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## Effective Community-Based Interventions for Antisocial and Delinquent Adolescents

Adolescents engage in higher rates of antisocial behavior and criminal activity than any other age group (Loeber, Farrington, & Waschbusch, 1998; Office of Technology Assessment, 1991). Although youth between the ages of 15 and 17 years comprised only 4% of the U.S. population in 1996, they accounted for 21% of arrests for burglary, 23% for robbery, 14% for rape, 10% for aggravated assault, 13% for murder, and 12% of total arrests (U.S. Bureau of the Census, 1997). When defined broadly to include minor delinquent acts (e.g., truancy, disobedience, vandalism), antisocial behavior is a common, if transient, occurrence over the normal course of childhood (Elliott, Ageton, Huizinga, Knowles, & Canter, 1983; Elliott, Huizinga, & Morse, 1986). Yet a large proportion of serious crimes is committed by a relatively small group of chronic and violent offenders (Loeber et al., 1998; Office of Technology Assessment, 1991), a substantial minority of whom go on to become adult offenders (Elliott, 1994; Farrington et al., 1990; Moffitt, 1993).

The societal costs of adolescent and adult antisocial behavior are considerable. Victims of violent crime often suffer immediate and long-term physical injury and psychological trauma (Hanson, Kilpatrick, Falsetti, & Resnick, 1995; Kilpatrick, Saunders, Veronen, Best, & Von, 1987; Resnick, Acierno, & Kilpatrick, 1997). The medical and mental health costs to these victims are estimated to exceed \$10 billion annually (Miller, Cohen, & Rossman, 1993). When these costs are combined with estimates of lost productivity and property loss and with intangibles such as pain, suffering, and risk of death, the costs of criminal victimization may exceed \$100 billion annually (Cohen, 1990; Miller, Cohen, & Wiersema, 1996). In addition,

substantial costs are associated with the court processing, incarceration, and monitoring of adolescent offenders during probationary periods. For example, expenditures for operating public and private juvenile correctional facilities is estimated to exceed \$2 billion annually (Office of Technology Assessment, 1991). Thus effective interventions for antisocial youth could yield substantial economic and health benefits to society.

Unfortunately, evidence for the effective treatment of antisocial behavior is ambiguous, with outcomes varying based on the treatment setting, sample characteristics, type of treatment, length of follow-up, and criteria for treatment success (Andrews et al., 1990; Antonowicz & Ross, 1994; Garrett, 1985; Gensheimer, Mayer, Gottschalk, & Davidson, 1986; Gottshalk, Davidson, Mayer, & Gensheimer, 1987; Lipsey, 1992; Mayer, Gensheimer, Davidson, & Gottschalk, 1986; Whitehead & Lab, 1989). Efforts to alter the short- and long-term trajectory of antisocial behavior have, generally, been minimally successful, with the typical treatment yielding only a 10% reduction in adolescent rearrests compared with control conditions (Lipsey, 1992; Lipsey, 1995). Recently, however, several intervention models have provided unambiguous evidence of effectiveness in treating serious antisocial behavior in youth (Elliott, 1998). These approaches appear to share at least two features deemed critical to achieving substantial, long-term reductions in arrest and incarceration rates. First, the treatments address the multiple factors that contribute to and maintain antisocial behavior. Second, they are truly community-based in that antisocial behavior is treated in the real-world contexts in which it occurs.

This chapter discusses these community-based delinquency interventions, as well as evidence for their long-term effectiveness. In addition, the empirical and theoretical underpinnings of these approaches are reviewed, as well as key treatment factors hypothesized as outcome mediators. Particular attention is given to two exemplary interventions, multisystemic therapy (MST; Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998) and functional family therapy (FFT; Alexander & Parsons, 1982), which have been described as “model” programs for violence prevention (Elliott, 1998) and which are considered among the most cost-effective approaches to crime reduction (Washington State Institute for Public Policy, 1998). First, however, the literature on the determinants of antisocial behavior is briefly reviewed to provide background on the complex array of factors that effective treatments must address.

### Determinants of Antisocial and Delinquent Behavior

Antisocial behavior in adolescence is multidetermined by the reciprocal interplay among individual child characteristics and various features of the social ecology in which the youth is embedded (Dodge, 1993; Henggeler, 1991). The most prominent individual risk factors for antisocial behavior include early aggressive behavior, poor impulse control, antisocial attitudes, and deficient social perspective-taking (Hawkins et al., 1998; Lipsey & Derzon, 1998). Larger contextual predictors of antisocial behavior include early school difficulties, affiliation with deviant peers, and family management and interaction difficulties (Hawkins et al., 1998; Lipsey & Derzon, 1998). When these factors are considered in the context of “causal” model-

ing studies of antisocial behavior (Dishion, Patterson, & Kavanagh, 1992; Elliott, 1994; Elliott, Huizinga, & Ageton, 1985; LaGrange & White, 1985; Patterson, Capaldi, & Bank, 1991; Patterson & Dishion, 1985; Simcha-Fagan & Schwartz, 1986), several key patterns emerge. First, affiliation with deviant peers is nearly always a substantial, direct predictor of antisocial behavior. Second, family and parenting factors are linked directly to antisocial behavior, but also indirectly through their contribution to delinquent peer affiliation. Finally, school, neighborhood, and other community factors appear to exert their influence on delinquent behavior indirectly through their influences on family and peer factors.

Adding to this complexity are important developmental components that may exacerbate or attenuate the effects of these etiological factors. For example, age and developmental level may moderate the impact of certain contextual risks such as deviant peer affiliation (LaGrange & White, 1985; Patterson et al., 1991). Furthermore, differential patterns of prediction appear to exist for subclasses of delinquent behavior, including early versus late starters (Patterson et al., 1991) and aggressive versus nonaggressive versus substance-abusing offenders (Loeber, 1990).

Overall, findings from the extensive correlational and longitudinal literature strongly suggest that interventions that narrowly target only one or a few of the known risk factors for antisocial behavior will likely show limited effectiveness. Conversely, the findings suggest that complex, multifaceted interventions that are individualized and that address the multiple systems in which the delinquent youth is embedded should prove effective. Indeed, the model programs outlined next share such noteworthy characteristics.

## Model Program Descriptions and Evidence for Effectiveness

### *Multisystemic Therapy (MST)*

MST is a family-centered, home-based intervention that targets the multiple systems in which the antisocial youth is embedded. MST adopts Bronfenbrenner's social-ecological model of human development (Bronfenbrenner, 1979), which suggests that behavior problems are linked with the reciprocal interplay among individual child characteristics and various aspects of the youth's social ecology (Henggeler, Mihalic, Rone, Thomas, & Timmons-Mitchell, 1998; Henggeler, Schoenwald, et al., 1998). The social-ecological perspective is consistent with findings regarding the determinants of antisocial behavior, as well as with family systems conceptualizations of behavior (Minuchin, 1974). Thus MST therapists intervene primarily at the family level by (1) empowering caregivers with the skills they need to communicate with, monitor, and discipline the target youth effectively, (2) assisting caregivers in engaging the youth in prosocial activities while disengaging the youth from deviant peers, and (3) addressing existing individual and systemic barriers to effective parenting. To achieve these ends, MST is delivered within the family's natural environment (e.g., home, school, community) by therapists trained in the use of a variety of empirically supported techniques (Henggeler, Schoenwald, et al., 1998). In addition, MST therapists are guided by a set of nine principles which offer general guidelines that direct case conceptualization, treatment specification, and

prioritization of specific interventions (Henggeler, Schoenwald, et al., 1998). MST is intensive (contact is daily when necessary) yet time-limited (services range from three to six months), requiring that therapist caseloads be fairly low compared with traditional services (caseloads range from four to six families).

To date, results from several randomized clinical trials demonstrate the long-term effectiveness of MST in reducing arrest rates, offense severity, and days incarcerated relative to control conditions. Three trials were conducted with violent and chronic juvenile offenders (Borduin et al., 1995; Henggeler, Melton, Brondino, Scherer, & Hanley, 1997; Henggeler, Melton, & Smith, 1992; Henggeler, Melton, Smith, Schoenwald, & Hanley, 1993), one with substance-abusing offenders (Henggeler, Pickrel, & Brondino, 1999), and one with a small sample of adolescent sexual offenders (Borduin, Henggeler, Blaske, & Stein, 1990). Compared with usual services or individual therapy, MST has reduced long-term arrests by as much as 63% and has reduced days incarcerated by as much as 64%. In addition, the effects of MST do not appear to be moderated by demographic characteristics (i.e., age, ethnicity, social class, arrest and incarceration history) or by preexisting problems in family, peer, or individual functioning (Borduin et al., 1995; Henggeler et al., 1992), indicating that MST is equally effective with youth and families from diverse backgrounds (Brondino et al., 1997).

### *Functional Family Therapy*

FFT is a relatively brief, family-focused intervention representing an integration of family systems perspectives and behavioral strategies (Alexander et al., 1998). FFT proceeds through five sequential phases that involve (1) engaging families, (2) motivating families, (3) reducing risk factors while promoting protective factors, (4) developing concrete plans of action and implementing the plans while constantly monitoring process and outcome, and finally (5) “enhance[ing] the family’s ability to impact multiple systems in which the family is embedded . . . , mobiliz[ing] community support systems (e.g., recovery services, nurse visitation) and modify [ing] deteriorated family-system relationships (e.g., with school, probation officers)” (Alexander et al., 1998, p. 13).

Initial validation trials demonstrated that FFT could reduce reoffending by as much as 60%, relative to control groups (Alexander, Barton, Schiavo, & Parsons, 1976; Alexander & Parsons, 1973; Klein, Alexander, & Parsons, 1977). However, these early trials possessed several characteristics that limited the potential generalizability of FFT. For example, this early version of FFT was very time-limited (10–12 sessions) and was conducted in university-based clinics. Furthermore, target youth were typically from White, middle-class, Mormon families and had committed “soft” delinquency offenses.

Subsequent replications of FFT, however, have been conducted by several teams of investigators with samples diverse in terms of cultural background, socioeconomic status, severity of offense, and locus of treatment delivery. For example, Barton and colleagues (Barton, Alexander, Waldron, Turner, & Warburton, 1985) provided home-based FFT to serious offenders, supplemented with job training and placement and school placement. At a 15-month follow-up, this intervention resulted

in significantly lower rates of rearrest when compared with a matched control condition. Similarly, Gordon and colleagues (Gordon, Arbuthnot, Gustafson, & McGreen, 1988) conducted a quasi-experimental trial with lower-income, rural, court-referred delinquents with a range of previous status offenses, misdemeanors, and felonies. After an average of 25 contact hours, FFT resulted in reduced recidivism for delinquent males and females. In addition, they found FFT to be effective in reducing recidivism 2½ years posttreatment (Gordon et al., 1988), as well as 5 years later when the youth reached adulthood (Gordon, Graves, & Arbuthnot, 1995). Alexander et al. (1998) summarized the results of 11 published and unpublished clinical trials and found overall that FFT has produced nearly a 35% reduction in rearrest and other out-of-home placements compared with matched or randomly assigned comparison groups. Unfortunately, none of the published outcome studies of FFT conducted with serious offenders have involved random assignment to treatment conditions; thus claims about the effectiveness of FFT with this population should be considered quite promising, but tentative.

### Mechanisms of Change

MST and FFT are also effective in improving functioning in those systems hypothesized to mediate the link between treatment and reductions in antisocial behavior. MST is effective at decreasing peer aggression (Henggeler et al., 1992) and improving school attendance (Brown, Henggeler, Schoenwald, Brondino, & Pickrel, 1999) among delinquent youth. At the family level, both MST and FFT have proven successful at improving several domains of family functioning, including intrafamilial communication and family interaction patterns (Alexander & Barton, 1976; Alexander & Parsons, 1973; Borduin et al., 1995; Henggeler et al., 1986; Parsons & Alexander, 1973), problematic parent-child relations (Brunk, Henggeler, & Whelan, 1987), family adaptability and cohesion (Borduin et al., 1995; Henggeler et al., 1992), and psychiatric symptomatology among caregivers (Borduin et al., 1995). Changes at the family level then appear to be directly linked to changes in youth antisocial behavior (Mann, Borduin, Henggeler, & Blaske, 1990). Furthermore, recent work (Huey, Henggeler, Brondino, & Pickrel, in press) suggests that therapist adherence to the MST protocol contributes indirectly to changes in delinquent behavior by improving family relations (i.e., family functioning, family cohesion, and parent monitoring) and decreasing the youth's affiliation with deviant peers. These findings conform with the "theory of change" advanced by both approaches (Alexander et al., 1998; Henggeler, Mihalic, et al., 1998).

### Key Treatment Features

Successful interventions for antisocial youth share a number of overlapping key features related to treatment focus, breadth, and technique that appear to account for improved outcomes. Designation as a key treatment feature was determined using two primary criteria: (1) the extent to which the component represented a core aspect of the model programs presented, and (2) empirical support for the significance of the component as an outcome determinant. These features are

neither novel nor arcane, as their relevance for the effective treatment of antisocial behavior has been argued by prominent reviewers for nearly two decades (Gendreau, 1996; Gendreau & Ross, 1979; Gendreau & Ross, 1987; Henggeler, 1994; Lipsey, 1992; Lipsey, 1995; McGuire & Priestley, 1995). Neither are these features unique to MST and FFT, although both approaches have been more successful than most at integrating these features within their respective treatment paradigms. With MST, nearly all of these features are encompassed by the nine treatment principles that guide MST interventions (Henggeler, Schoenwald, et al., 1998), whereas with FFT, they are more or less emphasized during distinct phases of treatment (Alexander et al., 1998).

### *Treatment Engagement*

Engagement refers to the process whereby the therapist is perceived as supportive and helpful so that family members actively participate in the treatment process. The practice of actively engaging families in treatment collaboration and building a therapeutic alliance is central to both MST and FFT (Alexander et al., 1998; Henggeler, Schoenwald, et al., 1998) and indeed is an essential element to child and adult psychotherapy more broadly (Horvath & Luborsky, 1993; Shirk & Russell, 1996). Engagement is facilitated by several practices on the part of the therapist and treatment team, including: demonstrating respect for and sensitivity toward family beliefs and practices, acting as an advocate for the family, avoiding blaming the family, avoiding the impulse to impose change on the family rather than collaborating to attain family-defined goals, maintaining a strength focus, and reducing barriers to treatment accessibility (Alexander et al., 1998; Henggeler, Schoenwald, et al., 1998).

In theory, families who are engaged in treatment should be less inclined to terminate prematurely. Recent studies provide evidence that both MST and FFT are more successful than comparison conditions in retaining families. For example, in two recent clinical trials, MST demonstrated treatment completion rates of 98% (Henggeler, Pickrel, Brondino, & Crouch, 1996; Schoenwald, Ward, Henggeler, & Rowland, 2000), whereas 85% of families were retained in the most recent FFT trial (Gordon et al., 1988; Gordon et al., 1995). These rates compare quite favorably with standard levels of attrition found in traditional child mental health settings (Armbruster & Kazdin, 1994; Wierzbicki & Pekarik, 1993).

The links between treatment engagement efforts and caregiver responses to treatment have received some empirical support. For example, Patterson and Forgatch (1985) found that therapist efforts to teach or confront met with resistance by caregivers, whereas efforts to support and facilitate met with increased treatment compliance. Subsequently, families considered to be more resistant had higher rates of dropout and were perceived by therapists as being less successful cases (Chamberlain, Patterson, Reid, Kavanagh, & Forgatch, 1984). Similarly, Alexander and colleagues (Alexander et al., 1976) found that the ratio of supportive to defensive speech acts by clients in family treatment was associated with less frequent premature termination (Alexander et al., 1976). At a more global level, Szapocznik and colleagues (Santisteban et al., 1996; Szapocznik, Kurtines, Santisteban, & Rio, 1990;

Szapocznik et al., 1988) found that Hispanic families assigned to an engagement-enhanced family intervention were more likely to complete treatment than those receiving standard family treatment; however, they found that participation in the engagement-enhanced family intervention was not associated with improved clinical outcomes (Szapocznik et al., 1988). Together, these findings suggest that certain engagement strategies help retain families in treatment, but other methods may be needed to ensure effective treatment outcomes.

### *Focus on Strength*

Social-ecological theories suggest that interventions that require families to make changes that are too discrepant from current family practices are unlikely to be sustainable in the long term (Gallimore, Goldenberg, & Weisner, 1993). Thus interventions should be strength-focused — reinforcing incremental progress toward treatment goals, building on competencies that family members already possess, and utilizing resources indigenous to the family and community. At the most basic level, maintaining a strength focus might involve providing verbal reinforcement for the client's efforts, homework completion, or treatment improvement. More complicated strength-focused interventions might involve enlisting the assistance of other natural agents to act as supports to family members.

With MST, one of the nine treatment principles highlights the importance of emphasizing positives throughout the course of treatment and of utilizing strengths as levers for change (Henggeler, Schoenwald, et al., 1998). Similarly, with FFT, there is a significant focus on the use of child, intrafamilial, and extrafamilial protective factors (e.g., supportive extended family, community resources) to mitigate the effects of risk factors that cannot readily be changed during the course of treatment (e.g., poverty, neighborhood violence; Alexander et al., 1998).

Taking a strength-focused approach is intuitively appealing, and empirical evidence supports its clinical utility. In particular, research suggests that therapy effects can be enhanced with the concurrent involvement of support figures in treatment (e.g., Wadden et al., 1990). For example, Higgins and colleagues (Higgins et al., 1993) found that adult cocaine users were 20 times more likely to achieve nine or more weeks of abstinence when a significant other was recruited to participate in treatment.

### *Intensiveness*

Both MST and FFT are time-limited but intensive interventions. Generally, MST interventions last between three and six months and often occur several times per week. However, daily contact is sometimes required for families with the greatest need, particularly during the initial stages of treatment (Henggeler, Schoenwald, et al., 1998). The importance of MST “dosage” is supported by findings that MST “completers” demonstrate superior outcomes relative to MST “dropouts” (Borduin et al., 1995), a finding that contrasts with the effects of traditional child mental health services (Weisz, Weiss, & Langmeyer, 1987; Weisz, Weiss, & Langmeyer, 1989). Although early FFT clinical trials achieved impressive results treating fami-

lies of “soft” delinquents with one session per week for a total of eight to twelve weeks (Alexander et al., 1976; Klein et al., 1977; Parsons & Alexander, 1973), recent work indicates that serious offenders require more intensive, home-based contact (Gordon et al., 1988).

This emphasis on intensity is consistent with results from several meta-analyses indicating that treatment intensity and duration have a moderate but significant influence on rates of rearrest (Gensheimer et al., 1986; Lipsey, 1992). However, it is important to note that the mere presence of intensive, family-focused services does not guarantee that the intervention will necessarily be of high quality or effective (Fraser, Nelson, & Rivard, 1997; Heneghan, Horwitz, & Levanthal, 1996).

### *Skills-Orientation, Using Behavioral Techniques*

Meta-analytic findings clearly support the clinical efficacy of delinquency interventions that use behavioral or cognitive-behavioral strategies and are skill-oriented (Lipsey, 1992). This finding corresponds with evidence from several broad-based meta-analyses that demonstrate the superiority of behavioral and social learning interventions relative to more insight-oriented approaches for children (Weiss & Weisz, 1995; Weisz & Weiss, 1987; Weisz, Weiss, Han, Granger, & Morton, 1995).<sup>1</sup> MST and FFT succeed, in part, because they adopt intervention strategies that are pragmatic and action-oriented, with the goal of building concrete, generalizable skills in the youth and caregivers. Thus the therapeutic repertoire of MST and FFT therapists often includes a wide range of behavioral strategies, including contingency contracting; the use of reframing, diverting, and interrupting; communication training; and behavioral parent training. In addition, MST therapists must occasionally learn and integrate other empirically supported techniques to address such issues as caregiver depression (cognitive therapy) or drug dependence (community reinforcement approach). Guidelines for implementing these strategies are further specified in treatment manuals for both MST (Henggeler, Schoenwald, et al., 1998) and FFT (Alexander & Parsons, 1982).

### *Individualization and Flexibility*

Interventions for antisocial youth should avoid a uniform “one-size-fits-all” approach by individualizing treatment to match the unique context of the target youth and family. Highly specified but rigidly manualized interventions that treat all antisocial youth as a homogenous group and fail to account for the family’s needs and competencies are likely to prove less effective than more flexible approaches. To properly individualize treatment, both MST and FFT eschew formal assessment (e.g., achievement tests, personality inventories) but emphasize the importance of evaluating the particular factors that contribute directly and indirectly to the target youth’s antisocial behavior (Alexander et al., 1998; Henggeler, Schoenwald, et al., 1998). Thus therapists obtain data from multiple sources within and across the systems in which the youth is embedded (e.g., family members, school personnel, caseworkers, court personnel) to evaluate the “fit” of the problem to the systemic

context (Henggeler, Schoenwald, et al., 1998). The specifics of the intervention will then depend on the therapist's evaluation of the needs and strengths within and between relevant systems. Evidence from the adult psychotherapy literature suggests that "individualized" approaches are at least as effective as highly structured, standardized interventions, but only when the choices of "individualized" therapists are constrained to empirically supported strategies (Emmelkamp, Bouman, & Blaaw, 1994; Schulte, Kunzel, Pepping, & Schulte-Bahrenberg, 1992; Jacobson, Schmalting, Holtzworth-Monroe, Katt, Wood, & Follette, 1989).

### *Comprehensiveness*

Given the pivotal role of primary caregivers and peers in the initiation and maintenance of antisocial behavior (see the preceding discussion), intervention at the family and peer level is of central importance. However, ample evidence suggests that for parents of disruptive and antisocial youth, compliance with therapy is often hampered by a host of factors "secondary" to the target problem, including economic distress, substance use, parent psychopathology, marital discord, and inadequate social support (Dumas & Wahler, 1983; Patterson & Chamberlain, 1988; Wahler, 1980; Wahler, Leske, & Rogers, 1979). If these barriers to treatment are left unaddressed, outcomes may suffer considerably (Patterson & Chamberlain, 1988).

Such barriers often require that therapists provide practical assistance to the family (e.g., transportation, arranging medical appointments, conflict mediation) or work with family members to develop assertion and planning skills to acquire needed resources on their own. In addition, circumstances may require the integration of MST with other empirically supported approaches for treating marital discord, substance dependence, and other potential barriers to caregiver functioning. For example, MST currently utilizes Higgins' community reinforcement approach (Budney & Higgins, 1998) when substance abuse or dependence interferes with the caregiver's ability to parent (Henggeler, Schoenwald, et al., 1998). However, both MST and FFT also target those systems outside the family unit (e.g., school, police) and the family's interactions with those systems (Alexander et al., 1998; Henggeler, Schoenwald, et al., 1998).

### *Promotion of Generalization*

Treatment generalization is addressed by MST and FFT at two levels. First, clinicians focus on helping the family develop skills that extend to all family members and that persist after treatment ends. Second, therapists emphasize the reduction of delinquent behavior and related problems across multiple settings (e.g., home, school, neighborhood). Therapist intervention in extrafamilial systems may be direct, but the ultimate goal is to empower family members to interact effectively with these systems on their own. Generalization is thus facilitated when the therapist collaborates with caregivers in setting treatment goals and in devising and implementing treatment strategies. In addition, the home-based model of service delivery facilitates the generalization and maintenance of treatment gains by (1) encouraging a more valid assessment of the contingencies that contribute to and maintain

antisocial behavior, (2) permitting the therapist to teach and monitor skills in the contexts in which they will actually be used, and (3) facilitating the use of natural reinforcers in the youth's ecology that are likely to be sustained beyond therapy (Gordon et al., 1988; Henggeler, Schoenwald, & Pickrel, 1995).

The long-term outcomes generated by MST (Borduin et al., 1995; Henggeler et al., 1997; Henggeler et al., 1992; Henggeler et al., 1993; Henggeler et al., 1996) and FFT (Barton et al., 1985; Gordon et al., 1988; Gordon et al., 1995; Klein et al., 1977) attest to the temporal generalizability of both treatments. Furthermore, in clinical trials that focused primarily on reducing antisocial behavior and rearrests, MST also had a secondary influence on drug use and abuse, drug-related arrests (Henggeler et al., 1991; Henggeler, Pickrel, et al., 1999), sexual offending (Borduin et al., 1990), and out-of-home placements (Henggeler et al., 1997; Henggeler et al., 1992; Henggeler, Rowland, et al., 1999; Henggeler, Pickrel, et al., 1999). Finally, compared with a control condition, FFT resulted in significantly lower rates of juvenile court involvement for the siblings of target youth (Klein et al., 1977), suggesting a generalizing effect beyond that of the intervention target.

### *Monitoring and Maintaining Treatment Fidelity*

Meta-analytic and narrative reviews indicate that researcher involvement in the design and implementation of treatment, appropriate training of therapists, and monitoring of therapist fidelity are linked with favorable treatment outcomes for delinquent youth (Gendreau, 1996; Gensheimer et al., 1986; Lipsey, 1996). Yet treatment fidelity is often ignored as a relevant factor in the psychotherapy literature, representing one of the greatest threats to the internal validity of a treatment outcome study (Moncher & Prinz, 1991). In a broad meta-analysis of child and adolescent psychotherapy research, Kazdin, Bass, Ayers, and Rodgers (1990) found that only 19% of published studies monitored or evaluated treatment integrity. Similarly, Gensheimer et al. (1986) showed that over 40% of diversion programs for juvenile youth measured program implementation in some fashion, but that only 25% provided any evidence of deviations from the protocol or unplanned treatment variation. Both findings suggest that "weak" treatments with poor integrity may predominate in the child and family treatment literature, thereby compromising the practical utility of promising treatment approaches (Yeaton & Sechrest, 1981).

MST and FFT both include explicit protocols for monitoring and maintaining implementation fidelity (Alexander et al., 1998; Henggeler, Mihalic, et al., 1998). For both, therapist sessions are frequently audiorecorded and the tapes used to provide feedback and recommendations during supervision. Not surprisingly, Henggeler and colleagues found that therapist fidelity to the MST treatment principles was both a direct and indirect contributor to reduced rates of delinquent behavior, rearrests, and incarceration among juvenile offenders (Henggeler et al., 1997; Henggeler, Pickrel, et al., 1999; Huey et al., in press). Similarly, Alexander et al. (1976) found that treatment effectiveness was influenced by the structuring and relationship skills of therapists.

## Other Promising Approaches

### *Other Comprehensive Approaches*

Several additional interventions have demonstrated their effectiveness by addressing the multiple determinants of antisocial behavior. For example, Davidson's Community-Based Diversion Project (Davidson et al., 1977; Davidson, Redner, Blakely, Mitchell, & Emshoff, 1987) appears to possess many of the hallmarks of the exemplary approaches presented previously (e.g., being intensive, treatment in the youth's ecology, being strength-focused, using behavioral strategies) and has achieved substantial reductions in rearrests at follow-up relative to court-referred controls. However, several findings lead to some questions about its general application in the field. First, in the most recent clinical trial, an insight-oriented relationship therapy performed as well as community-based diversion (Davidson et al., 1987). Second, the only published replication to date by an independent investigator yielded no effects on recidivism (Emshoff & Blakely, 1983). Finally, no trials have been conducted under "real-world" conditions (e.g., using professional therapists).

The Youth Services Program (Collingwood & Genthner, 1980) and vocationally oriented psychotherapy (Shore & Massimo, 1966; Shore & Massimo, 1979) also targeted multiple risk factors and demonstrated substantial reductions in recidivism relative to controls. However, the effects of neither model have been replicated, and the published evaluations of both approaches have serious methodological problems (e.g., quasi-experimental design, small sample).

### *Vocational Interventions*

Lipsey's meta-analysis revealed a seemingly paradoxical finding regarding the effectiveness of vocational interventions: whereas "employment-related" approaches are among the most effective interventions for delinquent youth, "vocational programs" are among the least effective (Lipsey, 1992; Lipsey, 1995; Lipsey & Wilson, 1998). This discrepancy is clarified when the key terms are defined — "vocational programs" usually provided training only, whereas "employment-related" programs provided work to the youth, often in addition to other relevant services. This finding complements an argument made by Shore (1972) that effective vocational interventions for youth need to be meaningful and challenging, while providing them with concrete opportunities. Indeed, when implemented in a comprehensive manner (e.g., education, training, placement in desirable or well-paying jobs), vocational interventions appear to be quite effective in reducing delinquent behavior (Odell, 1974; Shore & Massimo, 1966; Shore & Massimo, 1979; Walter & Mills, 1980). By providing quality training and access to a good job, a vocational intervention might significantly alter the youth's social ecology by exposing him or her to prosocial peers and by providing skills and resources necessary to enter the "opportunity structure" (Cloward & Ohlin, 1960). Conversely, vocational interventions that are loosely conceptualized or poorly implemented (e.g., group training with other delinquents, no job provision, undesirable or temporary jobs) appear to have a neutral or negative effect (Hackler, 1966; Johnson & Goldberg, 1983).

### What Does Not Work?

Ample evidence shows that several broad categories of intervention do not reduce recidivism and in some cases may intensify the breadth and frequency of delinquent behavior.

#### *Treating Antisocial Youth in Aggregate*

Although peer group interventions for the prevention and treatment of antisocial behavior have proven quite popular, group approaches may have the unintended consequence of intensifying delinquent behavior in some youth (Dishion & Andrews, 1995; Fo & O'Donnell, 1975; Gottfredson, 1987; Hackler & Hagan, 1975; O'Donnell, Lydgate, & Fo, 1979). Although the mechanism for this iatrogenic effect is unclear, several authors have speculated that participation in such groups may facilitate and extend the antisocial youth's deviant social network (Dishion & Andrews, 1995; O'Donnell, 1992). Thus, although group approaches do not necessarily exacerbate antisocial behavior (see e.g., Chandler, 1973) and may be effective in treating less serious disruptive disorders (Hoag & Burlingame, 1997), extant evidence suggests that group interventions with antisocial youth, if implemented, should occur in settings in which prosocial peers predominate (e.g., Feldman, 1992).

#### *Programs with Strong Punitive Elements*

Recently, Lipsey (1992, 1995) demonstrated that deterrence-based programs with predominant punitive elements (e.g., shock incarceration, intense surveillance) resulted in roughly a 25% increase in reoffenses relative to control conditions. Similarly, a recent cost analysis of 16 prominent violence prevention approaches (Washington State Institute for Public Policy, 1998) indicated that boot camps — a favorite among “law and order” politicians — resulted in net financial losses compared with alternative approaches. As McGuire and Priestly (1995) explain, punitive programs often fail, in part because they fulfill few of the criteria necessary for punishment to be an effective mechanism of behavior change (e.g., immediacy, consistency, availability and reinforcement of alternative behaviors).

#### *Traditional Counseling*

Lipsey's meta-analysis found very low effect sizes for diffuse psychological interventions such as traditional counseling and casework (Lipsey, 1992, 1995),<sup>2</sup> suggesting that unstructured or eclectic approaches to treating delinquent youth are generally ineffective. When individual counseling does work, it usually incorporates skills-oriented, behaviorally based strategies (Gendreau, 1996; Reid & Hanrahan, 1981; Sheldon, 1994), although few of these efforts have been successfully replicated.

### Integrating and Adapting Interventions in Real-World Settings

Currently, the vast majority of fiscal resources for addressing the problem of juvenile delinquency are devoted to highly restrictive settings (e.g., incarceration, hospitaliza-

tion) with limited or no evidence supporting their effectiveness over less restrictive settings (Kutash & Rivera, 1994; Lyman & Campbell, 1996). Unfortunately, the effectiveness of traditional outpatient mental health services is also not supported in treating conduct-related or other problems of childhood (Weisz, 1991; Weisz, Bahr, & Donenberg, 1992; Weisz, Donenberg, Han, & Kauneckis, 1995; Weisz, Donenberg, Han, & Weiss, 1995).

In addition to their demonstrated long-term effectiveness in controlled clinical trials, MST and FFT both possess features that make them ideal alternatives to the usual community services. MST and FFT are both cost-effective and ecologically valid and have explicit mechanisms for maintaining treatment fidelity. MST has the strongest record in each of these areas. First, the cost-effectiveness of MST has been verified across several randomized trials by independent reporters (Henggeler et al., 1992; Schoenwald, Ward, Henggeler, Pickrel, & Patel, 1996; Washington State Institute for Public Policy, 1998). Second, ecological validity has been demonstrated in two randomized trials by the application of MST using professional therapists hired by community mental health centers (Henggeler et al., 1997; Henggeler et al., 1992). Finally, because the quality of therapist performance tends to deteriorate in "the field" (see, e.g., Fleischman, 1982; Henggeler et al., 1997), MST has explicit mechanisms for facilitating continued adherence to the MST protocol. To this end, MST is supported by a treatment manual, supervisory manual, and consultation manual which help ensure quality adherence to MST in community settings (Henggeler & Schoenwald, 1998; Henggeler, Schoenwald, et al., 1998; Schoenwald, 1998).

Unfortunately, several important barriers to the dissemination of these effective treatments remain. First, therapists, supervisors, and administrators are rarely held accountable to consumers or payers for outcomes. Reimbursement is based primarily on the provision of services rather than on therapeutic effectiveness, thus offering no assurances that consumers are receiving quality services. These funding mechanisms often support the use of more restrictive services over community-based services (Meyers, 1994). Second, in community settings, therapists are generally free to use whatever strategies they wish, with little attention to treatment integrity and minimal clinical oversight. As noted earlier, therapies that are diffuse and nonbehavioral with minimal fidelity to a prescribed treatment protocol are unlikely to make a difference with delinquent youth. Third, political expediency and public concerns about community safety contribute to the drive for punitive strategies and restrictive mental health services.

Future efforts to reduce such system barriers to the development of effective treatment programs might include providing (1) extensive training of therapists and supervisors in therapies with proven effectiveness in treating antisocial youth, and (2) strong financial and occupational incentives for the provider organization and therapists to provide empirically supported treatments. For example, in a recent MST clinical trial of youth with serious psychiatric problems (Henggeler, Rowland, et al., 1999), therapist pay and job security were tied to maintaining treatment fidelity. In the search to disseminate effective interventions to community settings, MST and FFT stand as models for effectively bridging the gap between research and real-world clinical practice with antisocial youth.

## NOTES

1. See Casey & Berman (1985) for an exception.

2. Lipsey's most recent version of this meta-analysis (Lipsey & Wilson, 1998) shows individual counseling to yield a fairly respectable effect size of .46—much higher than in previous analyses (Lipsey, 1992, 1995). However, further investigation suggests that this discrepancy may result, in part, from Lipsey's unique coding convention. For example, one of the eight treatments (Borduin et al., 1990) coded as individual counseling by Lipsey was actually multisystemic therapy!

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