Annotation: Strategies for Helping Families with Conduct Disordered Children

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Introduction and Nature of the Problem

Child conduct disorders are increasingly prevalent, with far reaching effects. As used in this paper, the term "conduct disorder" refers to children who exhibit a persistent pattern of antisocial behavior, where there is significant impairment in everyday functioning at home or school, or when the child's behaviors are considered unmanageable by parents or teachers. Such children typically exhibit a broad range of antisocial behaviors at an abnormal rate (i.e. lying, cheating, stealing, hitting, oppositional behaviors and non-compliance to parental requests). The prevalence of the disorder as a clinical dysfunction suggests that 4–10% of children in Britain and the U.S. meet the criteria for the disorder (Institute of Medicine, 1989; Rutter, Cox, Tupling, Berger & Yule, 1975). Estimates also have indicated that child conduct disorders encompass from one-third to one-half of all child and adolescent clinic referrals (Herbert, 1987b; Robins, 1981). Moreover, the prevalence of these disorders is increasing, creating a need for service that far exceeds available personnel and resources. Recent projections suggest that fewer than 10% of children who need mental health services actually receive them (Hobbs, 1982).

The need to help families with conduct disordered children is particularly urgent in view of the fact that these "aggressive" children are at increased risk of being rejected by their peers (Coie, 1990a) and/or abused by their parents (Reid, Taplin & Loeber, 1981). They are also at risk of developing problems later in life, such as school drop out, alcoholism, drug abuse, juvenile delinquency, adult crime, antisocial personality, marital disruption, interpersonal problems and poor physical health (Kazdin, 1985). Research has indicated that a high rate of childhood aggression, even in children as young as age 3, is fairly stable over time (Robins, 1981). This contrasts with other childhood disorders (e.g. fears) that are age-specific and usually remit over the course of development. Thus, in the absence of treatment, the long-term outlook for conduct disordered children is poor. Moreover, this psychological disorder is probably one of the most costly to society (Robins, 1981) because such a large

proportion of antisocial children remain circulating through the revolving door of mental health agencies and criminal justice systems.

   The purpose of this paper is to discuss several prominent treatment strategies and therapies for helping families with conduct disordered children. The intervention programs were selected on the basis of their focus on preadolescent children, their widely available, detailed descriptions of training procedures, and their extensive evaluation of both the short-term and long-term effectiveness of therapy. The reason for highlighting interventions with younger preschool and school-aged children (as opposed to adolescents) is that the emerging research suggests that ''early starters'' of antisocial behavior are at significantly greater risk than later starters, both for chronic offending during adolescence and for careers as antisocial adults (Patterson, DeBaryshe & Ramsey, 1989). Because of the plethora of therapies that have emerged to deal with the problem of child conduct disorders (see Kazdin, 1985; Herbert, 1987a), it was not possible in this discussion to provide a comprehensive review; rather, several American intervention programs are highlighted because of their extensive evaluative studies. However, it is also important to note the international efforts being directed towards the problem of conduct disordered children, for example, in countries such as Great Britain (Herbert, 1987b), Ireland (McAuley, 1982), Canada (Wahler & Dumas, 1986) and Australia (Dadds, Schwartz & Sanders, 1987).

Parent Training Programs

Coercive family model

   One of the major strategies that has been followed in attempting to reduce conduct disorders among children involves training the parents to alter the reinforcement contingencies that support the antisocial behavior of children. The rationale for this approach is supplied by research indicating that parents of conduct disordered children lack certain fundamental parenting skills. For example, parents of conduct disordered children have been reported to exhibit fewer positive behaviors, to be more violent and critical in their use of discipline, to be more permissive, to be more likely to fail to monitor their children's behaviors, and to be more likely to reinforce inappropriate behaviors and to ignore or punish prosocial behaviors (e.g. Patterson & Stouthamer-Loeber, 1984; Webster-Stratton, 1985a,b). Patterson (1982, 1986) has presented pioneering causal modeling work regarding the family socialization processes which underlie the development and maintenance of conduct disordered behaviors. He has developed the ''coercive hypothesis'', based on a social learning interaction model, which postulates that children learn to escape or avoid parental criticism by escalating their negative behaviors which, in turn, leads to increasingly aversive parent interactions. As this coercive training in a family continues over time, the rate and intensity of parent and child aggressive behaviors are increased. Thus, both the parents and children are caught in the ''negative reinforcement trap'', shown by Patterson (1980) to be one of the most powerful processes contributing to child conduct disorders. Moreover, as the child observes his parents increasingly engaged in angry and negative responses, he or she receives the opportunity for further modeling and learning of aggression. Finally, Wahler's (1976) early research showed how the coercive cycle

can also be fostered by positive reinforcement, that is, parental attention positively reinforces the child's misbehaviors so that parents and children are victims of the "positive reinforcement trap". Following this theory, which posits the primacy of parents in the development of conduct disorders, intervention approaches have been aimed directly at treating the aggressive child's parents. Usually the therapist does not directly intervene with the child.

Description of the programs

Many parent training programs have been developed which focus on teaching parents how to change the interpersonal antecedents and consequences that are eliciting and maintaining the child's negative behaviors. The most influential parent training program was developed by Patterson, Reid and colleagues at the Oregon Social Learning Center (Patterson, 1982; Patterson, Reid, Jones & Conger, 1975). Spanning two decades of research with more than 200 families, their work provides an exemplary model for outcome research with conduct disordered children. Their parent training program was originally developed for preadolescent children, aged 3–12 years, who were engaged in overt conduct disorders. The program starts with parents reading a programmed teaching text and completing a test on the reading material. After completion of this test, parents are taught a step-by-step approach wherein each newly learned skill forms the foundation for the next new skill to be learned. Five family management practices form the core components of the program. First, parents are taught how to pinpoint and record the problem behaviors at home (e.g. recording compliance versus non-compliance). Second, they are taught reinforcement techniques (e.g. praise, point systems, etc.) and third, discipline procedures. When parents see their children behaving inappropriately, they learn to apply procedures such as "Time-Out" or a short-term removal of privileges (e.g. 1 hour loss of bike use). Fourth, they are taught to "monitor"—that is, to provide close supervision for their children even when the children are away from home. This involves parents knowing where their children are at all times, what they are doing and when they will be home. In the final phase of treatment, parents are taught problem-solving and negotiation strategies and become increasingly responsible for designing their own programs. The program typically requires 20 hours of direct contact with individual families and includes home visits in order to foster generalization of parenting strategies. This program has also been modified for use with delinquent adolescents. Modifications include targeting behaviors believed to put the adolescent at risk of further delinquency (e.g. curfew violations, drug use, time with "bad" companions); emphasizing the importance of parental monitoring and supervision; use of punishment procedures such as chores and restriction of free time, and greater involvement of the adolescent in treatment sessions, especially regarding the development of behavioral contracts with parents.

A second important parent training program was designed to treat non-compliance in young children, aged 3–8 years. Originally developed by Hanf & Kling (1973), the program was later modified and evaluated by Forehand and McMahon (1981). As presented by Forehand and McMahon (1981), the content of the first phase of this comprehensive parent training program includes teaching parents how to play

with their children in a non-directive way and how to identify and reward children's prosocial behaviors through praise and attention. Phase Two of the program includes teaching parents ways to give effective commands and how to use Time-Out for non-compliance. The program is conducted in a clinic setting with individual families rather than groups. Treatment occurs in a playroom equipped with one-way mirrors for observation; intervention methods involve role-playing and "bug-in-the-ear" devices through which the therapist can directly coach or prompt the parent while playing with the child. Progression to each new skill in the treatment program is governed by the parents' ability to achieve an acceptable degree of competence in a particular skill.

A third example of a comprehensive and extensively evaluated parent training program for young conduct disordered children was developed by Webster-Stratton (1981a,b, 1982a,b, 1984). The content of this program, which was designed for parents with children aged 3–8 years, includes components of the programs by Hanf and Kling (1973), Forehand and McMahon (1981) and Patterson (1982) as outlined above, as well as problem-solving and communication skills (D'Zurilla & Nezu, 1982; Spivack, Platt & Shure, 1976). What is unique about this program of research is its concern with developing the most effective methods of training parents—that is, methods that are cost-effective, widely applicable and sustained. Based on Bandura's (1977) modeling theory, the program utilizes videotape modeling methods. Efforts are made to promote the modeling effects for parents by creating positive feelings about the models shown on the videotapes. For example, the videotapes show models of differing sexes, ages, cultures, socioeconomic backgrounds and temperaments, so that parents will perceive the models as similar to themselves and their children. In addition, great efforts were made in the original development of the videotapes to show parent models in natural situations (unrehearsed) with their children "doing it right" and "doing it wrong". While there are more examples of positive parent–child interactions than negative, the intent in showing negative or ambivalent examples is to demystify the notion that there is "perfect parenting" and to illustrate how one can learn from one's mistakes.

The basic parent training program includes a series of 10 videotape programs of modeled parenting skills (250 vignettes, each of which lasts approximately 1–2 minutes) which are shown by a therapist to groups of parents (8–12 parents per group). After each vignette, the therapist leads a group discussion of the relevant interactions and encourages parents' ideas and problem-solving as well as role-playing and rehearsal. The program has also been given to over 80 parents of conduct disordered children as a completely self-administered intervention—that is, the parents complete the videotape programs and homework assignments without therapist feedback or group support. Recently an advanced videotape program (ADVANCE) based on six videotape programs has been developed to focus on family issues other than parent skills, such as anger management, coping with depression, marital communication skills, problem-solving strategies, and how to teach children to problem-solve and manage their anger more effectively. In both these programs, the children do not attend the therapy sessions, although parents are given homework exercises to practice various skills with their children at home.

Program evaluation

Each of these three parent training programs has been extensively evaluated. Results

are highly promising. The success of short-term treatment outcome has been verified by significant changes in parents' and children's behavior and in parental perceptions of child adjustment (e.g. McMahon & Forehand, 1984; Patterson, Cobb & Ray, 1973; Spitzer, Webster-Stratton & Hollinsworth, 1991; Webster-Stratton, 1981b, 1982a, 1984; Webster-Stratton, Kolpacoff & Hollinsworth, 1988). Home observations have indicated that parents are successful in reducing children's levels of aggression by 20–60% (Patterson, 1982; Webster-Stratton, 1985c). Generalization of improvements from the clinic to the home (e.g. Patterson & Fleischman, 1979; Peed, Roberts & Forehand, 1977; Webster-Stratton, 1984), over reasonable follow-up periods (1–4 years), has been demonstrated by all three programs, as has generalization to untreated child behaviors (e.g. Arnold, Levine & Patterson, 1975; Fleischman, 1981; Forehand & Long, 1986; Webster-Stratton, 1982b, 1990a,b). However, studies which assessed generalization of child behaviors from the clinic to the school were less consistent. Two studies of the Forehand and McMahon (1981) program did not show generalization to the school (Breiner & Forehand, 1981; Forehand et al., 1979). The Webster-Stratton (1982a) program reported significant improvements in teacher reports of child adjustment immediately post-treatment, but a year later these were not maintained. All the programs have had reports of high parental ratings of acceptability and consumer satisfaction (Cross Calvert & McMahon, 1987; McMahon & Forehand, 1984; Webster-Stratton, 1989b).

In regard to comparison studies, changes resulting from Patterson's parent treatment approach have been shown to be superior to family-based psychotherapy, attention-placebo (discussion) and no-treatment conditions (Patterson, Chamberlain & Reid, 1982). Changes from Forehand and McMahon's (1981) program have been shown to be more effective than a family systems therapy (Wells & Egan, 1988), and a group version of the program was more effective than a parent discussion group based on the Systematic Training for Effective Parenting (STEP) program (Baum, Reyna McGlone & Ollendick, 1986; Dinkmeyer & McKay, 1976). Webster-Stratton's program has been replicated with several different populations and has been found to be superior to a waiting-list control condition (Webster-Stratton, 1981a, 1982b, 1984). In addition, the therapist-led group discussion videotape modeling method (GDVM) has been shown to be equally good if not more effective than a parent training method based on the highly individualized "bug-in-the-ear" approach, a parent group discussion approach (without videotape modeling methods) or a completely self-administered videotape modeling approach (without therapist feedback or group discussion) (Webster-Stratton et al., 1988; Webster-Stratton, Kolpacoff & Hollinsworth, 1989). This component analysis of the GDVM parent training methods suggests that parent training methods based on videotape modeling plus parent group discussion and support will produce more sustained and long-term effects than programs which do not use videotape modeling or group discussion methods. Moreover, the group approach represents a cost-effective alternative to the conventional parent training format of individual therapy with a single family.

Factors contributing to outcome

Despite the general overall sucess of these programs in producing ''statistically

significant'' changes in parent and child behaviors, there is also evidence that some families do not respond to treatment; these children continue to have ''clinically significant'' behavior problems after treatment. If the criteria for treatment response is defined as the extent to which parents and teachers report children's adjustment within normal or the non-clinical range of functioning (Jacobsen, Follette & Revenstorf, 1984), then the results of these interventions look less robust. Long-term follow-up studies suggest that 30–40% of treated parents and 25% of teachers report children to have behavior problems in the deviant or clinical range (Forehand, Furey & McMahon, 1984; Schmaling & Jacobson, 1987; Webster-Stratton, 1990a,b). Parent and family characteristics such as marital distress, spouse abuse, lack of a supportive partner, maternal depression, poor problem-solving skills, and high life stress are associated with fewer treatment gains (e.g. Forehand *et al.*, 1984; Forgatch, 1989; Webster-Stratton, 1985d,e, 1989b, 1990b,d; Webster-Stratton & Hammond, 1988). Moreover, families with socioeconomic disadvantages and a lack of social support for the mother outside the home are less likely to maintain treatment effects (Wahler, 1980; Wahler & Dumas, 1984).

In view of the limited success of parenting programs with some families, investigators have begun to strengthen treatment effects by lengthening the interventions, offering ongoing ''booster shot'' training, and adding other therapy components to the parent training programs such as problem-solving, marital communication and anger management skills. Very few studies have been conducted to investigate the potential contribution of other therapy components to the standard parent training treatment approach. Those that have incorporated adjuncts have generally supported the short-term efficacy of these additional procedures over and above basic parent training (Dadds *et al.*, 1987; Griest *et al.*, 1982). However, these studies have been limited by small sample size, lack of long-term follow-up data and non-specific measures to evaluate the effectiveness of the added treatment components. A comparative study is currently in progress at the University of Washington to assess the effects of adding the family treatment (ADVANCE) to their basic parent training program.

Child Training Programs

Cognitive and social skills deficit model

Parallel to the research on parent training as a treatment strategy for conduct disordered children has been another body of research on child social skills training for peer-rejected children. The concern for intervening with this group arose from accumulating evidence that peer rejection, like childhood aggression, was stable over time (Cole & Dodge, 1983) and predictive of continued social problems, poor school adjustment, loneliness, juvenile delinquency and poor adult mental health (Ladd & Asher, 1985). The rationale for a social skills training approach with conduct disordered children is provided by the research suggesting that such children may have a fundamental deficit in at least some aspect of their behavioral, affective and cognitive dimensions. Research has indicated that conduct disordered children are not only aggressive in the family context but are also less competent socially and more likely

to be rejected by peers than are other non-aggressive children (Coie, 1990a; Loeber & Dishion, 1983; Ladd, 1983). In fact, there appears to be considerable overlap between peer-rejected children and conduct disordered children. Two studies have suggested that negative behaviors may be the "driving force" leading to peer rejection (Coie & Kupersmidt, 1983; Dodge, 1983). Both studies found that boys who became rejected in newly formed groups were those who showed initial high rates of aggression, hostile verbalizations and disruptive behavior. Other studies have suggested that conduct disordered children are more impulsive, more likely to have difficulty solving social problems (Rubin & Krasnor, 1983), more likely to misattribute hostile intentions to others (Dodge, 1985) and are less empathic than their non-aggressive peers (Ellis, 1982). This theory suggesting that conduct disordered children lack the critical cognitive and social behavioral skills needed for positive interactions has been termed the "deficit hypothesis" by Asher and Renshaw (1981); it implies an intervention approach aimed directly at the child.

Description of programs

A variety of child training programs have been developed. There have been two basic types of child skills training approaches. The first approach attempts to train the child in *target social behaviors* based on the hypothesized social skills deficit. Such programs coach children in positive social skills such as play skills, friendship and conversational skills (e.g. Gresham & Nagle, 1980; Ladd & Asher, 1985; LaGreca & Santogrossi, 1980; Minken *et al.,* 1976; Mize & Ladd, 1990; Spence, 1983), academic and social interaction training (Coie & Krehbiel, 1984), and behavioral control strategies (Bierman, Miller & Stabb, 1987). Some of these programs have targeted a few specific skills such as conversational skills (Bierman & Furman, 1984; Ladd, 1981) or game skills (Oden & Asher, 1977), while other programs have focused on a wider variety of skills, such as LaGreca and Santogrossi's (1980) program which targets eight behaviors (including smiling, greeting, joining, inviting, conversing, sharing, cooperating, complimenting and grooming). The second type of child training approach relies on cognitive-behavioral methods and focuses on training children in the *cognitive processes* (e.g. problem-solving, self-control, self-statements) or the affective domain (e.g. empathy training and perspective taking) (Camp & Bash, 1985; Kendall & Braswell, 1985; Lochman, Burch, Curry & Lampron, 1984; Spivack & Shure, 1974). The methods used by both of these approaches usually include verbal instructions and discussions, opportunities to practice the skill with peers, role-playing, games, stories and therapist feedback and reinforcement. Most of these programs are school-based and time-limited (4–12 weeks) and the majority of programs (e.g. Kendall & Braswell, 1985; Spivack *et al.,* 1976) have not specifically focused on children with conduct disorders. Those that did specify this population have tended to intervene with adolescent delinquents rather than young aggressive children.

One of the most thoroughly evaluated and comprehensive cognitive-behavioral approaches to teaching anger control in conduct disordered children, aged 9–12 years, was developed by Lochman and his colleagues in their "Anger Coping Program" (Lochman, Lampon, Gemmer & Harris, 1987; Lochman, Nelson & Sims, 1981). This school-based program consists of 18 group therapy sessions with five children

per group, led by two co-therapists. The content includes teaching interpersonal problem-solving skills, strategies for increasing physiological awareness and learning to use self-talk and self-control during problem situations. The teaching methods include hands-on materials, games and pictures of social problems as well as role-playing and videotape feedback. In addition, the boys set goals and have behavioral contracts, which are monitored daily and reinforced contingently by classroom teachers.

A second promising program, particularly for preadolescents with antisocial behavior problems, was recently developed by Kazdin, Esveldt-Dawson, French and Unis (1987a, b). This Problem-Solving Skills Training (PSST) program was based on the programs developed by Kendall and Braswell (1985) and Spivack *et al.* (1976). The content of this program includes interpersonal problem-solving as well as training in academic tasks. The PSST is individually administered in 20 sessions, each lasting 45 minutes.

Evaluation of programs

A review of this research is only mildly encouraging (Asher & Coie, 1990; Kendall & Braswell, 1985; Rubin & Krasnor, 1983). While very few programs were actually conducted with clinical samples referred because of conduct disorders, there does seem to be evidence that the younger or less mature children and the more aggressive children are relatively unaffected by the existing child social skills training (Asher & Renshaw, 1981; Coie, 1990b; Kendall & Braswell, 1985). Moreover, because few studies have employed direct observational measures of aggression or non-compliance, it is unknown whether those children who do show improvements in cognitive processes, social skills, and sociometric ratings will also show reductions in conduct problems. There has been a failure to show convincingly that improvements in social or cognitive skills in the laboratory or in analog situations generalize to the real world or that the long-term effects of child treatments are maintained (Bierman, 1989).

Cognitive-behavioral programs with preadolescents look somewhat more promising. In one study, Lochman *et al.* (1984) reported that their cognitive-behavioral program was more effective than either goal-setting alone or no treatment in reducing disruptive aggressive off-task behavior in the classroom. The addition of goal-setting to the cognitive intervention resulted in greater reduction in aggressive behavior than did the cognitive intervention alone. The long-term effects of this program remain unknown, however. Studies by Kazdin *et al.* (1987b) have suggested that their PSST program is superior to relationship therapy and attention-placebo control conditions on both parent and teacher ratings of behavior problems at post-treatment and at 1-year follow-up. A second investigation showed similar results when PSST was combined with parent training and compared to placebo control (Kazdin *et al.*, 1987a). However, since there were no observational assessments of behavior in the laboratory, schools or homes, it is unclear what behavior changes occurred and whether they generalized across settings. Finally, few studies have elaborated on the predictors that contribute to the success or failure of social skills programs, except, as noted above, to suggest that the greater the level of child aggression, the less effective the treatment.

Conclusions and Discussion

In this paper I have described a number of promising, carefully controlled, cognitive-social learning-based treatment programs for helping families with relatively young conduct disordered children. Due to space limitations I have not reviewed other types of treatments based on other theoretical models, such as community-based treatments or functional family therapy. Instead I have reviewed the content, methods, and strategies utilized by two broad types of programs, one which is family-focused and aimed at treating the parents, and the other which is child-focused and aimed at treating the child. These two types of program are based on two different etiological models concerning the development and maintenance of conduct disorders: the first implies a parent management skills deficit, the second a child cognitive or social skills deficit. Thus, in a sense these two treatment approaches can be seen as an indirect test of two competing causal models of child conduct disorders.

In summary, this review of the research suggests that parent training programs not only comprise the largest body of research in this area but also have presented the most effective and promising results. However, the data concerning predictors of parent training treatment outcome (response, relapse and failure) have pointed to the need to broaden parent training interventions to include other treatment components for family problems. As a result, new training programs are currently being developed and evaluated which include cognitive-behavioral approaches to the treatment of depression, marital discord, stress, and lack of support in parents with conduct disordered children. It is hypothesized that these expanded programs will improve the programs' effectiveness and long-term effects. Moreover, as a result of this research, the theoretical causal model concerning the development of conduct disorders has been expanded to include consideration of the process by which extrafamilial, intrafamilial and child factors may disrupt parent–child interactions (Patterson, 1986). Nonetheless, while a parent training approach holds much promise for effectively treating conduct disordered children, there is one disadvantage: namely, the possibility that parents will refuse to participate in such programs. Some parents do not participate either because of their own dysfunction or because they do not accept there is a problem or because they have given up and are not motivated to change their behaviors.

On the other hand, cognitive-social skills training has the practical advantage of being made available through school programs to children whose parents are reluctant or unwilling to participate in parent training programs. However, studies to date have presented comparatively less convincing and less potent results. There are several possible reasons for this. The first is that most of the child training studies in recent years have been carried out with older children or adolescents who have already had at least 5–6 years' experience in schools and in relationships with peer groups (Coie & Kupersmidt, 1983; Dodge, 1983). Since the literature suggests that one of the characteristics of the chronic delinquent is that he or she is likely to have shown an onset of aggressive behaviors in the preschool years (Loeber, 1982, 1985), it is highly likely that by the middle grades the aggressive child's negative reputation and rejection by his or her peer group may be well established (Coie, 1990a). This experience with ongoing social rejection in their early social development may make it difficult for

such children, even if they subsequently learn more appropriate social skills, to utilize these skills and change their image (Bierman & Furman, 1984). Intervention at a younger age may be more strategic in terms of helping children develop social competence before these negative behaviors and reputations develop into permanent patterns (Dodge, Pettit, McClaskey & Brown, 1986).

A second possible reason for the lack of effectiveness of the child skills training programs, particularly with younger, aggressive, peer-rejected children, is the fact that the content of most of the traditional programs (with some exceptions such as Lochman's and Kazdin's programs) does not directly address aggression and non-compliance. In fact, direct behavioral prohibitions, or specific consequences for negative behaviors such as Time-Out, are rarely included (Coie & Krehbiel, 1984; Ladd, 1981). Social skills intervention programs should be tailored to the specific needs, problems and age of conduct disordered children.

A third possible reason for the lack of success in social skills training with very young children may be a lack of specific attention to the methods of training young children. At present, it is unclear what methods of treatment are most effective with young children. Nonetheless, research evaluating the effects of television on children suggests that younger children may benefit from a concrete, performance-based model, such as videotape modeling, rather than a cognitive or verbal approach (Singer, 1982; Singer & Singer, 1983). When designing the content and methods of intervention programs for preschoolers versus grade school children, greater attention needs to be paid to developmental differences. For example, imaginary play is highly important in the 3–7 year old age range but less critical at other ages (Connolly & Doyle, 1984). Currently we are investigating the effectiveness of a child training program based heavily on videotape modeling methods as well as role-play, rehearsal, fantasy play and activities for conduct disordered children aged 4–7 years. The content includes empathy training, problem-solving, anger management, friendship skills, communication skills, and academic training (Webster-Stratton, 1991). A final reason for the lack of potency of child social skills training treatment approaches may be the exclusive focus on the child as the locus of change, rather than acknowledging the role parents and families play in the development of social competence.

An integrated approach

Although child or parent focused models each present a distinct set of hypotheses concerning the etiology of conduct disorders and prescribe a correspondingly different approach to intervention, the models are by no means mutually exclusive. Instead they might be considered different factors in a broader and more complex conceptual model of conduct disorders. For example, consider the following model: a child exhibits normal behavior problems (or is temperamentally more "difficult" to start with); the parents (particularly if already under stress because of divorce, low income or lack of support, etc.) respond to the child's problems by being critical and negative, thus inadvertently reinforcing negative behaviors. These behavior problems further accentuate the parents' stress level and critical responses towards the child which, in turn, reinforces the child's negative responses. Next the child's negativism and non-compliance spills over from the home into the school, causing the child to be

rejected by peers. This peer rejection further affects his or her self-esteem and difficulties related to school and inflames the parents' disappointment and anger with him/her. Developmental models such as this one are currently being tested by Patterson and his colleagues. Preliminary investigations support the idea that antisocial behaviors generalize from home to school and social failure (Patterson, Capaldi & Bank, 1991). Nonetheless, regardless of whether one believes the origins of the child's problems to be in the child or the social environment, it is undeniable that these factors are inextricably interconnected; only an integrated approach treating both the child and the family can hope to produce maximal results.

Future directions

Many creative interventions have been developed, offering much hope for effectively treating families with conduct disordered children. Such programs also hold promise for prevention programs that could be offered early to high-risk populations, before the disorder develops in the first place. Future research and intervention programs now need to consider carefully the most strategic timing of the intervention. Most programs have focused on older school-aged children, but the preschool age may be an optimal time to begin intervention with the family, in order to facilitate children's social competence and improve parenting skills. If the problems persist, it may then be useful to involve schools, teachers and peers in the interventions. Second, research and intervention programs need to pay more attention to developing the most appropriate methods for training parents and children. The videotape modeling and group support methods we described in our programs represent one attempt to find more effective and less costly ways of working with families and disseminating information. Third, programs need to select carefully their training content, based on a conceptual model of the factors related to development of conduct disorders. The basic conceptual work of pioneering researchers, such as Patterson (1986), Gottman (1983, 1986), Gottman and Parkhurst (1980), Putallaz (1990) and others (see review by Asher & Coie, 1990), help to delineate the conceptual connections between the parent or child dysfunctions (and deviance from normal) and treatment goals. Finally, the findings concerning families with conduct disordered children have repeatedly suggested this is a chronic problem, often transmitted across generations. Thus, in order for interventions programs to be effective, they need to be perceived not as a short-term "quick fix" but rather in a longitudinal framework involving periodic training and support at various stages throughout the child's and family's development.

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