager-parent advocate team, with a maximum case load of eight families, identified each family's strengths and service needs, developed a comprehensive treatment plan with full participation of the child and his or her family, acted as an advocate for the family, linked the family to services, and taught behavior management and self-help skills.

Staffing. Case managers, parent advocates, and their supervisors each received 3 days of orientation and training. This training included a research overview, detailed training in the use of data collection instruments, and discussions about parent-provider collaboration and family-centered service delivery. Case managers also received the usual 10-day intensive case management training as it became available in their counties.

Through December 1993, four parent advocates and five case managers provided services at the three study sites. All of the case manager-parent advocate teams were composed of white, non-Hispanic women, reflecting the racial composition of the counties they served.

Case managers began their employment with the project at the mean age of 30 years (range: 26 years to 34 years); parent advocates were slightly older, with a mean age of 39 years (range: 32 years to 48 years). Case managers usually held master's degrees, although one had a bachelor's degree. The case manager's most common field of study was psychology or a related discipline, such as community mental health. The educational experience of parent advocates ranged from less than high school to a bachelor's degree. All case managers and parent advocates were experienced in the field of mental health services from both provider and recipient perspectives. All case managers had prior experience in children's mental health, with an average of 9 months in inpatient mental health services and 4 years in outpatient services. Parent advocates had at least one child with SED, ranging in age from 6 years to 15 years. Parent advocates were selected by program directors for their experience, skills in relating to families, and knowledge of and interest in learning about the service system and advocacy. They were employed for approximately 10 hours to 15 hours per week. Some parent advocates received additional training through their agencies. All received support from a statewide parent advocate who was a consultant to this project.

Although the precise role played by each, parent advocate evolved differently, there were some common features. Parent advocates provided parent-to-parent support and case-specific and systems advocacy. They represented a "family perspective" in their encounters with professionals. Parent advocates also worked to create better communication between families and professional service providers. Much of their work involved providing informal support to parents through home visits and by telephone. Whereas case managers focused most of their attention on the children, parent advocates tended to have much less contact with them. They modeled self-advocacy skills for parents and prepared parents for meetings (e.g., Individualized Education Program meetings), attended the meet-

ings with them, and, over time, helped the parents feel comfortable in advocating for their children.

FCICM staff turnover was limited to one parent advocate during the first year of the project. During the second year, a case manager left her position; in the third project year, two additional parent advocates and another case manager left. These staff changes apparently were unrelated to the project or any particular agency problems.

Family Role and Parent Training.

The goal of FCICM is to provide supports and services to keep the child at home. Because the family is viewed as the child's primary resource, FCICM makes the family an integral member in planning, service delivery, advocacy, and decision making. FCICM uses a modified version of the Parent Skills Training curriculum to disseminate behavior management skills to families. Although the content taught remains the same, the delivery is tailored to the immediate needs and circumstances of the family. Unlike FBT, training is given on an individual basis, with the sequence and pace of skill building determined by the family.

Parent support groups evolved differently at each site, though typically, support group meetings had a social aspect. Parents also shared their experiences, brainstormed ideas, and listened to occasional outside speakers. In one county, parents were referred to existing support groups and project staff focused their efforts on organizing "family fun" events and activities for siblings. The second county had success holding monthly meetings, and parents found each other to be a tremendous source of support. In the third county, efforts to organize a support group were unsuccessful. Although individual parent-to-parent support was strong, staff cited as obstacles distance, transportation problems, and socioeconomic differences among group members.

Respite Care. As with FBT, trained respite families were available for planned and emergency respite. FCICM respite families received training in the Rest-A-Bit curriculum (Donner, 1988).

Unlike FBT, FCICM families used in-home as well as out-of-home respite care. FCICM parents expressed a preference for in-home respite, and the program model was amended accordingly. In-home respite providers were recruited for their experience working with children and adolescents with special needs. When necessary, respite care was also provided for siblings of enrolled children.

Funding. An important component of FCICM was flexible service dollars at \$2,000 per family per year to support the achievement of treatment goals and to expand the array of available services. A portion of this money was earmarked for general service system expansion (e.g., after-school programs) and the development of psychiatric emergency services, with the remainder (approximately 25%) available to meet child- and family-specific needs. Families played a major part in deciding how these expenditures were made. Unlike the funds expended in the FBT program, these monies could be used for all family members, in so far as expenditures related to clinical goals, quality of life, and so forth. With oversight from their supervisors, case managers gained access to these funds through automatic teller machine accounts, vouchers, and contracts for services.

Expenditures during the first 6 months of enrollment in FCICM clearly reflected children's and families' multiple needs. Similar to FBT expenditures during the same period, economic expenses (35%) and clinical supports (13%) were in the top three FCICM flexible service dollar expenditure categories. Unlike FBT expenditures, however, in-home respite (23%), social-recreational supports (11%), and transportation costs (9%) accounted for a large share of disbursements. This pattern reflects the case manager-parent advocate team's charge to do "whatever it takes" to link the children and family to the services and supports they identified as necessary. The pattern of use also was markedly similar to individualized services provision in other

rural areas (Dollard, Evans, Lubrecht, & Schaeffer, 1991).

Project Management

To provide a broad perspective on both the program and the research, the state formed a management team that included the director of the New York State Office of Mental Health Bureau of Children and Families, the assistant director of the Bureau of Evaluation and Services Research, a program implementation specialist, two researchers, and a state-level parent advocate. The state team convened an annual meeting of experts in treatment foster care, health care finance, and research design and methodology. At the local level, provider agency directors and/or county mental health directors were actively involved in program implementation and administration.

State team members met quarterly with FBT and FCICM staff members and program coordinators from all sites. These meetings have enabled a timely response to any issues that affect service delivery or research. Special focus group meetings were arranged to discuss topics such as the role of parent advocates, data collection concerns, behavior management skills training, and enrollment. Training for new staff was provided as needed.

DISCUSSION

For both interventions, preliminary data indicate that staff were working with the target group of children and families. Many of these families had been multistressed and had exhausted most of their personal resources and most, if not all, of the treatment options available in their communities. Once programs were implemented, it took time for family specialists and case manager-parent advocate teams to establish linkages and to design creative, individualized services for children and families, especially in resource-poor communities.

Local Conditions

Sites began to enroll families in services in the spring of 1991. From this

point onward, the project's implementation was influenced by the strengths, experiences, biases, and creativity of service providers, parent advocates, children and their families, agency cultures, and local politics. Because of the different organizations providing services and the different kinds of resources available in the counties, this project established itself differently in each county. The project sites are geographically disparate and each has its own political context and established patterns of delivering services. Such differences introduced a dynamic tension of tailoring the study and its interventions to make them sensitive to local conditions while still ensuring sufficient similarities among staff, programs, and enrollees to allow for pooling of data. It was particularly challenging to have program sites located anywhere from 60 miles to 230 miles from the central research office, thus limiting daily face-to-face interactions among key participating agencies. Site visits, periodic multisite meetings and trainings, and frequent telephone contact were helpful in maintaining linkages.

Project's Rural Nature

The research team was particularly interested in developing interventions that could be used successfully in rural areas because of these areas' unique problems of considerable distances between families and programs, and the common reliance on hospitalization and clinic treatment because of the paucity of resources to support other service options. Even when additional resources became available the difficulties in gaining access constituted barriers to their use. The lack of sufficient meetings to help parents develop good relationships with respite providers, distance, low population density, and service scarcity also played roles in the formation of support groups, the number of unmet service needs, and the nature of flexible service dollar expenditures.

Random Assignment and Enrollment

Several aspects of the random assignment process contributed to a slow rate

of enrollment in the project. The stark choice of in-home versus out-of-home placement made the random assignment process difficult: A minority of families were open to either option, but most expressed a strong preference for either FCICM or FBT. Families who declined to participate were referred to other services in the community. Although in some cases, families expressed strong preferences for a particular assignment, it is believed that the families who did agree to participate were those who had exhausted other options and may, therefore, represent a strong test of both models of community-based services.

Some potential referral sources had difficulty with the lack of control in choosing services for their clients. Many providers had concerns that the research team was interfering with their clinical judgment, and some who did refer children were certain that only one of the interventions would result in positive outcomes for a particular child and family. Several clinicians later stated that they were very surprised that a child they had expected to remain in the community only with FBT was actually doing well in FCICM. Referral sources were also deterred by the task of completing extensive paperwork requirements for the applications.

Based on the outcome of the random assignment process, it is believed that researchers need to maintain control of the process because it is tempting for clinicians to circumvent it and select an option for the child. Moreover, it is also necessary occasionally for the research team to talk directly with clinicians who represent the pool of referrals for the interventions to ensure that they understand the nature of the interventions, the safeguards that are built into the study for the child, and the necessity for experimental studies on program effectiveness. Other factors that contributed to a slow enrollment were difficult intra-county service provider relationships that blocked likely referral channels and fewer-than-anticipated referrals from inpatient settings.

Medicaid/Fiscal Management

Staggered enrollment, resulting in low sample numbers, had implications for

program funding at each of the sites because it affected Medicaid revenues and produced budget shortfalls. In counties where nonresearch FBT clusters and intensive case management slots were not available, referring providers were frustrated that they could not use unfilled research slots with families not participating in the research. These same administrators, however, voiced unequivocal support for the FCICM program model.

Parent Training and Support Groups

Changes were made in the way Parent Skills Training was presented to families in FCICM. Initial planning called for training parents during support group meetings and reviewing skills during home visits. Staggered enrollment, differences in families' concerns and needs, and the slow start-up of support groups made it preferable to deliver this training to families on an individual basis rather than in group settings. Case managers adapted their use of the materials to individual families, beginning with the skills the parents indicated they most needed, rather than following the curriculum sequentially. In some cases, skills were "taught" without using the written materials because some parents had limited reading ability. In interviews, families often made reference to their use of behavior management skills contained in the curriculum.

The challenge of starting and nurturing successful support groups in rural areas cannot be underestimated. For example, parent support groups did not serve as a vehicle for formal training and support as originally planned. Due to their staggered entry into service, geographic distance, and different interests, families did not really form clusters of support. Support group organizers at the three sites had to find ways to bring together diverse groups of parents and help them feel comfortable in meeting as groups. The support groups that were the most successful resolved transportation problems, provided childcare and food, met at times that were convenient for families, and had family-driven agendas.

Flexible Funding

Flexible funding is an important tool in the provision of individualized services, and staff at the program sites were creative in the use of flexible service dollars, particularly in the area of recreational services. Other studies have shown that, when asked, parents frequently cite the need for recreational activities in which children with special needs can participate (Palma, 1994; Trupin, Forsyth-Stephens, & Low, 1991). The rural nature of the counties contributed to the challenges of meeting these recreational needs, but preliminary data show that the proportion of children in both interventions with unmet recreational needs decreased over time as flexible service money or subsistence allowance monies were spent on these kinds of activities.

Parent Advocate's Role and the Parent-Provider Relationship

Although the process of defining priorities and roles for parent advocates is ongoing, parent advocates have emerged as important stakeholders at each site. Parent advocates formed highly effective partnerships with case managers and achieved high levels of coordination and trust. Case managers, parents, and local program coordinators all expressed a strong belief that the parent advocate role provided important support to families in the project and had a broad influence. Having regular contact with a colleague who is the parent of a child with a SED increased awareness in the professional community about the multiple strengths and needs of families. This awareness was further heightened when a parent advocate needed flexibility and support during periods of her own child's hospitalization or crisis. Parents pointed out that parent advocates understood what they have experienced and did not blame them. They described a very different type of support that can only come from someone who has struggled to obtain services and shared the **uncertainties of** raising a child with SED. Parent advocates shared a repertoire of strategies (e.g., coping with erratic behaviors, navigating the "system") with parents.

A great deal was learned about the roles that parents can play in service provision and research. The unique personal styles of the four parent advocates who are working or have worked with families in FCICM have expanded our understanding of the multiple contributions that such parents can make in individualizing care. At the family level, they offered specific advice on topics ranging from accessing educational services to developing household budgets. At a program and policy level, they contributed to the design and implementation of the research demonstrations (e.g., a parent advocate was a member of our project management team).

Parent advocates must maintain a distinct perspective: On one hand, they must act as allies of parents who are often at odds with the established system. At the same time, they must understand and work with the complex service system without becoming co-opted by it. This has a number of practical implications, including who should employ and supervise parent advocates and what activities should not be a part of the parent advocate's job description (e.g., serving as assistant case managers, spending more time with the children rather than the parents, etc.). Moreover, to be effective, parent advocates need a certain amount of flexibility in modifying their role to meet the needs of communities, different cultural groups, and individual parents. Parent advocates also need a support system of other parents and committed liaisons in key places within the formal service system.

S U M M A R Y

Finally, despite the multiple stressors to which the families in both interventions were exposed, this study has demonstrated strengths that they bring in caring for their children. Although this project is not yet finished, some support has been shown for the assertion that, given intensive and individualized supports, children with SED can be cared for effectively in their own homes. Currently, the average length

of stay in FCICM is 13.2 months, and preliminary data on functioning, symptoms, and behaviors show that children maintained in their own homes do not appear to be disadvantaged when compared to their peers who have been placed out of their homes. The next step will be collecting and analyzing longitudinal data on child and family functioning to assess the interventions' outcomes.

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Authors' Note

The authors are indebted to Elizabeth Pease of the New York State Office of Mental Health's Bureau of Evaluation and Services Research for her critical reading and revision of this article. The authors are also indebted to the staff of Franklin County Community Services and North Star Industries, Inc., in Franklin County; the Northern New York Center in Clinton County; the Mental Health Association in Ulster County, Inc.; Pathways, Inc., and Steuben County Mental Health in Steuben County; and the families of all these counties for their help in conducting this research demonstration project.

Notes

1. "Family," "family of origin," and "parents" include adoptive families, biological families, stepfamilies, and families composed of the child and other relatives. Family is used to describe the people with whom the child regularly makes his or her home to distinguish them from the treatment families in the FBT.
2. Investigated and reported elsewhere are the psychometric properties of the CAFAS (Hodges, Bickman, & Kurtz, 1991), the CBCL (Freeman, 1985; McConaughy & Achenbach, 1985), the TRF (Achenbach, 1991b), the Piers-Harris Children's Self-Concept Scale (Piers, 1984), and FACES III (Olson et al., 1985).

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NOTICES

The Orton Dyslexia Society's Annual Outstanding Dissertation Award

Application guidelines for the Outstanding Dissertation Award are available by contacting The Orton Dyslexia Society. Deadline for submission to the committee is March 1, 1995. The award will be presented at the society's 46th annual conference in Houston, Texas, November 1-4, 1995. The recipient receives a \$1,000 cash award, plus \$500 for travel expenses. Some recent winners include Brenda H. Stone, PhD, University of Rhode Island; Lois G. Dreyer, PhD, Southern Connecticut State University; and Margaret Semrud-Clikeman, PhD, University of Washington. For a copy of the guidelines, write or phone: The Orton Dyslexia Society, The ODS Dissertation Award, Chester Building/Suite 382, 8600 LaSalle Road, Baltimore, MD 21286-2044; 410/296-0232.

Expanding Autism Journal Seeks Manuscripts

The bimonthly journal *Focus on Autistic Behavior* will soon be superseded by a new, peer-reviewed quarterly journal, to be titled *Focus on Autism and Other Developmental Disabilities*. The journal will continue to include articles related to persons with autism but is being expanded to address issues concerning persons with other developmental disabilities, such as mental retardation. Editorial responsibilities for the new journal will be shared by Dr. Richard Simpson, the current editor of *Focus on Autistic Behavior* and a professor of special education at the University of Kansas, and Dr. Dianne Berkell, a

professor of special education at Long Island University, C. W. Post Campus.

The journal's editorial staff seeks manuscripts from diverse philosophical and theoretical positions. Five types of full-length manuscripts (15 to 30 pages) will be considered for publication: (a) original research reports; (b) reviews and interpretations of professional literature; (c) theoretical papers, conceptual statements, and position papers; (d) intervention procedures; and (e) program descriptions. The journal will also publish short manuscripts (2 to 10 pages) in two areas: (1) teaching tips and (2) book reviews.

Persons submitting papers for publication in *Focus on Autism and Other Developmental Disabilities* should prepare their manuscripts in accordance with the Publication Manual of the American Psychological Association (4th ed., 1994). An original of the complete manuscript and three high-quality copies (double-space all manuscript pages, including tables, figures, references, and headings) should be submitted; each manuscript should include a cover sheet listing the names, affiliations, addresses, and phone numbers of all authors. All manuscripts will be screened by one of the coeditors for appropriateness of content and form and reviewed by three peers (selected by the coeditors on the basis of their expertise in particular areas). Authors typically will be notified of the disposition of their paper within 8 to 10 weeks of the time it is sent for peer review. Additional details may be obtained by contacting either Dr. Richard L. Simpson, Department of Special Education, University of Kansas Medical Center, 3901 Rainbow, Kansas City, KS 66160-7335; or Dr. Dianne Berkell, Long Island University, C. W. Post Campus, Department of Special Education and Reading, Brookville, NY 11548.

Connecting Low-Income Families to Mental Health Services: The Role of the Family Associate

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PROBLEMS RELATED TO IDENTIFYING children with mental health needs and effectively connecting them with appropriate services are perplexing to professionals in the health, mental health, and other child-serving systems. Practitioners are often discouraged when families do not follow through on a referral to a mental health clinic or when parents bring their children for one visit and never return. These phenomena have received very little research attention, and in the absence of solid information to guide theory and practice, efforts to understand these difficulties often resort to stereotypical explanations, including poor motivation and lack of interest on the part of the family, particularly if family members are characterized by poverty, lack of education, or other stigmatizing factors. There is a clear need for effective methods of promoting better access and follow through, both in starting services and in continuing services to the extent that they are needed. There also exists a parallel need for a better understanding of the dynamics involved when families do not access or fully use mental health services.

The use of a paraprofessional helper called the family associate to address the problems of access to mental health services faced by low-income families and to promote service initiation and continuance is described in this article. The particular context is Oregon's Early and Periodic Screening, Diagnosis and Treatment (EPSDT) program, which focuses on Medicaid-eligible, low-income children and their families. The family associate role has been developed

The family associate is a parent without professional mental health training who acts as a system guide to low-income families whose children have been referred to mental health services through the Early and Periodic Screening, Diagnosis and Treatment program. The family associate provides emotional support, information about mental health services and community resources, and directs assistance, such as help with transportation and child care. Based on the belief that parent-to-parent support can be a powerful tool in overcoming the barriers to accessing services, the family associate role has been successfully implemented in three counties in Oregon. The family associate role and its implementation, characteristics of the families who participated, and the implications for introducing this role into traditional mental health service systems are described.

and successfully implemented as part of a research and demonstration project designed to test the feasibility and effectiveness of providing short-term assistance and support to families whose children have been referred for further evaluation and/or mental health services.

MEDICAID POLICY AND EPSDT

EPSDT is a system of comprehensive and preventive health care developed to detect and correct chronic disabling conditions among children who are poor. Unlike other Medicaid programs that finance episodes of medical care without becoming involved in identifying that need, EPSDT encourages outreach, early identification, case management, and other support services to eligible families in an effort to avoid more serious health problems for children as they grow older (Jones & Nickerson, 1986). This emphasis on early identification and prevention is especially important because mental health problems are rarely identified and treated when children are young and less seriously disturbed and because the

level of need for services is very high among children who live in poverty (Ontario Child Health Study, 1990; Petti & Leviton, 1986).

Since 1967, when EPSDT was authorized as a health screening program, a series of revisions have expanded the eligibility criteria, the focus on screening, and the services available. The net effect of these changes has been to mandate health treatment services, including mental health services, to an expanded population of poor children. Because EPSDT has been recognized only recently as a major source of funding for mental health services, there has been no systematic study of the use of EPSDT programs for the identification and treatment of mental health problems in poor children. In the field of developmental disabilities, Meisels and Margolis (1988) concluded that EPSDT was not effective in achieving early identification or increased access to treatment for this special needs population. Although the experience of children with developmental disabilities in the EPSDT system cannot be generalized to children with mental health needs, there is no reason to believe that the latter would fare better under

EPSDT without specific steps to improve the accessibility and availability of services. Certainly the barriers identified by Margolis and Meisels (1987), such as inadequate screening, untrained health care professionals, and lack of access to treatment resources, are likely to be major problems for children with emotional or behavioral problems (EBD).

Service Initiation and Continuance

Studies of service discontinuance have identified a wide variety of possible reasons for why this may occur. It has been suggested that demographic characteristics such as low income and education may be associated with service dropout (Baekeland & Lundwall, 1975; Garfield, 1986; Wierzbicki & Pekarik, 1993). However, other researchers have indicated that the demographic characteristics of clients, especially income, are not consistently related to continuance (Day & Reznikoff, 1980; Sirles, 1990; Sledge, Moras, Hartley, & Levine, 1990) or are not as important as service system issues (Goldin, 1990; Good, 1990; Sirles, 1990; Wise & Rinn, 1983). Also, in a recent meta-analysis, Wierzbicki and Pekarik (1993) reported that clients' expectations of treatment may overshadow the importance of demographic variables in predicting continuance.

Other attempts to account for dropping out of services appear to cluster into three major areas: (a) problem characteristics such as psychiatric symptomatology (Swett & Noones, 1989), duration of the problem (Gaines & Stedman, 1981), and type and severity of the problem (Lochman & Brown, 1980; Sirles, 1990; Viale, Rosenthal, Curtiss, & Marohn, 1984); (b) social and environmental factors such as distance from services or difficulty arranging childcare (Margolis & Meisels, 1987; Temkin-Greener, 1986); and (c) barriers related to the service delivery system such as hours of operation, configuration of services (Good, 1990; Margolis & Meisels, 1987; Sledge et al., 1990), or delays in scheduling appointments (Leigh, Ogborne, & Cleland, 1984;

Sirles, 1990). These findings, combined with ambiguity concerning the role of socioeconomic variables, suggest that efforts to promote continuance in services need to address functional issues related to accessibility and availability of services.

THE ROLE OF THE FAMILY ASSOCIATE

The family associate intervention was developed to address the barriers to accessing mental health services that low-income families might encounter, thus increasing the number of families who ultimately access and use such services for their children. This intervention was designed to influence several "policy-relevant" variables (i.e., circumstances or conditions that may be modified through intervention), including caregiver needs and characteristics, resource problems, and service system factors.

Caregiver needs and characteristics include attitudes and beliefs of caregivers that may inhibit entry and/or continuance in services for their children or themselves, as well as problems such as mental or physical illness. Examples include fears or concerns about involvement with mental health treatment, negative attitudes about mental health services or social services in general, and religious convictions that discourage the use of mental health services. In addition, difficulties that caregivers have in coping with multiple stresses (e.g., poverty, child's behavior, inadequate housing) may interfere with seeking or using needed services. Family resource problems include lack of transportation, childcare, or telephone service, or problems such as the inability to take time off from work to keep appointments. Service system factors may include inconvenient hours of operation, waiting lists, or lack of clear information about the purpose of the EPSDT mental health referral or the process for gaining access to services. The complex children's mental health system can be especially overwhelming to parents who are already challenged by a child's emotional or behavioral difficulties.

The key components of the family associate program are support and tangible service provided through parent-to-parent contact. The family associate models the skills necessary to maneuver within the mental health system and other community programs, thus serving as a system guide and advocate for the family and as a supportive peer for the parent. This modeling and collaborative work is designed to increase the caregivers' sense of empowerment (i.e., a feeling of mastery over one's environment) and their ability to independently navigate the service systems. The primary responsibilities of the family associate fall into the following three general categories:

1. Providing information: The family associate provides the parent with information about topics such as the EPSDT referral process, the mental health evaluation process, emotional and behavioral disorders in children, available services, parents' and children's rights and responsibilities, and community resources. For example, family associates provided many parents with fact sheets about childhood disorders.

2. Providing support: The family associate offers the parent social and emotional support aimed at decreasing the extent to which family members feel isolated, helpless, and/or intimidated by the service delivery system. One family associate worked with many grandparents who were raising their grandchildren. Because she was also a grandparent, she was able to empathetically listen to them and help normalize their caregiving situations. The family associate also emphasizes making linkages to other parents with similar experiences and to local parent support groups.

3. Linking to resources: The family associate helps the parent find specific resources to address needs such as transportation and childcare that may be obstacles to accessing mental health services. He or she provides information about and helps families connect with community resources or services for which the family qualifies, and models the skills needed to locate and secure

the resources. For example, one family associate discovered that parks and recreation passes were available for low-income families in her county.

A component of the family associate role is access to a flexible cash fund to help families pay for supportive services. The money may be used to help families get their children to mental health services or ease their daily living burden so that emphasis can be placed on consistent participation in these services. Expenses that can be covered by the flexible cash support fund include:

1. Childcare for the family's other children;
2. Transportation costs, including public transportation, gasoline, car repairs, and automobile insurance;
3. Clothing and personal effects for family members;
4. Recreational activities to help reduce tension and provide interaction with the community;
5. Respite care to temporarily relieve parents from the stress of caregiving.

The family associate role was implemented in a research and demonstration project designed to test the effectiveness of this approach in promoting continued participation in services. The project provided a unique opportunity to develop and test an intervention designed to address problems previously linked to client characteristics (e.g., low income, lack of "system" skills) as well as environmental issues (e.g., lack of transportation, distance to services, lack of childcare). The project was structured as a quasi-experiment in which three Oregon counties implementing the family associate role were compared to four Oregon counties with no equivalent intervention. All counties had EPSDT programs and were selected in an effort to constitute two groups that were generally similar in population density and other characteristics. In this article the initial experiences and knowledge gained in the implementation phase of this project are presented.

DESCRIPTION OF FAMILIES AND CHILDREN

Target Population

Families whose children were eligible for EPSDT and who had been referred for mental health services were included in this project. In Oregon, children eligible for EPSDT are (a) in families who receive general assistance, (b) in foster care, or (c) disabled. Families were included in the project if their child was between 4 years and 18 years old; currently living with a parent, guardian, or foster parent (i.e., not in an institutional placement); had a parent or caregiver available for interviews (i.e., was not an emancipated minor); and had not participated in more than three mental health appointments resulting from the EPSDT referral. This last criterion assured that families who were working with the family associate had not yet fully established themselves in services.

Under EPSDT, children can be referred to mental health services by a private physician, a public health nurse or clinic, or a school nurse. In most cases, referrals were received at the county mental health program where the family associate was located. Upon receipt of a referral, the family associate mailed a letter and project description to the family, followed by a telephone call to verify the family's eligibility and to offer participation in the project. If the family agreed to participate, an initial interview in the family's home was scheduled as soon as possible.

Data Collection

Data were collected directly from the parent or other caregiver at both an initial interview and at a follow-up interview 3 to 4 months later. The family was paid \$25 for each interview. The initial interview was conducted by the family associate and included child and family demographics, information about previous mental health experience, the parent's perception of barriers that might make it difficult to get the child to mental health services, and completion

of the behavior problems section of the Child Behavior Checklist (CBCL; Achenbach, 1991) by the caregiver.

Two additional data collection techniques were employed to measure family associate activities and services. The Ratings of Important Issues for Families (RIIFF) was developed for this project and was completed by the family associates when work with each family ended. A 16-item self-report questionnaire, the RIIFF was used to measure the family associates' perceptions of the barriers experienced by the caregivers. Each item is presented as an issue that may be important to families when they are initiating mental health services for their child and is rated on a 4-point Likert scale (1 = not important to 4 = very important). Family associates also identified issues they actually addressed in their work with each family and provided an overall estimate of the degree to which each family needed the services, based on a 4-point Likert scale (1 = not at all to 4 = very much).

The Family Associate Activity Log was developed as a project-specific document maintained by the family associates during the time they worked with each family. For each contact with, or on behalf of, a family, family associates recorded (a) the date; (b) the person contacted; (c) the type, duration, and location of the contact; (d) the type of activity(ies); and (e) comments about the contact. Any single activity or combination of six activities could be recorded: scheduling, data collection, providing intervention, finding resources, providing support, or receiving information. Family associates also reported the dollar amount and purpose of any expenditures.

Child and Family Demographics

The rate at which families chose to participate in the intervention varied across the three counties: 19 (100%), 27 (77%), and 51 (69%). Of the 31 families who declined, 9 stated they did not want family associate services because their children did not need mental health services, based on their own or a professional's assessment. Other reasons were that they did not want to be in-

involved with another person/agency or they did not have time to work with the family associate. As of January 1994, 97 caregivers had completed the initial assessment and had worked with a family associate. Most caregivers were birth mothers (85%), were between the ages of 20 years and 39 years (75%), and either had a high school diploma (38%) or some college (40%). The children referred for mental health services included slightly more boys (60%) than girls (40%), and were primarily in the age ranges of 8 years to 12 years (45%) or 4 years to 7 years (42%). Only a small proportion of the children (13%) were in the 13 years to 18 years category. Eight percent of the children and 7% of the caregivers identified with a specific ethnic or cultural group. The annual family income for 89% of families was under \$15,000, and 76% of the caregivers reported no employment outside of the home.

The sample families lived in a variety of locations, including rural areas, small towns, and larger cities. The population of towns nearest in location to the families ranged from around 100 to nearly 113,000, and 53% of the families lived in areas where the closest town had a population of less than 20,000. Almost half (49%) lived within 4 miles of the mental health office where their children received services; 75% lived within 9 miles.

An indication of the severity of the children's behavior problems is provided by the total behavior problem T scores from the CBCL. Sixty-seven percent of the scores fell into the clinical (61%) and borderline clinical (6%) ranges. Sixty-nine percent of the children exhibited clinical (58%) or borderline clinical (11%) levels of externalizing behavior problems, and 62% of the children demonstrated clinical (53%) or borderline clinical (9%) levels of internalizing behavior problems.

An understanding of parents' attitudes toward and concerns about mental health services for their children can be gained by examining the anticipated barriers that parents identified in the initial interview. Parents responded to a list of common barriers by indicating

if they expected any of the items to be problematic. The most frequently identified barriers were transportation (51%), time conflicts (47%), childcare problems (45%), dislike of the therapist or treatment program (38%), disagreement with the diagnosis or treatment approach (32%), a belief that services would not help (29%), confusion about the next step (25%), and treatment refusal by the child (23%). Interestingly, no significant relationship was found between distance to the mental health office and an expectation that transportation problems would be a barrier. The percentages for the remaining expected barriers—disruption to family routine, too far to travel, discomfort with mental health services, and no need for mental health services—were all 21% or below.

SERVICES PROVIDED

Implementation

The three family associates were recruited and hired by the county mental health programs in which they were to work. All were women; one was African American. Two had previous experience maneuvering within complex service systems for their own children. The third, a parent of young children, had previous experience at the line staff level within children's mental health services. None had prior training as a mental health service provider, although all three had worked in paraprofessional or support staff positions and were familiar with the internal workings of social services.

Before data collection began, two 2-day training sessions were conducted for the family associates and their supervisors. The first session was held immediately after the family associates were hired and the second after a 3-month pilot period. The primary goals of the initial training were to provide an overview of the philosophy of the project and the family associate role, an orientation to family support literature and services, an introduction to available community resources, and a discussion of ways to implement the role

and define boundaries. The training consisted of presentations, discussions, role plays, and problem-solving exercises. A number of key issues were addressed, including child abuse reporting, confidentiality, the brief nature of the intervention, the extensive needs of low-income families, and termination from the program.

During training, a focus of discussion was the Family Cash Support Fund. Emphasis was placed on working with the families to demonstrate how to get their needs met without creating a dependent relationship on the project; therefore, family associates were instructed to first take advantage of all other community options, including free services and affordable alternatives. Once these services and resources were depleted or deemed unavailable, the cash fund was to be used to enhance each family's ability to access and/or continue mental health services.

During the 3-month start-up period, the family associates were encouraged to experiment with different ways of working with families and adapting the intended services to the unique situation in each county. A special challenge of this initial phase was establishing the role of the family associate within each county's existing mental health systems.

At the second training session, the family associates shared common strategies and experiences from the pilot period and raised a number of important issues. These included establishing trust with families, dealing with the stress of listening to the caregivers describe their difficult circumstances, and addressing termination concerns. An ongoing theme was the need to clarify the distinction between the roles of the family associate and the traditional service provider.

From the beginning of the project, supervision was recognized as a crucial support for the family associates. Because each family associate was usually the first person to contact a family whose situation was unknown, it was critical that she have support and backup from a trained mental health professional in her county. Initially, supervision focused

on finding local resources, learning county-specific procedures, and developing relationships with referral services and mental health providers in the county. The latter two issues were significant because the county mental health systems had never included a paraprofessional working directly with families nor had they used flexible funding to meet families' needs. Eventually, supervision shifted to a focus on the extensive needs of families involved in multiple services and with more severe circumstances. Family associates received supervision from the person responsible for monitoring EPSDT procedures and services or another qualified mental health professional in the county.

The family associates were also given opportunities to further develop their roles through discussions with each other and the research team. The project manager planned regular conference calls for the family associates to discuss their activities, find solutions for challenging situation, and provide each other with support for implementing an isolated role. However, scheduling calls in which all three family associates could be involved proved to be impossible, so most telephone support involved only one family associate. The family associates were also brought together for two day-long follow-up meetings to allow them to share experiences and exchange ideas. The research team also discussed preliminary data with them and received their feedback on role implementation.

Family Associate Activities

Each family associate worked with 5 to 10 families, and they maintained contact with them until the child had participated in three mental health appointments. This was judged to be a reasonable indicator of successfully initiating mental health services. The duration of family associate services ranged from 3 weeks to 3 months and varied according to the availability of services. As services were terminated, new families were recruited from the most recent referrals.

The specific family associate services provided were documented through entries in the Family Associate Activity Log. Each entry listed the person with whom the contact was made, the method of contact (in person, telephone, or mail) and the types of activities. More than one activity could be recorded for each contact. Family associates made most of their contacts with a family member (87%), and contacts were most frequently made by telephone (52%) or in person (42%). Family associates provided information to the caregivers (61%), support (41%), and money (21%), and located resources (9%). All families were provided with information, 93% were given social and emotional support, 79% received money from the cash fund, and 37% were given assistance in locating resources. Family associates were not asked to give time estimates for each activity; however, they reported that the majority of their time was spent providing emotional support.

Another perspective is provided by the family associates' completion of the RIIFF. This instrument assessed both their perception of the barriers experi-

enced by parents and whether or not they provided services to address these barriers. Data for the first 71 families for whom complete data were available are presented in Table 1.

There is consistency between the barriers that family associates rated as important to families and the barriers that they reported working on with families. Emotional support, information about mental health services, and transportation were the top three in each set of ratings. The finding that family associates did not always provide services in the areas they rated as important to the families is not surprising, given the degree of the families' needs and the limitations faced by family associates. The most notable discrepancies between services provided and barriers experienced occurred in areas such as childcare, respite care, and need for information, discrepancies that most likely reflect a restricted range of available resources, particularly in rural areas.

The Family Cash Support Fund was specifically developed to help families with expenses that impeded their access to services. The categories of expenses, the number of families who

TABLE 1
Barriers Experienced and Services Received by Caregivers^a

Barrier/need	Families with barrier ^b (%)	Families receiving services for barrier (%)
Emotional support	82	79
Information about mental health services	62	51
Transportation	54	54
Recreation	49	41
Information about emotional disorders in children	43	31
Childcare	27	16
Clothing	23	18
Respite care	20	9
Daily living tasks	16	6
Utilities	11	9
Obtaining benefits	10	3
Contact with other parents	9	7
Food	1	0

Note. *N* = 71.

^aBased on ratings (RIIFF) provided by the Family Associates. ^bBased on combining the ratings of *slightly important*, *moderately important*, and *very important*.

received support in each category, the number of expenditures made (one family might receive funds several times for the same category), and the average amount per expenditure per category are presented in Table 2. Fifty-six of the 71 families (79%) received financial help from the fund, averaging \$132 per family. Individual families received from \$10 to \$369. The majority of expenditures were related to private or public transportation, including car repairs, tires, gas, bus tickets, and taxi service.

Family associates realized that even though a family might have had the necessary means to get to appointments, if the parent(s) were exhausted from taking care of a child with special needs, their ability to get to the mental health office was reduced. One answer to this problem was to give the parents a break by offering the child recreational opportunities (e.g., martial arts, scouting, swimming) outside of the home. This recreation/entertainment was often substituted for the more traditional child/respite care services that were difficult to find in most counties. Few families received reimbursement for formal childcare or respite care (see Table 2).

Family associates also reported expenditures related to daily living needs. These included providing home heating during the winter months, installing a telephone to maintain contacts with the mental health agency, and providing money for laundromat expenses. Personal effects expenditures

included clothing, shoes, and haircuts for children.

Fifteen of the 71 families (21%) received no monetary support. Some families did not need the money because they had established adequate support networks (e.g., family/friends for free childcare) or because services were conveniently located (e.g., no transportation costs because the mental health appointments occurred at the child's school). Others were uncomfortable about taking money for what they believed they should be able to provide or were skeptical about the counties' willingness to pay for items such as clothes or car repairs. In addition, family associates initially were hesitant to use the cash fund because of concerns about "using it up" too soon, "bribing" families, or creating monetary dependence. As family associates became more comfortable with using the flexible fund, it became a testimony to their creativity in addressing various family needs.

DISCUSSION

The family associate role overlays a family support strategy on a mental health system organized and staffed by skilled mental health professionals. Involved in the implementation of this intervention were two major issues: the introduction of an innovative paraprofessional role into an existing service system and the pragmatic difficulties of supporting paraprofessionals in their efforts with low-income families.

System issues that appeared to be related to the implementation of the family associate role included initial misgivings with the ideas underlying this role voiced by some mental health staff, minor delays in implementing a system of referrals to the program, and the grant-funded nature and the generally low status of paraprofessionals. Each of the family associates struggled to make her role fit within the unique structure of county mental health services. The results of these efforts varied, depending on the support available within the mental health program and on other circumstances in each county. Even if there were individuals within each county who valued and promoted this paraprofessional strategy, it did not necessarily assure smooth implementation.

The pragmatic difficulties that emerge when a paraprofessional strategy is placed within a traditional mental health system are illustrated by the training and supervisory needs of the family associates. Paraprofessional training must always provide a balance between developing professional skills and capitalizing on the expertise and experience for which the paraprofessional was hired. This balance is underscored in mental health services where emotional disabilities are intertwined with issues of poverty, and paraprofessionals may encounter infrequent but dramatic crisis situations. In this project, family associates frequently saw families in their homes, away from the support offered by professional staff in the mental health offices. How to train family associates to handle all possible situations while at the same time maintaining their personal expertise as peer parents is an ongoing issue requiring further exploration.

Another concern is the type and frequency of supervision needed by family associates. Supervisors with clinical experience may lean toward discussion of "problem families" and encourage "expert" interventions rather than empowerment-oriented activities. The experiences of this project suggest that family associates need supervision that helps them understand mental health issues while preserving their unique perspectives.

TABLE 2
Summary of Expenditures from Family Support Cash Fund

Expense category	Number of families	Number of expenditures	Avg. dollars per expenditure
Transportation-private	27	38	70.53
Transportation-public	9	14	33.93
Respite/childcare	5	6	56.83
Daily living needs	13	15	58.47
Personal effects	9	13	52.39
Recreation/entertainment	29	37	67.08

Note. *N* = 71.

Implementation of the family associate role has allowed for a more indepth exploration of the barriers faced by poor families in accessing mental health services. The problem of transportation to and from services was a dominant theme throughout these findings: It was identified as a barrier by most families and the family associates, and assistance with transportation was the most frequent expenditure from the flexible cash fund. Problems with transportation and the distance from mental health services, however, appear to be two separate and distinct barriers. This distinction takes on added meaning when seen in the context of rural counties with minimal public transportation. Families in rural areas who live 20 or more miles from services and who are accustomed to driving that far may not identify either transportation or distance as a barrier when they have a reliable vehicle. On the other hand, families who live much closer to the mental health agency may identify both transportation and distance as a problem because they have neither a car, nor access to public transportation and must transport several children in addition to the one that has been referred. Isolation created by lack of transportation and its ramification for service utilization clearly needs more study.

The next phase in the study will be to assess the intervention's effectiveness by examining the extent to which families and children initiate and continue in mental health services. Additional analyses will examine family empowerment and family coping strategies, and the relationship of these variables to the children's demographic and clinical characteristics. Equally important are the perceptions and experiences of the families concerning the family associate services they received. The family associate role is a unique strategy for addressing family and environmental circumstances that may interfere with access to mental health services. This approach and related strategies that introduce new roles into the system hold considerable promise for improving services to children with emotional disorders and their families.

About the Authors

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Authors' Note

This study was supported with funding from the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration Grant No. MH49072-02.

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The Vanderbilt School-based Counseling Program: An Interagency, Primary-Care Model of Mental Health Services

THOMAS CATRON AND BAHR WEISS

CHILDREN FROM ECONOMICALLY and socially disadvantaged environments face a multitude of obstacles and are at risk for the development of a variety of emotional, behavioral, and cognitive disorders. These children frequently live in overcrowded homes where they are exposed to severe marital discord and receive minimal parental supervision; in addition, their broader social environment is frequently violent, with high levels of crime and substance abuse (Anderson, 1983; Dryfoos, 1990; Rutter & Quinton, 1977; Schorr, 1988; Wilson, 1987). Given the extent of adversity that these children face, it is not surprising that although approximately 12% of the general population under 18 in the United States is estimated to suffer from a mental disorder, estimates of mental disorders among disadvantaged children are 20% or higher (Gould, Wunsch-Hitzig & Dohrenwend, 1981; Institute of Medicine, 1989). If unaddressed, the challenges and problems these children experience early in their lives often become manifested later as delinquency, substance abuse, and other criminal activities, as well as teenage pregnancy, academic failure, and school dropout (Dryfoos, 1990; Tolmach, 1985).

Unfortunately, the mental health needs of these high-risk children often go unmet; in fact, the inaccessibility of services for the urban poor has become widely recognized (Shuchman, 1991). Knitzer (1982), writing for the Children's Defense Fund, reported that the mental health needs of two thirds of all children with severe emotional

In this report, the rationale, development, implementation, and evaluation of a school-based mental health services program for high-risk children with serious emotional and behavioral problems is described. The unmet needs of the target population and how a collaborative, primary care model of service delivery addresses the shortcomings of traditional mental health services is detailed. Finally, policy and future research directions are discussed.

disturbance continued to be unmet, while many others receive inappropriate or excessively restrictive services. One reason socioeconomically disadvantaged youth often do not receive needed psychological resources is because of a lack of appropriate and accessible mental health services. Even when services are available, disadvantaged families may lack the motivation, transportation, financial resources, or necessary knowledge to obtain mental health services, or parental psychopathology may interfere with the effective utilization of such services (Kendall & Morris, 1991). In addition, these families may be so preoccupied with meeting basic needs that they fail to recognize the significance of their children's problems. Even if they do, they may lack the trust or confidence to discuss their concerns with professionals (Dryfoos, 1990). As a result, children who are at risk are likely to grow up to become disturbed adults, perpetuating a cycle of poverty and emotional and behavioral disorders (EBD) (Tolmach, 1985).

Increasing the accessibility of mental health services for high-risk children thus is critical, and several innovative programs have emerged in response to this need. Some have involved residential (e.g., Isaacs & Goldman, 1985) or day treatment (e.g., Tolmach, 1985) programs. Others have

offered preventive services (e.g., Head Start) designed to ameliorate cultural disadvantages (e.g., Valentine, 1979), prevent homicide among African-American youth (Nashville Urban League, 1991), or compensate for a lack of male role models (Wissner, 1991). However, the public schools, without the assistance of the mental health system, often end up with the responsibility for meeting the mental health needs of disadvantaged children with EBD. Required by law (P.L. 94-142, Education for All Handicapped Children Act) to address the educational needs of children with serious emotional disturbance (SED), school systems have used the services of their school psychologists, social workers, nurses, guidance counselors, and teachers in an attempt to provide the most appropriate, least restrictive services within the school setting (Knitzer, Steinberg, & Fleish, 1990). Although interventions utilizing traditional school personnel have shown some promise (e.g., Bien & Bry, 1980; Kolvin et al., 1981), it is unrealistic to expect public schools to provide comprehensive clinical services for children with SED. Not only do public schools lack the funding for the appropriate level of services, school personnel are often too busy or lack the necessary education and training. As a result, many students go without ser-

vices or are placed in costly, restrictive classrooms or out-of-home programs (e.g., inpatient or residential settings; Dryfoos, 1990; Tolmach, 1985).

This inability on the part of the schools is unfortunate, because in some regards the school setting may be an ideal location for the provision of mental health services. Such services are highly accessible because children typically are required to attend school in all states and generally are provided transportation to and from school as necessary; thus, their attendance is not dependent on the parents' resources or motivation. Additionally, the school is a familiar institution and may be less intimidating to parents and children than a mental health center. Furthermore, providing mental health services within school may greatly benefit the school's ability to do its job of educating students because clinical staff can address children's emotional and behavioral problems directly and are also able to collaborate with school personnel on issues related to classroom conduct or other behavioral matters. Thus, access to services may be increased by the local mental health system providing these services within the school setting (Tapp & Niarhos, 1994).

SCHOOL-BASED COUNSELING PROGRAM

The Vanderbilt School-based Counseling Program (SBC) was established in 1990 to increase access to mental health services for children and families from socioeconomically disadvantaged backgrounds; in 1993, an evaluation of the SBC program began. This program is based on a collaborative, primary care model. Trained and licensed mental health clinicians (master's level social workers, psychiatric nurses, psychologists, or related disciplines) work in the school and provide services to each referred student. The range of possible interventions includes psychotherapy (individual, group, family, and marital), parent skill training and education, behavioral and psychiatric consultation to staff and faculty, community liaison, and case management. The intensity

and comprehensiveness of the services varies according to individual need (e.g., one to five individual psychotherapy sessions per week). Preventive services are provided for such areas as divorce adjustment and substance abuse. The purpose of the program is to provide accessible, intensive, and comprehensive mental health services to the target population in order to prevent costly out-of-home (e.g., hospitalization or residential care) or restrictive educational placements.

The successful implementation of an SBC program depends heavily on the cooperation of the host school. This project relied on existing relationships with school personnel (director of pupil personnel services) to identify and recruit appropriate schools and to facilitate implementation. Clinicians and project managers initially met with each school's staff (principals and faculty) to present the program and describe the services, policies, and necessary procedures. It was important to make clear the expectations and limitations of the program and the clinicians' role in the school. Establishing a trusting relationship with the school staff and demonstrating interest in fulfilling a common mission (e.g., to educate children in the least restrictive environment) was a priority.

Target Population

The target population for the SBC program was children who come from impoverished backgrounds, who live in urban, high-crime neighborhoods, and who need but do not receive mental health services. For the evaluation of the SBC program, the researchers, with the assistance of school officials, selected nine elementary schools (kindergarten through sixth grade) in the Metro Nashville Public School system, based on the criterion of 70% or more of the school population participating in a federal free-lunch program (a readily available indicator of the number of poor urban children attending a particular school).

Over the course of the first year of the evaluation, approximately 20% of the families left the project because they

moved to unserved schools. Only three families voluntarily withdrew: one because the project was involved in reporting suspected child abuse, the others because the mothers believed the services were not effective. At the end of the first treatment year, 13% of the children had been judged as functioning well enough to warrant termination. This rate was anticipated, and the project was structured to provide up to 2 years of services.

Screening Procedure

To select children to receive services, a grade-wide assessment for Grades 2 through 5 was conducted in the spring of 1993 at each of the participating schools. As well as identifying a pool of eligible participants, this assessment provided baseline measurements for all children who would be tested over the course of the study. Follow-up assessments targeted the same cohort of children (e.g., students in Grades 3 through 6 were tested in the fall of 1993). Special education students, including those identified as SED, were excluded from these assessments.

In these screenings, information was obtained for six problem domains (delinquency, aggression, anxiety, somatization, hyperactivity, and depression) from three sources (teachers, peers, and self-reports). All these sources were needed in order to identify the full spectrum of psychopathology children experience. Although teacher reports are among the best indicators of externalizing problems in children, self-reports may be more effective for assessing internalizing symptoms such as anxiety and depression (Kazdin, 1987). Peer ratings of emotional and behavioral problems provided an important complement to teacher reports and self-reports because peers are often more aware of other students' behavior than are teachers and because they can be more honest than students themselves about socially undesirable behaviors (e.g., aggression, crying). The use of multiple informants also helped to ensure that children were not identified for transitory problems.

Teachers were given the Teacher Behavior Questionnaire (TBQ; Weiss, Catron, & Harris, 1993a), a 28-item screening inventory designed to assess teachers' perceptions of children's behavioral and emotional problems. This inventory was developed for use with the SBC clinics by: (a) compiling the reasons the teachers at the SBC pilot sites had listed as the cause of their referral(s) to the pilot clinics; (b) categorizing these items in regard to the six problem domains (e.g., anxiety, delinquency); and (c) within each category, selecting the items with the highest frequency for inclusion in the TBQ. Teachers also were asked to generate a list of students they would refer for counseling services; this information was compared to the students identified for services by the grade-wide assessments to evaluate the consistency and validity of the different referral procedures.

Students completed three self-report questionnaires. The State-Trait Anxiety Inventory for Children (STAIC; Spielberger, 1973) was used to obtain self-reports of anxiety. However, only those items assessing either the specific cognitive or physiological components of anxiety were included in the children's STAIC scores. Next, the children were administered the Child Externalizing Behavior Questionnaire (Weiss, Catron, & Harris, 1993b). This questionnaire obtains self-reports of aggressive and delinquent behavior. It contains 11 items adapted from the TBQ and produces an Aggressive Behavior and a Delinquent Behavior scale. Because self-reports of hyperactivity and attentional problems are of questionable validity with children (e.g., Loeber, Green, Lahey, & Stouthamer-Loeber, 1990), this domain was not assessed via self-report. The Vanderbilt Depression Inventory (VDI; Weiss & Garber, 1993) was used to obtain self-reports of depression. This inventory was designed for making developmental comparisons involving specific depressive and depression-related symptoms. The VDI contains 26 items rated on a Likert scale (1 = not at all true to 5 = very true). Most symptoms are assessed with one

item; however, key symptoms such as sadness have two items. The VDI has two scales: a core DSM scale containing items from the DSM-III-R, and an associated features scale containing items such as somatic complaints and anxiety. Initial testing has indicated that the instrument meets acceptable psychometric standards.

Thus, reports for six domains of psychopathology were obtained from three different informants, with the one exception of self-reports of hyperactivity and attentional problems. The 17 variables were standardized and first weighted by informant and then by domain. Informant weights were derived from the relative discriminative validities of the different informants by domain (Kazdin, 1987; Kazdin, Esveltd-Dawson, Unis, & Rancurello, 1983; Panak, 1990; Sacco & Graves, 1985; Weissman et al., 1987). For example, because teachers are less reliable informants of children's internalizing symptoms than are peers or self-reports, teacher scores on depression and anxiety received relatively low weights.

Problem domains were weighted by their relative clinical seriousness. Specifically, domains were weighted by their "referability index" (RI; Weisz & Weiss, 1991), which represents the frequency with which parents report a particular child problem as the reason for referral at mental health clinics relative to the frequency with which the problem is reported in the general population. Thus, problems that are seen as more serious by parents and that are more likely to elicit clinical referral, relative to frequency with which they occur in the general population, have larger RI. Using this approach, the relative seriousness of the domains, in descending order, was delinquency, depression, aggression, somatization, hyperactivity, and anxiety.

Participants received six scores representing the six psychopathology domains, which were computed by first obtaining the weighted sum of the informants for each domain and then multiplying this sum by the RI for that particular domain. Finally, scores for the top two domains for each student were

summed to produce an overall psychopathology score. Rather than using either the single top domain or three or more domains, the two top domains were summed, in order that our selection would be a balance of the breadth and severity of psychopathology. Students were then rank ordered according to this overall psychopathology score and recruited from this list for study participation. This weighting scheme, rather than the use of established clinical cutoffs, was employed because clinical cutoffs for most of the measures in the proposed study have been established among populations not at risk and they thus might have been inappropriate for use with our samples.

PROGRAM COMPONENTS

The various components of the SBC program were devised to meet the shortcomings of traditional service delivery models in providing mental health services to the target population. Specifically, a primary care model that delivers a range of on-site services was used to avoid the typical fragmentation of services and improve accessibility and utilization. Most participating parents readily approved of these services; however, family, marital, and other parent-directed services typically were less successful in obtaining participation.

The unique features of the SBC program are its location in the school and the coordinated manner in which services are provided. The program's location permits ready identification of children at risk or in need of services, and it greatly improves children's access to such services, which are conveniently provided in their neighborhood school without the problems associated with attending traditional walk-in clinics. Clinicians thus have easy access (via teachers, principals, other school staff, or classroom observation) to information regarding the child's behavioral and emotional functioning. In addition, clinicians are readily available to provide teachers with consultation related to psychological matters such as classroom and behavior management.

The SBC program and community mental health centers (CMHC) are similar in that a range of services are available to children and their families. However, in the CMHC, services typically are specialized and fragmented. Different types of services are usually provided by different professionals (e.g., psychotherapists and case managers), and the therapist treating a child must coordinate the various services to provide a full multilevel intervention. Such fragmentation results in multiple visits to the clinic and, in some cases, to separate locations for different services. In addition, when intensive services are needed (e.g., increased classroom structure and multiple weekly services), a child is typically removed from the neighborhood school and placed in a separate facility. These more restrictive, costly, and disruptive placements might be avoided if similar services were available within the school.

The decision regarding what services are provided to a child is made by the individual clinician in conjunction with his or her clinical supervisor. For the most part (i.e., more than 90% of the time), psychotherapy sessions are individual rather than family or group. Individual services typically occur one to three times per week for 30 to 60 minutes per session. Although all six clinicians in the evaluation program have attempted to involve the families in treatment, their efforts have proven moderately successful at best. On average, parents are involved in less than one meeting per month at the school, although one to two telephone contacts per month typically are made. Home visits are not always practical due to safety problems and the need to travel in pairs. Approximately 35% of the children are seen by the consulting psychiatrist, usually to be evaluated for medication or to determine whether psychosis is present. For 12% of the children, the therapist has been involved with the legal system (e.g., serving as advocate for a child who was sexually abused). The therapists spend approximately 15% of their time in the classroom, either consulting with the teacher or directly observing their children's be-

havior. Overall, the therapists spend just over half of their time (55%) delivering direct services to the children.

A clinical/program coordinator (.5 FTE) is responsible for overseeing the service and clinical administrative activities of the clinicians. This typically involves providing direct clinical supervision, consulting on emergencies, addressing clinical programmatic issues, monitoring clinician activity, and serving as liaison between the school administration and the clinicians. Of particular importance is the role the coordinator plays in assuring that the program model is implemented. Clinicians are provided training/in-service regarding the program model, associated activities (e.g., teacher/classroom consultation), and information pertaining to organizations/agencies they are likely to encounter through liaison activities (e.g., Metro School system, Department of Human Services, juvenile court, etc.). As well as receiving weekly individual clinical supervision, therapists meet weekly as a group (led by the coordinator) to discuss program implementation, common issues, difficult cases, etc. These group meetings have proven very useful in helping the therapists avoid the sense of professional isolation that being the only mental health professional in their setting (i.e., the school) may engender. In order to function successfully in this form of program, clinicians must be able to function independently and enjoy it.

Psychotherapy

The specific needs of each child and his or her family can be addressed by a variety of psychotherapy interventions, including individual, group, family, and marital. During this study, a specific theoretical psychotherapy model was not being tested; thus, clinicians used the theoretical orientations with which they were most familiar. (All clinicians, however, were expected to provide each of the four psychotherapy levels.) Consequently, several theoretical orientations were represented, including behavioral, cognitive-behavioral, humanistic-client centered, and psychodynamic-insight-oriented models. However, three of the

six clinicians used humanistic-client-centered methods as their primary clinical approach, two used psychodynamic-insight-oriented approaches primarily, and one used primarily the cognitive-behavioral.

The frequency and intensity of psychotherapy was also modulated to address the mental health needs of the child. Specifically, this meant that some children might receive a combination of psychotherapies (e.g., individual, group, and family) or individual treatment several times per week. Such flexibility allowed the clinician to provide an intensive level of intervention while maintaining the child in a regular classroom. Children were allowed to leave the classroom to attend services in the clinicians' on-site office.

Parent Services

Parent-directed services were provided at the school, due to the safety risks involved in the therapist's traveling unaccompanied in many of the neighborhoods. This lack of home-based services appeared to hinder parent participation in many of the parent-directed services (although some parents declined to participate in any parent-directed services). Parents were given opportunities to learn new skills in behavior management, assertiveness, or other relevant parenting skills. This training could be taught in individual or group format. Parents also received individual counseling or referrals to other appropriate providers (e.g., substance abuse counselors) to address mental health problems. Parent support groups were possible in some settings and allowed parents to share ideas and support each other in coping with the many problems associated with living in their neighborhoods.

Behavior management training was the most frequently used parent-directed service. Parents were taught basic behavioral concepts (e.g., reinforcers, consequences, and consistency) and how to apply these concepts in managing problem behaviors. This service focused on helping parents develop more appropriate behavioral controls and minimizing punishment.

Consultation

The two types of consultation that occurred were educational and psychiatric. The clinician provided the teacher with consultation services specifically aimed at behavior management techniques and improvement of classroom structure. Teachers could request consultation for any student; however, the typical consultation centered on students with problematic behaviors. Teachers were taught basic behavioral concepts and were shown how to establish behavior management plans and how to structure the classroom to benefit all students (e.g., establishing clear rules, consequences, and rewards).

Medical students in a child psychiatry residency program offered consultation to both clinicians and teachers. These psychiatrists provided diagnostic and conceptual guidance to the clinicians through case staffings and direct medication management services to students. Psychiatrists consulted with teachers concerning diagnostic issues and typically provided direct observation of the students in question. Teachers would then be advised as to the nature of the mental health problem (if any), and recommendations for a course of action would be presented. Psychiatrists visited each school every 2 weeks for approximately 2 to 3 hours.

Case Management

Clinicians provided case management to students under direct care. This service usually involved determining and coordinating appropriate resources for the child and family, and the typical activity involved helping the family obtain social and medical services. Most of the community liaison activities occurred through case management. In this regard, the clinician might communicate regularly with juvenile court officers, Department of Human Services caseworkers, or a community physician. The liaison activity helped each agency have a better understanding of the child's functioning and enabled the clinician to assure that all services and resources were provided.

Prevention

Direct prevention activities centered on psychoeducational presentations to classrooms or other assemblies and covered such topics as alcohol, drug, and/or sexual abuse; violence; and coping with stress. These presentations occurred three to four times per year. The prevention of problematic behavior was enhanced indirectly by teaching teachers new behavior management skills from which the children benefitted.

PROGRAM EVALUATION

An evaluation of this service delivery model was undertaken in 1993, with the primary goal of evaluating the efficacy of the collaborative treatment program relative to traditional community-based services with regard to: (a) early identification; (b) the *accessibility and utilization* of services; (c) the prevention of more costly and restrictive placements; and (d) the students' emotional, *behavioral, and academic functioning*. In addition, this evaluation assessed the school-wide "diffusion" effects. As noted previously, although the SBC treatment is aimed at the individual child, certain components (e.g., teacher consultation) may have a broader, more generalized diffusion effect (Meyers, 1985). The effectiveness of the different service delivery models—whether observed outcome varied as a function of the informant (e.g., parent or teacher), the impact of parental psychopathology on child outcome, or the effect of child outcome on parental psychopathology (because child psychopathology may function as a parental stressor; e.g., Breen & Barkley, 1988; Mash & Johnston, 1983)—also will be evaluated.

The nine participating schools were randomly assigned to a treatment (six schools) or comparison (three schools) condition. Families of students identified in the grade-wide assessments were contacted by the schools and invited to participate in the project, and parental permission to be contacted by project researchers was obtained. Project researchers contacted the parents, ex-

plained the project in more detail, obtained consent from families interested in participating, and administered additional family assessment procedures. Children from the treatment schools were randomly assigned to either the SBC program or to individual academic tutoring (AT), which served as an attention-placebo control group, and a matched group of children who were referred to local community mental health centers (CMHC) was selected from the comparison schools. Randomization across all three conditions was not possible because it was necessary to ensure that the SBC program in each of the SBC schools was large enough to provide a reasonably sized caseload for the therapists. This would not have been possible if subjects were randomly assigned across the three groups rather than two, because of anticipated attrition rates in the CMHC condition. Data from the grade-wide assessments were used to obtain self-report data for monitoring the children's adjustment and functioning. In addition, parents completed the Child Behavior Checklist (Achenbach, 1991) and teachers completed the TRF.

Preliminary Results

Demographic information from the grade-wide assessment revealed that the average age of the initial second-grade through fifth-grade sample was 9.55 years. The ethnic distribution was 40.6% White, 48.4% African American, 0.9% Hispanic, 3.7% Asian, and 2.0% Native American. Boys comprised 49.9% of the sample. Thirty-one percent of the children selected for treatment had delinquency as their primary or secondary problem area; percentages for the other domains were 36% depression, 30% aggression, 36% somatization, 28% hyperactivity, and 38% anxiety. Children who were identified to receive services had a mean TRF *t* score of 70 for the problem area for which they were selected to receive services. These levels of serious psychopathology are consistent with estimates of mental health problems in at-risk populations (e.g., Institute of Medicine, 1989). It is important to note, however, that the group

of children that we identified did not include children who already were receiving full-time SED services.

Further examination of initial assessment results indicated that, when controlling for level of psychopathology, the identification of students as seriously emotionally or behaviorally disordered was not affected by race, age, or gender. This is an important finding, because minorities tend to be overrepresented in SED classrooms (Chinn & Hughes, 1987), which suggests that traditional referral methods may be biased. Thus, the grade-wide assessment methodology and its multi-informant, weighted format appeared to be an effective, nonbiased method for the identification of children with a broad spectrum of emotional and behavioral disorders.

A comparison of children and families referred to the two treatment conditions revealed that in the first 6 months, 98% of children referred to the SBC program entered services, whereas 17% of children referred to traditional clinic-based services entered treatment. This indicates that school-based programs can significantly increase the accessibility and utilization of mental health services to the target population. Finally, it appears that parental perception of the severity of difficulties at home is one important factor affecting utilization of traditional clinic-based services. Parents of children accepting referrals to the community-based services reported significantly more problems at home than did parents of children not accepting community referrals; interestingly, teacher reports of children whose families accepted or did not accept community referrals did not differ.

SUMMARY

School-based mental health services offer several advantages over traditional clinic-based ones. First, locating clinics in the schools increases the accessibility and utilization of services. Second, school-based services facilitate a primary care model that more efficiently addresses the needs of children with seri-

ous emotional and behavioral problems from socioeconomically disadvantaged backgrounds because services are less likely to become fragmented and the capability of delivering a multilevel intervention is enhanced. The presence of mental health resources in schools also increases the likelihood that a student may be served in the least restrictive setting because the intensity and comprehensiveness of the services can be adjusted according to need.

Our assessments indicated that schools serving predominantly children who are at risk have what can only be considered an inordinately high need for mental health services. Indeed, if one includes the children already identified by the school system as SED and children in the borderline range, over 35% of the children in the schools that were assessed had significant emotional and behavioral problems. Statistics indicate that many of these students will not receive mental health services until they are placed in a restrictive educational or treatment setting (Knitzer, 1982; Shuchman, 1991). School-based mental health services can facilitate the early identification and treatment of children who are at risk and avoid costly out-of-home or educational placements.

Determining the effectiveness of such school-based services in addressing the needs of the target population might have an impact on public policy. Public funds often are not allocated in a way that permits funding of necessary services or nontraditional service delivery systems (e.g., Medicaid often only covers psychotherapy services in a licensed facility). Different types of funding that allow for innovative, nontraditional services need to be considered, such as block grants to serve target populations and flexible funding accounts. Such methods free the provider from the constraining definitions of "allowable services." However, these methods require legislative support for implementation (with appropriate oversight). Scientific evidence that alternative service delivery models improve services and outcome can be influential in establishing such policies. As health care reform promises major changes in how

services are financed, more consideration should be given to evaluating traditional and alternative treatment strategies.

Research into mental health services will provide important information for those who decide how to allocate limited resources. Many model programs are implemented on a large scale due to philosophical appeal rather than scientific support. If school-based mental health services prove to be an effective service delivery model for a given target population, there will still be questions about which modes of treatment are most effective.

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Authors' Notes

- 1 This research was supported by a grant from the National Institute of Mental Health (No. NIMH 1-R18-MH50265) and Substance Abuse and Mental Health Services Administration (No. SAMHSA 5-HD5-SM50265).
- 2 The authors wish to thank Terry Katzman-Rosenblum, MA, Allyson Ross, MSN, and Susan Ratcliffe, MSN, for their contributions to the program development and implementation. Also, thanks go to Metropolitan Nashville Public Schools; Dr. James Zerface; Dr. Warren Thompson; Dede Wallace Health Care Systems; Elam Mental Health Center; and the principals, teachers, and families who have participated in this project.

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The Challenges of Child Mental Health Services Research

BARBARA J. BURNS

THE MANDATES FOR RESEARCH on the effectiveness of service systems and service delivery components have only been articulated clearly in the past 10 years. Prominent reports that delineate a research agenda for children and adolescents include the 1986 Office of Technology Assessment (OTA) report on children's mental health (U.S. Congress, 1986), followed in 1989 by the Institute of Medicine (National Academy of Sciences, 1989) and the National Institute of Mental Health (NIMH) Advisory Mental Health Council (U.S. Department of Health and Human Services, 1990) reports. A subsequent OTA report on adolescent health (U.S. Congress, 1991) spelled out seven research priorities relevant to mental health services for adolescents (also applicable to children):

1. Develop estimates of adolescents' need for mental health services based on epidemiological surveys;
2. Evaluate the effectiveness of various mental health treatment modalities for adolescents;
3. Assess the potential for substitution of community-based mental health treatment services for restrictive institutional services;
4. Develop criteria for quality mental health treatment of adolescents;
5. Determine effective mental health services system design and development;
6. Evaluate alternative methods for financing mental health services for adolescents;

This article presents challenges facing child mental health services research in its context as a recently developed field of research and the contributions made by six articles in this issue. These articles illustrate the two major categories of services research: systems level research and clinical services level research. The authors of these articles have documented initial results of innovative interventions at both levels and have raised several methodological issues, particularly for randomized clinical trials in naturalistic settings. Recommendations for considering issues of design and measurement in future research are discussed.

7. Strengthen recruitment and training of researchers in adolescent mental health. (Vol. 2, pp. 486-487).

From a health services research perspective, the six articles in this issue are responsive to at least three of these priority areas (Nos. 2, 3, and 5) and can be grouped roughly into two categories: service systems research and clinical services research. The first category is represented by the Catron and Weiss article on locating mental health services within schools and the Koroloff et al. article that presents a staffing intervention to increase access to mental health services. These correspond to Priority No. 5 in the list, which is related to improved service system design. The second category, clinical services research, is evident in the focus on the effectiveness of specific service interventions exemplified by the four articles on innovative treatment approaches: intensive case management (Cauce et al., Evans et al.), multi-systemic family preservation therapy (Scherer et al.), and wraparound foster care (Clarke et al.). To some extent, these four articles also address the potential for substituting home and

community-based care for treatment in institutions.

The investigators deserve recognition for ground-breaking work from both clinical and research perspectives. They assumed a leadership role in developing the interventions while also designing and conducting the research. Moreover, they did not have the luxury of first testing the interventions under highly controlled laboratory type conditions—the model for biological and drug studies. Instead, everything occurred in the field in usual care, or what is sometimes called “naturalistic” settings, with the types of clients for whom the interventions were intended. Because there probably is no other option for research on services interventions, what were not available were the usual protections found in other types of research, where the initial stages occur in a laboratory, such as a teaching hospital, and move progressively into settings with fewer exclusion criteria and “frontline” clinicians. In fact, there is not a protected setting in which to test an intervention such as case management, which, by definition, calls for “real world” coordination of services by multiple human services agencies. These

investigators initiated their research in the field guided by clinical experience and mostly descriptive (uncontrolled) reports (except for Scherer et al.). Under these circumstances, courage is evident in use of the most rigorous research design, namely, the randomized clinical trial. These studies also did not occur in typical clinical settings such as mental health centers. Instead, the investigators reached out to other human services sectors where youths who may be most in need of services are found, namely, in the schools, courts, social services agencies, and the community at large, including the streets. Further, the interventions were carefully thought out and are well described. Finally, these authors are to be commended for their willingness to publish very early findings and to describe the problems encountered in establishing the interventions or in obtaining cooperation to conduct the research. They deserve credit for their openness and willingness to risk criticism when delaying publication might have produced more definitive findings. In a new field, alerting other investigators to the initial findings and the methodological issues enables them to learn from and potentially adjust the course of their work and to assist funding agencies in setting more realistic expectations and priorities.

SERVICE SYSTEMS

The two service systems interventions focused on increasing access to mental health services, one by shifting the locus of services and the other by an outreach staffing intervention. The Catron and Weiss article follows the tradition of school-linked health centers (see U.S. Congress, 1991, Chapter 15) which typically were not staffed to provide mental health services. However, at these centers, a mental health problem was the Number 2 reason for seeking care. Catron and Weiss found an astounding contrast in the rate of successful referrals, that is, when services were provided in the school (99%) versus when referrals were made to mental health centers (17%). As this research is pur-

sued, it will be important to learn more about the clinical characteristics of the school- and clinic-treated groups (do they differ in level of impairments), the type and amount of care received, and the rate of treatment completion. If increased access to services is also associated with comparable quality of care and outcomes, it will become important to learn more about how to staff and fund school-based clinics. Clearly, the costs will not be absorbed by the school system, raising a question about resources for such services. To what extent are mental health centers able or willing to relocate child staff to schools? What kinds of requirements will Medicaid and other insurers impose for reimbursement in school settings? A more difficult question to answer at this time is how school-based clinics would fit into health care reform. This series of issues illustrate those that might follow the important initial finding of increased access.

The family associate intervention (Koroloff et al.) appears to be an inexpensive way, through early periodic screening, diagnosis, and treatment (EPSDT), to assist children already identified as in need of care to actually obtain care. The use of parents rather than professionals to facilitate entry into an often intimidating service system may have helped to further reduce barriers of care that were not formally acknowledged in the survey (e.g., lack of understanding about how to negotiate the system of care). In the next stages of their research, they will assess the extent to which families actually connect with treatment and successfully complete it. If other types of data were available (e.g., retention of family associates, costs), it would help to make this intervention transportable to other locations. Questions relative to the feasibility of recruiting and retaining family associates and the costs of this intervention need to be addressed. Caseloads are small (5 to 10 families) and the duration of the intervention is relatively brief (3 weeks to 3 months). The average cost per family (plus the flexible dollars) could easily be calculated and would be useful to other programs considering

such an outreach approach. In the future, the use of parents to assist families who are difficult to engage in treatment could be compared to other types of workers likely to provide outreach, typically professionally trained case managers, and the relative effectiveness and cost could be assessed.

These two articles directly address important service system issues and exemplify ways in which systems research can be logically extended. The challenge will be to differentiate between what can be learned from small and incremental studies as seen in the Catron and Weiss and Koroloff et al. work and where much larger studies are required to concurrently examine a range of service system issues. The types of research extensions suggested above reflect service systems research questions at a more macro level addressable in services demonstrations such as the Robert Wood Johnson Program for Children (England & Cole, 1992), those supported by the Center for Mental Health Services, and naturalistic studies of larger systems of care, as will occur under the recently announced NIMH child initiative called UNO-CAP (Cooperative Agreement for a Multi-Site Study of Mental Health Service Use, Need, Outcomes, and Cost in Child and Adolescent Populations, 1994). For instance, an issue such as services integration (locating services in a single child agency, as in the Catron and Weiss study) can be extended in larger studies to encompass multiple service systems and various approaches to coordination of services (e.g., pooled funding, multi-agency teams, interagency agreements for training). Questions about the relative effectiveness of integration of services versus other mechanisms for coordination of services can then be examined at multiple levels—that is, level of care, ownership (private versus public), and sector (mental health, education, health, social services, juvenile justice). Financing mechanisms (capitation versus fee-for-service) clearly influence how systems operate (as does variation in legislation) and represent important research foci. Service systems also have to be designed in response to

the needs of the population to be served and to geographical constraints such as urban or rural location. The preceding issues merely exemplify the potential range of service systems research topics needing attention.

In future studies of service systems, a critical challenge will be obtaining consensus on effectiveness measures. It is not enough to specify basic concepts: services should be accessible to those in need, appropriate and quality care should be provided, care should be coordinated, and positive outcomes should occur for children and families. These premises apply to populations and to service systems, not just to individual-level data. To a great extent, an ability to conceptualize and measure service system outcomes has lagged behind such measurement at the client level. For many years, a conceptual framework for assessing quality of care (Donabedian, 1980) has existed at three levels: (a) structure (e.g., organization, linkages to other systems, staffing, financing); (b) process (e.g., timeliness of care, appropriateness of treatment and treatment combinations, and continuity of providers); and (c) outcomes (both system and client level). This model could be adapted for research on child service systems. The provision of services is examined at multiple levels, thus avoiding the "black box" of examining clients at baseline and at some later point without information about what has occurred in the interim. A literature exists upon which to build such a model, starting with Stroul and Friedman (1986). Operationalizing the concepts to measure the functioning and effectiveness of child systems, however, has not yet received a similar level of attention by investigators and is needed to effectively pursue research on a systems level.

SERVICE COMPONENTS

Four groups of investigators conducted randomized clinical trials to test the effectiveness of innovative clinical interventions. The paucity of research on traditional clinical interventions has been pointed out (Burns & Friedman,

1990), and the need for well-designed clinical trials in naturalistic settings has been underscored. However, these studies are very difficult to design and conduct successfully. Even for an intervention (multisystemic family preservation) that had been tested previously, effect sizes were small (Scherer et al.) As implied by these authors, this may be a function of the severity of the problems in the chronic or violent adolescent offenders treated, or it may be associated with brief follow-up or other factors. Nonetheless, the small effect size is a warning to investigators testing newly developed interventions. For example, the homeless youths in Seattle receiving case management demonstrated lower levels of aggression and greater satisfaction with quality of life than control youths but did not differ on other measures at the 3-month follow-up (Cauce et al.). In contrast, the wraparound (or individualized system) foster care showed fairly consistently positive results at the 18-month follow-up, but data were not available for 23 (17%) of 132 research subjects (Clark et al.). Were the missing subjects those who had not been enrolled for the full 18-month period or were there missing data due to attrition, and did the loss of data for these subjects introduce bias into the findings? The fourth randomized trial (Evans et al.) will compare family-centered intensive case management with treatment foster care. Implementation has been delayed in part because randomization proved difficult for multiple reasons, including family preferences (i.e., families open to an in-home intensive intervention may be very different from families who are ready to place a child) and state budget cutbacks that affected availability of the intervention.

The randomized clinical trials (RCTs) described in this issue, although demonstrating positive results for the most part, also demonstrated the range of problems typical of RCTs in naturalistic settings with real clients (Cordray & Pion, in press). Although the major advantage of an RCT is avoidance of selection bias, real-world situations can introduce biases of other sorts that

threaten the value of the randomized design. The kinds of interferences directly or indirectly specified in the preceding articles and in similar studies in progress include the following:

1. Small sample size threatens statistical power to find an effect. A rule posed by Sechrest and colleagues (1979) is that about half of the estimated sample for an RCT will be found despite large estimates of availability.
2. Brief intervention and follow-up limit the amount of time potentially necessary for an effect to be demonstrated. Alternatively, very lengthy interventions challenge the investigators and the service system to sustain the intervention, to prevent unplanned crossover between experimental and control conditions, and to avoid other effects of history (e.g., policy changes).
3. Failure to systematically document that the planned intervention actually occurred, despite clear program descriptions that spell out such plans, creates a risk of testing an intervention that did not occur or did not occur as intended.
4. High rates of study refusals and/or attrition and limited reporting of the characteristics of these groups can affect the potential for generalizability.
5. Problems in obtaining both consumer and provider cooperation with randomization, related to preferences for either the experimental or the control condition, will potentially introduce bias.
6. An inability to ensure blindness of condition assignment (experimental versus control) for research interviewers may have implications for training rather than for research design; an inability to keep providers blind, although not feasible at the client level, creates a risk of contagion when experimental and control conditions occur in the same settings and represents a design consideration.
7. Limited indications of positive outcomes, possibly due to measures that

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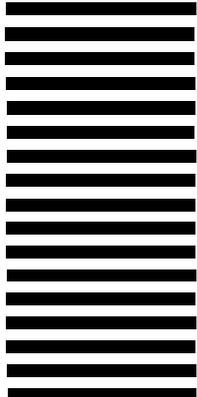
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are not sensitive to change, make the interpretation of negative findings problematic, and raise a question about whether negative findings are due to a true failure to find an experimental effect or to measurement error.

The preceding set of risks to RCTs, although not new, potentially spell disaster for application of this research design to services research. A reassuring observation is that those risks probably apply to all RCTs, except for early stages of drug trials that can be highly controlled. Some of the above risks apply to other medical RCTs (i.e., blindness to study condition is not an option in trials of surgical interventions, or life-style or cognitive changes). Quasi-experimental designs that offer alternatives to the RCT are not as susceptible to some of the preceding risks, but in many ways, they can be more difficult to design and analyze (Bickman, 1990). Before shifting to a less rigorous study design, a number of steps can be taken to compromise selected design requirements to minimize such risks.

A major compromise is to accept that ensuring blindness of the study condition is not feasible for RCTs in naturalistic settings. Although a cardinal principle in drug studies, in other respectable areas of medical research where blindness of study condition is not possible, this has been eliminated without any apology. Although providers will be aware of clients' study condition assignment, there are ways to reduce potential bias in research interviewing: A major one is to provide training that explicitly communicates that a fair test of the intervention is being conducted. This requires that the investigators be truly unbiased. Another compromise is to accept the reality that researchers cannot protect trials from the effect of history (i.e., policy or fiscal changes cannot be prevented). Either the bias introduced has to be handled statistically, or, if this is not possible, the experiment may have to be terminated midstudy.

Other problems can be dealt with more directly. Small sample sizes can

be increased through multisite collaborative studies. This is a clear solution, but one that will occur only for interventions that have truly shown promise in prior uncontrolled studies—largely because of the expense of multisite trials. Gaining clinician and consumer cooperation when there is a clear preference for one intervention can be addressed through randomization on the basis of preference (Bradley, 1993). Although this offers the benefit of reducing refusals and attrition, these new designs may introduce some problems of generalizability (i.e., results apply only to individuals with a given preference, not to all individuals potentially needing the intervention). The problem of a lack of information about the characteristics of refusals and attrition can be corrected easily by providing such information—standard practice for investigators experienced in conducting RCTs and one that applies equally to child services research. Failure to provide information about implementation of the intervention (sometimes referred to as “fidelity to the model”) can be handled by collecting data to monitor the intervention; this requires planning when the study is being designed. Although the RCT articles in this issue clearly described the interventions, data documenting the faithfulness with which they occurred were generally lacking. Failure to actually provide the planned intervention can result in negative findings and thus eliminate a potentially useful intervention for the wrong reason. The fidelity issue applies to both control and experimental conditions because “drift” in the implementation of the intervention can occur for either condition. Documenting provision of the intervention requires objective data on the amount and quality of services received, through a management information system, direct observation of the treatment, or self-report (Burns, Angold, & Costello, 1992). Weisz, Donenberg, Han, and Kauneckis (in press) advocated use of manuals to structure treatment and careful monitoring in clinic-based studies. Finally, too brief a follow-up period can be corrected with a longer one; however, this

increases the cost of the research as well as the possibility of further attrition and influence by external historical factors. Both the length of the intervention and follow-up periods necessary will be better informed with empirical data that do not require an RTC.

Less easily corrected is the issue of the sensitivity of measures to child and family change. To some extent, we have probably been overmeasuring (i.e., using a wide array of measures to capture change anywhere it occurs). A common set of measures for diagnosis, symptoms, and family and child functioning are appearing repeatedly in child services research studies. Whether choices are being made on the basis of scientific usefulness or merely repeating what other investigators are using is not entirely clear because choice of measures with basic psychometric properties has been limited. Evidence of the usefulness of commonly used measures needs to be critically assessed. Further, one category of measurement—quality of life, which is considered critical and sensitive to change in health services research on adults (e.g., use of the SF-36 in the Medical Outcomes Study; Rogers, Wells, Meredith, Strum, & Burnham, 1993)—was only reported in one article in this issue (Cauce et al.) and rarely elsewhere. Concerted attention to testing a measure of quality of life for children is needed (the SF-36 for children is expected to be available soon) (NIMH, 1994b). Although there is common agreement about the importance of certain measures (e.g., reduction in out-of-home, out-of-county, or out-of-state placements), placements may occur at too low a rate in some client groups to detect a difference between experimental and control clients. A precaution, if evidence of the usefulness of selected measures for given study populations is not evident in the literature, is to carefully pretest such measures. As described in this issue's articles, problem behaviors targeted by the intervention, particularly in the adolescents who are served, are often fairly entrenched and resistant to change, however powerful the intervention. Some understanding of the sequence of

change is needed to guide measure selection.

A methodological initiative is needed to identify and develop measures that are sensitive to change in children and families who receive appropriate care. NIMH recently (1994a) issued a program announcement on research on methods, measures, and statistical analysis in mental health, which could help with this problem. Prior to developing new measures, a logical first step would be to obtain consensus on critical outcome domains, appropriate informants, and the utility of measures currently in widespread use. For example, a recent report by Macro International (1993) (supported by the Center for Mental Health Services), which identified and reviewed the properties of child mental health measures, could provide a basis for such discussions, potentially leading to identification of a set of relatively brief, objective outcome measures.

Finally, another critical recommendation to increase the scientific benefit of RCTs is that support be provided to conduct substantial feasibility studies before embarking on fully funded RCTs. This is not a new suggestion, but the scope may be more extensive than the usual notion of pretesting. The difficulty in obtaining grant funding for a feasibility study and the delay in funding between a feasibility study and a comprehensive RCT serve as disincentives to do some of the labor-intensive prior work that could provide insights about the likelihood of success of a more expensive trial. As both an advocate of RCTs (Burns & Friedman, 1990) and a more sanguine RCT investigator (who still asserts their value), I believe that many of the risks of RCTs could be reduced by thorough feasibility studies. Suggested criteria for such studies would include

1. The eligible population is well specified and an accurate determination about availability (sufficient sample size) for treatment (after inclusion and exclusion criteria are applied) can be made. This includes a true test of agreement with, and understanding of, inclusion and exclusion criteria by providers.
2. Interventions (control and experimental) are clearly operationalized and meet ethical requirements; for control conditions, this means not usual, but state-of-the-art care.
3. Both control and experimental interventions are acceptable to clinicians and patients; this requires actually testing the randomization procedures and examining rates and characteristics of refusals to insure acceptability by both clinicians and clients.
4. The intervention can be implemented by usual (frontline) service providers, and maintained for the expected duration and intensity (also referred to as treatment dosage); clients will also persist for the duration of the intervention and the study, which may require follow-up beyond termination of the clinical intervention.
5. Measures are understandable and culturally relevant, and they demonstrate more than the usual psychometric properties of reliability and validity; namely, they are sensitive to change (clearly applicable to service systems studies as well as RCTs).

CONCLUSION

Child mental health services research on the effectiveness of service systems and specific service components is for investigators with courage. The stakes are high-improved mental health services for children and families-but the pathways have not been fully articulated. As a relatively new research endeavor, one that has received limited governmental and foundation research support, the challenges are significant. Methodological work that (a) reconsiders the merits of various research designs for descriptive as well as controlled studies, and (b) gives attention to measurement needs at the system and client levels is necessary in order to move forward. Further, cooperation among federal agencies, policymakers, service providers, consumers (children and families), and investigators is essential to forging new directions. Both

open-minded and tough-minded approaches are required by all to jointly achieve the scientific work necessary to affect the mental health of our youths.

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Author's Note

Assistance by Zarrin Brooks in preparation of this article is gratefully acknowledged.

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N O T C E S

Call for Papers for The International Conference on Research and Practice in Attention Deficit Disorders

The Division of Special Education at The Hebrew University of Jerusalem is pleased to host the International Conference on Research and Practice in Attention Deficit Disorders in Jerusalem, Israel, May 23-25, 1995. Scholarly papers are currently being solicited on issues dealing with all aspects of research and practice in attention deficit disorders. Specific areas of interest are:

- Effective treatment modalities
- School/home/physician liaisons
- Adolescent and adult issues
- Theoretical model building
- Cognitive behavior modification
- Self-management procedures
- Juvenile delinquency and aberrant behaviors

Please send a cover letter specifying the names and affiliations of all authors and an abstract to the Chair of the conference Scientific Committee. Manuscripts should be received no later than December 1, 1994.

Tom Gumpel, PhD
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Life Planning Seminars for Persons with Disabilities

To assist parents and professionals in answering an important question facing every special family—How can I help my child, sibling, spouse, or parent continue to enjoy a comfortable life if I become incapacitated or when I die?—a national company has, for the last 6 years, been helping families steer toward “comprehensive life planning.”

Each month, the company's planning teams (attorneys, financial planners, CPAs) give over 150 free 2-hour seminars to parent and professional groups around the country; these noncommercial presentations, with 35mm slides, handouts, and lots of time for questions, help families begin the life planning process. Legal and financial aspects are included as they apply to the overall process. A team member is available to provide a free consultation to determine a family's current status, or families can take the seminar information to their own planners and attorneys.

Persons interested in arranging a free seminar for a parent support group, a local agency, school staff, and so forth should contact the Estate Planning for Persons with Disabilities national office at 1-800-448-1071.

THE JOURNAL OF EMOTIONAL and Behavioral Disorders (JEBD) is a refereed, quarterly multidisciplinary journal publishing articles on research, practice, and commentary related to individuals with emotional and behavioral disorders. Articles represent the wide range of disciplines studying and serving such individuals, including counseling, education, early childhood care, juvenile corrections, mental health, psychiatry, psychology, public health, rehabilitation, social work, special education, and related areas. The editors welcome articles on characteristics, assessment, prevention, intervention, treatment settings (e.g., home, school, community, clinic, institution), legal or policy issues, evaluation, and other topical areas. Research reports, reviews of research, descriptions of practices, and discussions of applied issues are particularly appropriate for publication in JEBD.

Types of Articles

Research reports describe original research studies that have applied implications. Group designs, single-subject designs, qualitative methods, and other appropriate strategies are welcome.

Review articles provide qualitative and/or quantitative syntheses of published and unpublished research and other information that yields important perspectives about emotional and behavioral disorders. Such articles should stress applied implications.

Discussion papers describe, interpret, criticize, and otherwise address issues with applied implications for the field. Such articles may but do not have to be reactions to material appearing earlier in JEBD.

Letters to JEBD are considered if they briefly comment on an issue of interest to readers of JEBD, including comment on material appearing in earlier issues of JEBD. In general, letters are limited to three double-spaced, typewritten pages. There may be citations and references if appropriate, but no tables, figures, or footnotes. Letters are published when appropriate and as space permits. They

are subject to editing and condensation by the editors.

Descriptions of programs or practices inform readers of significant assessment, intervention, evaluation, and other procedures observed to have value in serving those identified as experiencing, or at risk for, emotional and behavioral disorders. Special considerations for descriptions of programs manuscripts:

This kind of manuscript may present programs in the fields of special education, corrections, mental health, education, counseling, social work, psychology, or other related disciplines. The purpose of program descriptions is to disseminate information on programs that have been planned, implemented, and evaluated. Although journal space is limited, the ideal for such an article is that readers would be able to replicate the practices and procedures presented. Therefore, it is critical to clearly communicate the essential components of the program. Below are guidelines, though not requirements, for descriptions of programs.

1. *Introduction.* Please present a sound rationale for the program's existence. The information appropriate to this section may include a review of related programs, empirically based need for the program, and legislative or legal mandates.

2. *Subjects.* The main purpose is to specify the individuals served by the program. Information appropriate to this section may include an operational definition of the individuals, measures used for identification, referral and identification process, number of individuals served, and demographic information (e.g., age, sex, race).

3. *Setting.* The setting section is meant to identify the physical and other context in which the program was located. The information appropriate to this section may include geographic location, size and economic level of community, physical location of program, primary agency, relationship to other service agencies, and funding support of program.

4. *Program features.* The purpose of this section is to describe the critical com-

ponents of the program and service provided. The information appropriate to this section may include the program's goals and objectives, actual services, assessment and curriculum materials, staff to client ratio, staff training and supervision, entrance and exit criteria, and support to families.

5. *Evaluation.* Please describe the evaluation model and present any outcome data. The information appropriate to this section may include evaluation question(s), evaluation instruments, consumer satisfaction, subject outcomes, program outcomes, clinical and social significance of outcomes, follow-up data, and third party reviews.

6. *Synthesis.* The synthesis section should summarize the program, identify implementation issues, and discuss future trends. The information appropriate to this section may include a review or evaluation of the program's components, relationship to similar projects, critical issues, barriers to implementation, policy and legal issues, and future program goals.

Article Submission

Conditions. The editors assume that when an author submits a manuscript to JEBD for review, the author (a) assures that the manuscript is not being considered concurrently by another journal; (b) has not published a substantial part of the article or the findings elsewhere; (c) is responsible for the accuracy of all statements and findings; (d) agrees that the editor has the right to edit the manuscript as necessary for publication, if accepted (such that content is not changed); (e) will obtain permission, if appropriate, to quote and reproduce material owned by someone else; and (f) assigns all rights for the publication of the manuscript, if accepted for publication, to the *Journal of Emotional and Behavioral Disorders*.

Manuscript preparation. Authors should prepare manuscripts according to the *Publication Manual of the American*

Psychological Association (4th ed.), published in 1994. Copies may be ordered from: Order Department, American Psychological Association, 1200 Seventeenth St., N.W., Washington, DC 20036. There are several changes from the third edition, most of which are summarized on pp. xxvi to xxx of the fourth edition. Some key points are worth emphasizing:

1. *Typing* (APA, chap. 4). Double-space between all lines of the manuscript, including headings, quotations, references, figure legends, and all parts of tables.

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6. *Citations and references* (APA, Secs. 1.13 and 3.94 to 3.123). The style and punctuation of references should conform to APA requirements.

Additionally, please use "person-first" descriptions: for example, "adolescent with emotional and behavioral disorders" rather than "emotionally and behaviorally disordered adolescent."

Procedures for editorial consideration. The author should send *five* clear, easily read copies of the manuscript to either editor of JEBD:

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Receipt of the manuscript will be acknowledged by mail. Each submitted manuscript is initially screened by an editor for appropriateness of content and readability, as well as adherence to the aforementioned format guidelines. A manuscript that meets these screening criteria is sent for blind review to consulting editors or guest evaluators who are experts in the content area or methodology of the manuscript. When reviews are returned, the editor considers reviewers' comments and makes an editorial decision to (a) reject, (b) request a revision that will receive further review by the consulting editors, (c) request a revision that will be reviewed by the editor, or (d) accept as is. The senior author receives copies of reviewers' comments, with no indication of reviewer identity. Reviewers are informed of the disposition of the manuscript and receive copies of reviews, with other reviewers' identities revealed.

C A L E N D A R

November

- November 6-11, 1994
The International Seminar on Women and Disability. Tel Aviv, Israel. Contact: Dr. E. Chigier, Israel Rehabilitation Society, 18 David Elazar St., Tel Aviv, Israel 61909; FAX 9723-6919885
- *November 9-12, 1994
Orton Dyslexia Society, 45th Annual Conference. Los Angeles, California. Contact: The Orton Dyslexia Society, 8600 LaSalle Road, 382 Chester Building, Baltimore, MD 21286-2044; 410/296-0232
- November 10-12, 1994
Sixteenth International Conference of the Council for Learning Disabilities: "Research & Methods-Partners in Effective Teaching." San Diego, California. Contact: Kirsten McBride, CLD, PO Box 40303, Overland Park, KS 66204; 913/492-8755
- November 10-12, 1994
CEC/DDEL Symposium on Culturally/Linguistically Diverse Exceptional Students: "Multiple Voices, Multiple Perspectives." Reston, Virginia. Contact: CEC, 1920 Association Dr., Reston, VA 22091-1589; 800/224-6830
- November 10-12, 1994
Developmental Interventions in Neonatal Care. Washington, DC. Contact: Contemporary Forums, 11900 Silvergate Dr., Suite A, Dublin, CA 94568-2257; 510/828-7100, ext. 3
- November 10-13, 1994
Third International Symposium on Telecommunications in Education. Albuquerque, New Mexico. Contact: Lori Novak, International Society for Technology in Education, 1787 Agate St., Eugene, OR 97403-1923; 503/346-4414
- November 13-18, 1994
International Course on Sexual Counseling for Persons with Chronic Illness or Disability. Tel Aviv, Israel. Contact: Dr. E. Chigier, Israel Rehabilitation Society, 18 David Elazar St., Tel Aviv, Israel 61909; FAX 9723-6919885
- November 15-16, 1994
American Speech-Language-Hearing Association, Annual Conference:

"Research Frontiers in Brain Imaging." New Orleans. Contact: ASHA, Brain Imaging Research Conference, 10801 Rockville Pike, Rockville, MD 20852; 800/638-6868

- November 18-21, 1994
American Speech-Language-Hearing Association, Annual Conference. New Orleans, Louisiana. Contact: Dr. Frances Johnston; 301/897-5700
- November 30-December 3, 1994
Eleventh Annual Conference of the National Association for the Dually Diagnosed. Salt Lake City, Utah. Contact: Elsa C. Kaiser, NADD Conference Office, PO Box 101264, Denver, CO 80250; 303/698-1820 or 800/526-0278
- November 30-December 3, 1994
National Association for the Education of Young Children, Annual Conference. Atlanta, Georgia. Contact: NAEYC; 800/424-2460

December

- December 1-4, 1994
Ninth Annual Training Institute of Zero to Three, National Center for Clinical Infant Programs. Dallas. Contact: Zero to Three, 2000 14th St., North, #380, Arlington, VA 22201-2500; 703/356-8300; FAX 703/790-7237
- December 2, 1994
Sixth Annual Cove Conference on the Educational and Psychological Needs of Students with Learning Disabilities. Winnetka, Illinois. Contact: The Cove School, 520 Glendale Ave., Winnetka, IL 60093; 708/441-9300
- December 8-10, 1994
The Association for Persons with Severe Handicaps, Annual Conference. Atlanta, Georgia. Contact: 206/361-8870

February

- February 3-5, 1995
Bridges in Early Intervention: Building Supportive Relationships for Families, Providers and Communities, sponsored by the Infant Development Association of

California. San Jose, California. Contact: Melissa Bazos; 916/433-6133

- February 23-25, 1995
Midwest Symposium for Leadership in Behavior Disorders. Kansas City, Missouri. Contact: Kirsten McBride, PO Box 40001, Overland Park, KS 66204

March

- March 1-4, 1995
Learning Disabilities Association of America, Annual Conference. Orlando, Florida. Contact: Jean Petersen, LDA, 4156 Library Road, Pittsburgh, PA 15234; 412/341-8077
- March 2-4, 1995
Georgia Council International Reading Association 18th Annual Conference. Atlanta. Contact: Marsha Fisher, 104-C Country Club Dr., Americus, GA 31709
- March 14-18, 1995
Technology and Persons with Disabilities, sponsored by the Center on Disabilities, California State University, Northridge. Los Angeles. Contact: Dr. Harry J. Murphy, Center on Disabilities, California State University, Northridge, 1811 Nordhoff St., Northridge, CA 91330-8340; 818/885-2578; FAX 818/885-4929
- March 16-20, 1995
First East African International Schools Support Services Conference. Dar es Salaam, Tanzania. Contact: Dr. O. Kusuma-Powell, International School of Tanganyika, PO Box 2651, Dar es Salaam, Tanzania, East Africa
- March 29-31, April 1, 1995
The Learning Disabilities Network 13th Conference on Educational Therapy and Learning Disabilities. Dedham, Massachusetts. Contact: The Network, 72 Sharp St., Suite A-2, Hingham, MA 02043; 617/340-5605

April

- April 5-9, 1995
Council for Exceptional Children, Annual Conference. Indianapolis, Indiana. Contact: 800/486-5773

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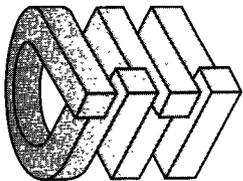
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THE **illusion**
OF
full inclusion



EDITED BY
James M. Kauffman
AND
Daniel P. Hallahan

A Comprehensive Critique of a Current Special Education Bandwagon

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17. **Inclusive Education: Right for Some** • *Bernard Rimland*
18. **Mainstreaming and the Philosophy of Normalization** • *Edward F. Zigler and Nancy Hall*

Appendix: Statements on inclusion by American Council of the Blind, American Federation of Teachers, Children and Adults with Attention Deficit Disorders, Consumer Action Network, Council of Administrators of Special Education, Inc., Council for Exceptional Children, Council for Learning Disabilities, Division for Learning Disabilities of the Council for Exceptional Children, Learning Disabilities Association of America, National Education Association, National Education Association - Council for Exceptional Children - American Association of School Administrators, National Joint Committee on Learning Disabilities, and The Association for Persons with Severe Handicaps.

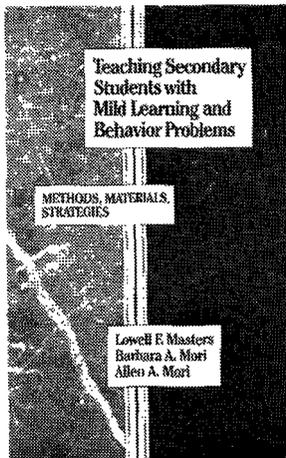
"... an illusion that may trick many into jumping on the bandwagon but is sure to produce disappointment if not outrage in its riders when the juggernaut crushes the students it was supposed to defend."

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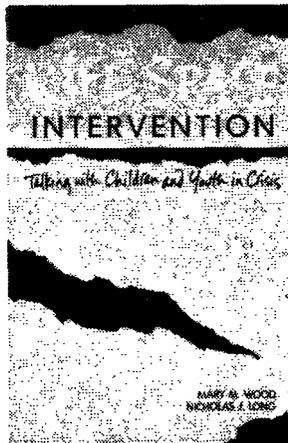
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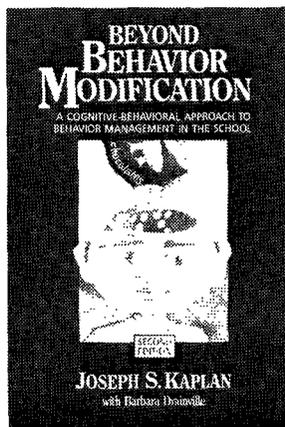
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