

*TRANSLATING WHAT WE KNOW ABOUT THE  
CONTEXT OF ANTISOCIAL BEHAVIOR INTO A  
LOWER PREVALENCE OF SUCH BEHAVIOR*

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Although we have identified many variables that affect antisocial behavior, there is no evidence that we have learned how to reduce the incidence of such behavior or the proportion of young people who repeatedly engage in antisocial behavior. It is appropriate, therefore, for behavioral scientists to turn some of their energies to research on reducing the incidence and prevalence of antisocial behavior. Small communities may be a particularly useful social unit in which to conduct experimental research. The interventions to be tested include advocacy and community organizing to influence communities to make validated school and clinical interventions widely available and to assist them in increasing other forms of supervision of young people and social and material support of families. Key components of advocacy and community organizing are suggested, and possibilities for research are described.

DESCRIPTORS: antisocial behavior, advocacy, community organizing, parent skills training, schools

Despite the progress that has been made in identifying and modifying variables that affect antisocial behavior, few would argue that our society has made progress in reducing the incidence of such behavior or the proportion of young people in our society who engage in such behavior. In 1988 our murder rate was higher than that of any industrialized country (Interpol, 1988). The rate at which young people (15 to 19 years old) commit murder rose from 3.6 per 100,000 in 1960 to 11.3 per 100,000 in 1988 (Fuchs & Reklis, 1992). Our rate of reported rapes in 1988 was more than twice the rate for any other industrialized democracy. Our rate of assault was also the highest, and it rose 23% between 1986 and 1990 (Interpol, 1988).

It is ironic that we have such high rates of serious antisocial behavior at the same time that the behavioral sciences are making so much progress in understanding and intervening on

the contextual conditions that contribute to the development of antisocial behavior. As Mayer (1995) documents, there is mounting evidence that antisocial behavior is more likely to develop when parents use harsh and inconsistent discipline, fail to be positively involved with their children, and fail to monitor and set limits on what their children are doing outside the home (Patterson, Reid, & Dishion, 1992). These same parenting practices are associated with the development of other problems including substance use (Biglan, Duncan, Ary, & Smolkowski, in press) and high-risk sexual behavior (Metzler, Noell, Biglan, Ary, & Smolkowski, 1994). Contextual conditions that appear to influence ineffective parenting practices include divorce, poverty, substance abuse, and spousal abuse (Walker, Colvin, & Ramsey, 1994).

School conditions that contribute to the development of antisocial behavior have also been described by Mayer (1995) and by Walker et al. (1994). They include, lack of rule clarity, lack of enforcement of rules and policies, and ineffective instruction.

Nor are we lacking empirically validated interventions that prevent or remediate antisocial behavior. Parenting skills training programs

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have been shown to reduce coercive parenting practices (Webster-Stratton, 1981, 1982; Webster-Stratton, Kolpacoff, & Hollingsworth, 1988) and to improve parental monitoring (Dishion & Andrews, 1995). Family support programs for parents of young children appear to improve parenting practices and prevent problem behavior in school (e.g., Heinicke, 1990). Recent work by Henggeler, Melton, and Smith (1992) suggests that a comprehensive intervention with families that addresses the entire range of contextual conditions that influence family practices and youth behavior can reduce antisocial behavior of serious juvenile offenders. With respect to interventions in schools, Mayer (1995) has described how improvements in school-wide discipline and teaching practices can reduce the incidence of vandalism, increase assignment completion, and decrease the number of school dropouts. Walker et al. (1994) provide an excellent review of the practices needed for schools to prevent or ameliorate aggressive and uncooperative social behavior problems. They include early screening and identification of antisocial behavior patterns, social skills training, effective instruction, and establishment of a school-wide discipline program.

In short, we know a great deal about what can be done, but we have not yet translated our knowledge into widespread changes in the incidence of antisocial behavior or the proportion of children who engage in antisocial behaviors. Indeed, at the same time that our knowledge base has been expanding, the incidence of antisocial behavior is increasing. Walker et al. (1994) cite a study by the National School Boards Association (1993) of 700 school districts that found that 80% of the districts had experienced an increase in school violence during the preceding 5 years.

From a scientific perspective, this situation should not be surprising. It is in the nature of a science to start with the simpler problems and go on to the more complex only when there is a basis for doing so in our understanding of the simpler processes. Before we can reduce the prev-

alence of boys who are likely to assault others, we must understand how to change the likelihood of such behavior in the individual case. I suggest, however, that we now know enough about the variables that influence antisocial behavior and parenting practices to turn some of our energies to research on affecting the incidence and prevalence of antisocial behavior.

#### FOCUSING ON THE INCIDENCE AND PREVALENCE OF ANTISOCIAL BEHAVIOR

We first need to adopt the incidence and prevalence of antisocial behavior as dependent variables. Elsewhere (Biglan, 1995), I have elaborated what research on the incidence and prevalence of behavior might involve. The incidence of a behavior is its frequency in a defined population per unit time. For example, the incidence of assault in a school might be defined as the number of times that anyone is assaulted on school grounds each month. Mayer, Butterworth, Nafpaktitis, and Sulzer-Azaroff (1983) indirectly studied the incidence of vandalism by focusing on the dollar cost of vandalism in the 18 schools in which they worked. Although the cost of vandalism is not a direct measure of the incidence of vandalism, it is presumably a function of the number of incidents of vandalism.

The prevalence of a behavior may be defined as the proportion of people in a defined population who repeatedly engage in a behavior over a given time period. For example, public health researchers often focus on reducing the prevalence of individuals in a community who smoke cigarettes (e.g., Lichtenstein, Nettekoven, & Ockene, 1991). One might deal only with the incidence of antisocial behavior, but both concepts are probably needed. We may be happy to know that the incidence of a problem such as vandalism in a school has been reduced, but given the fact that in the absence of intervention antisocial behavior is highly stable (Walker et al., 1994), we will also want to know whether our interventions are reducing the pro-

portion of young people in the population who tend to engage in these behaviors repeatedly.

A focus on incidence and prevalence is in keeping with a public health perspective. Increasingly, researchers and policy makers in public health have focused on reducing the incidence or prevalence of unhealthy behaviors such as smoking (COMMIT Research Group, 1995a, 1995b) or driving while drunk (e.g., Wittman & Shane, 1988). From the standpoint of public well-being, our ultimate goal must be to lower the incidence of antisocial behavior and the prevalence of people who repeatedly engage in such behavior.

Targeting the incidence or prevalence of antisocial behavior will in no way detract from the importance of careful analysis of the contingencies that influence behavior. Indeed, Mayer's (1995) work provides an excellent example of how an analysis of the effects of setting events and contingencies can be marshaled to bring about changes in the practices of entire schools and, thereby, changes in the incidence of vandalism.

Nor would a focus on incidence and prevalence mean the abandonment of a contextualist philosophy of science in which the goal is to identify variables that predict and influence the phenomenon in question (e.g., Biglan & Hayes, in press; Hayes, 1993; Hayes & Brownstein, 1992; Morris, 1993). Indeed, such an explicit philosophy may ensure that research identifies variables that can be used to affect incidence and prevalence. Without it, there is a risk that research will simply map correlates of incidence or prevalence without pointing to what can be done to affect them (Biglan, 1995).

#### RESEARCH THAT COULD CONTRIBUTE TO REDUCING THE INCIDENCE AND PREVALENCE OF ANTISOCIAL BEHAVIOR

##### *Small Communities as the Optimal Unit for Research*

There are a variety of social units that could be the focus of research on reducing the inci-

dence and prevalence of antisocial behavior. They range from individual schools to whole nations. Comparisons among states and even nations may give clues as to the factors that influence antisocial behavior. For example, international comparisons of the murder rate provide support for the hypothesis that the ready availability of guns in the United States contributes to its high murder rate (Handgun Control Inc., 1995). However, research might best be done in small communities (Biglan, 1995).

It is in small communities that one has some hope of influencing the independent variables that must be affected if communitywide changes in antisocial behavior are going to occur. These include the actions of social service, civic, governmental, religious, and educational organizations. This is not to say that one must study rural communities. Indeed, Mattaini (personal communication, July 22, 1995) is developing a community intervention to reduce antisocial behavior in the Manhattan Valley neighborhood on the Upper West Side of New York City.

There are also strong methodological reasons for focusing on small communities. The cost of measuring incidence and prevalence is lower in small communities than it is in larger social units. So too is the cost of measuring the behaviors of individuals and the actions of organizations that must be targeted in order to affect antisocial behavior.

The design for such research might be a repeated time-series experiment across three or more communities (Biglan, 1995; Fawcett et al., 1994). A communitywide intervention can be implemented in one community, and repeated measures are taken in each of the communities. Measures of antisocial behavior and other problem behavior could be obtained, along with measures of parenting and teaching practices. If the intervention is designed to influence community organizations to adopt new policies and programs to influence youth behavior, repeated measures of community organization practices would also be needed. A more complete discussion of methodological consid-

erations for such research is given in Biglan (1995), and an example of a repeated time-series design across communities is provided by a study that assessed a program to reduce illegal sales of tobacco to young people (Biglan, Henderson, et al., 1995).

#### *Increasing the Prevalence of Validated Practices*

A first step in lowering the prevalence of antisocial behavior might be to increase the provision of validated family and school interventions. As noted above, these interventions include parenting skills training, family support programs, and, in the schools, screening for at-risk children, school-wide discipline procedures, and effective instructional practices, as described by Mayer (1995) and Walker et al. (1994). Thus, one component of a comprehensive community intervention would be an effort to get such programs established and delivered to at-risk children and families.

The key research question would be how schools, social service agencies, and other community organizations can be influenced to adopt and maintain such programs. At present, we know little about the variables that influence organizations to adopt and maintain effective programs, and we have learned, through sometimes bitter experience, that effective programs will not necessarily be adopted (e.g., Engelmann, 1992; Watkins, 1988). Research is needed on whether advocacy and organizing support for validated programs among key organizations and community leaders can increase the adoption and maintenance of such programs. Below, I describe what such community organizing and advocacy might involve and the research that is needed.

#### *Affecting the Larger Context for Parenting Practices*

A community intervention can also address the contextual conditions that undermine effective parenting practices. As noted above, the contextual factors that interfere with effective parenting include marital discord and spousal abuse (Reid & Patterson, 1991), insularity (Du-

mas & Wahler, 1983), poverty and economic hardship (Conger et al., 1992), single parenting (Reid & Patterson, 1991), and conflict with persons outside the family (Dumas, 1986). Some of these factors can be addressed by traditional clinical interventions. However, many are beyond the power of clinical interventions. For example, the ability of a clinician to assist a family in dealing with economic hardships (e.g., job loss) is limited.

It may, however, be possible for community interventions to address some of these factors. There is evidence that communities with greater social connections among residents have less child abuse (Garbarino & Sherman, 1980), lower crime rates, and better child-rearing practices and outcomes (Furstenberg, 1990) even in the context of poverty. It may therefore be possible to ameliorate some of the effects of poverty through efforts to increase community members' social connectedness. Research is needed on how communities can increase these forms of social connectedness and the impact of such social connectedness on child-rearing outcomes. In addition, communities can increase material and social support for families who are confronting economic hardship. They can ensure that its police and social service agencies employ procedures that minimize repeated domestic violence and disputes within neighborhoods. They can increase the degree to which community members volunteer time and resources to assist families.

Thus, our ability to improve the prevalence of effective parenting practices would be enhanced by a greater understanding of how such deleterious family conditions can be ameliorated. At present, we know little about how to assist communities in doing this. Perhaps the first step should involve informing community leaders about the role of the effects of such factors on families and helping them to develop and test strategies for addressing them (e.g., Hawkins & Catalano, 1992). Here too, advocacy and community organizing are essential.

*Other Things Communities Might Do*

Communities can act in loco parentis. If there is a labor shortage in families, such that some children do not receive sufficient support and supervision, it may be in the interests of communities to provide supplemental supervision. We see this happening in the development of latch-key programs. However, supervised recreation for teenagers may also be important. Jones and Offord (1989) found, in a quasi-experimental design, that the provision of supervised recreation that emphasized skill development led to a decrease in antisocial behavior among poor children living in a large low-income housing project.

Other things that communities might do to increase supervision and reinforcement of positive behavior include adult mentoring programs and increasing the degree to which police and other adults are present at the times and places where juvenile crime is likely to occur. Empirical evaluation of the efficacy of such programs is much needed. If their efficacy is shown, we will then have to turn to the question of how to get these programs adopted and maintained.

*Recommendations for Communities*

By way of summary, imagine that a small community had asked a panel of behavioral scientists what could be done to reduce the level of vandalism, assault, harassment, and petty theft that was being committed by its youth. There are a number of things we could recommend with some confidence, including increasing the availability of parent skills training and family support programs, improving school-wide discipline procedures, and ensuring that every child was being effectively taught (as described by Mayer, 1995). Other steps that might be recommended include increasing supervised recreation, increasing the presence of police and other adults at key times and places in the community, and making adult mentors available to youth. We would have to admit that we could not be sure of the impact of the latter steps without

further evaluation. Indeed, we would want to propose an experimental evaluation of the entire package and each of its components.

It seems, however, that our recommendations would be incomplete if they included nothing more than a litany of specific interventions. The recommendations do not address how an interested community could be helped to adopt these steps. Nor do they take advantage of the nature of the community as a community. For example, they do not take advantage of existing social organizations in the community that might have a substantial influence on youth behavior and on families and schools. And they do not allow for the possibility that community organizations will come up with solutions that we never dreamed of. If communities are going to develop more effective approaches to child rearing, we must learn how to help them influence the practices of organizations such as school boards, school administrations, social welfare agencies, and civic organizations, and we must learn how to assist them in developing and testing innovative approaches to ameliorate the conditions that contribute to antisocial behavior.

There are two additional intervention activities that are needed in order to (a) get specific programs implemented and (b) mobilize the social system of the community to take additional steps in the interest of children and adolescents. One activity is advocacy, and the other is community organizing. These concepts have been around for a long time, and there are numerous examples of such activities. More precise delineation of these activities and experimental evaluation of their value could be of particular benefit.

#### THE NEED FOR RESEARCH ON ADVOCACY AND COMMUNITY ORGANIZING

*Advocacy*

The adoption and maintenance of the practices outlined above (e.g., parenting skills training programs, family support programs, recrea-

tion, effective teaching practices, supervised recreation) require that we effectively advocate them. According to the *Oxford English Dictionary* (1971), one meaning of *to advocate* is "to plead or raise one's voice in favor of; to defend or recommend publicly." The question, then, is whether we can develop ways of recommending these critical practices that foster their adoption and maintenance.

Although they have not been subjected to experimental design, there are examples of advocacy via mass media that appear to have affected practices. Warner (1977, 1989) has described how the 1964 Surgeon General's report and the requirement for television ads that recommend smoking cessation were associated with a reduction in the prevalence of smoking. Flay (1987a, 1987b) has described the effects of media campaigns in inducing people to stop smoking or attempt to stop.

From a behavioral standpoint, we can conceptualize advocacy as specific statements or communications (they might include pictures, songs, poems, etc.) that link the advocated behavior or practice to a reinforcer (e.g., "Parent training will reduce crime") or link a behavior or practice to be discouraged to an aversive stimulus (e.g., "Cutting funding for family programs will lead to increased crime"). Of course, a statement or communication does not necessarily have functional effects, and we are concerned with generating statements that will have effects on the behavior of the listener. Recent work provides a more precise way of thinking about this concept than has been available heretofore. Hayes, Zettle, and Rosenfarb's (1989) analysis of rule following suggests that a verbal statement affects the listener's behavior because of the person's history of reinforcement for responding to such statements. Hayes et al. distinguish two types of consequences for rule following. In *pliance*, a rule is followed because of the apparent social reinforcement for doing so. For example, a teacher states classroom rules, and a child behaves in accordance because of the reinforcement that he or she has previously

received for doing what teachers have asked. In *tracking*, a person behaves consistent with the rule because of the apparent correspondence between the rule and the way the world is. For example, a parent in a parent training class implements a reinforcement system because the instructor's previous instructions have led to reinforcing consequences from the child.

Another concept regarding listener behavior is relational framing (Hayes & Hayes, 1992). Relational framing is a form of response class that has three defining features. The first is *mutual entailment*. If a person relates Stimulus A to Stimulus B, then he or she also relates B to A. The second relation is entailed by the first. For example, if A is judged to be similar to B, then B is judged to be similar to A. If A is the name for B, then B is the thing named by A.

The second defining feature of relational framing is *combinatorial entailment*. If a person relates A to B and B to C, then they will relate A and C in some way. If A is the opposite of B and B is the opposite of C, then A and C must be the same.

The third defining feature of relational framing is transfer of function. If A has a certain psychological function and A is related to B, then under certain conditions, B will acquire functions based on its relationship to A. For example, if a person fears crime and is told, in circumstances that prompt belief, that parenting skills training can prevent crime, they may respond more favorably to parenting skills training.

Relational framing is conceived of as a set of arbitrarily applicable responses. Perhaps the most rudimentary one is involved in naming. A child learns that this furry animal is a *cat* and that *cat* is this furry animal. The verbal response "cat" is reinforced in the presence of a cat and the child's looking at or pointing to a cat when the word "cat" is spoken is reinforced. After numerous such experiences, the child begins to respond relationally, in the sense that when a new word is given for an object, direct training in the word-object and object-word directions are

no longer necessary. The child has developed a response class that might be called "naming framing."

The concepts of relational framing, pliance, and tracking provide us with a way of thinking about the effects of advocacy. If a specific message has an effect on the listener, it is because it changes the way that listener relates the stimuli referred to in the message. For example, if a parent is told that rewarding middle-school children for doing homework will improve their grades, they may find it more reinforcing to implement a reward system. The initial effect of that message in motivating them to implement the reward system is due to the new relationship between rewarding homework and better grades that has been established by the message. However, if implementing the reward system has aversive consequences, the parent may stop implementing the reward system and may stop making the linkages that are stated by the parent trainer. That is why a good parent trainer tries to ensure that there are many different sources of reinforcement for trying suggested procedures. Thus, telling a parent about the numerous advantages of a reward system may make it initially more reinforcing to try the system, but social reinforcement such as group members' praise for doing so will strengthen the tendency (pliance), as will reinforcing changes in the child's behavior (tracking). (See Biglan, 1995, for a more extensive discussion of advocacy.)

Consider then the problem of advocating a specific practice such as a civic organization raising funds for a parenting skills training class for parents of at-risk middle-school children (Dishion & Andrews, 1995). It will presumably help to link the funding of the program to things that are reinforcing for members of the organization. For example, funding this program will (a) prevent crime, (b) reduce labor costs by ensuring that a larger portion of the labor force is well educated and cooperative, (c) lead to the organization achieving a goal, and (d) win the approval of community members.

Of course, the reinforcing value of funding the program will be enhanced only to the extent that events such as these are truly reinforcing for the members of the civic organization. Gathering information about what members value would be an important prelude to developing persuasive communications. There is also the issue of communicator credibility. More credible communicators are more persuasive (McGuire, 1985). From a behavioral standpoint, a credible communicator is someone who has been believable in the past or someone who is like people who have been believable in the past.

Another issue is that reinforcement must accrue to organization members if they do what is advocated or even plan to do what is advocated. The reinforcement could be in the form of progress toward the goal or evidence of benefits to children and families, but it could also simply be social reinforcement from organization members and other community members.

Another factor that will presumably increase the effectiveness of advocacy is information about other community members' support of the advocated program or practice. Presumably this information indicates that it is likely that the listeners' support for the program or practice will be reinforced by others. For example, as a prelude to an activity designed to get parents to talk to their children about not using tobacco, we sent a letter about the activity to parents that was signed by numerous (40 or more) community leaders.

Finally, it is likely that advocacy must be ongoing, because it is unlikely that the effects of a particular advocacy statement will last very long. Advocacy might be done via media, presentations to community groups, or personal contacts. In Project SixTeen, a community intervention to reduce the prevalence of adolescent tobacco use, we used all three forms of advocacy to generate community support for specific antitobacco programs and policies and to directly affect individual adolescents and

their parents (Biglan, Ary, Duncan, Black, & Smolkowski, 1995).

Wallack, Dorfman, Jernigan, and Themba (1993) have described media advocacy techniques that appear to be valuable in bringing about policy changes or the adoption of programs. Here the effort is to use media to increase public support for specific policies and to influence policy makers directly. Wallack et al. provide numerous case-study examples of public-health-related policy changes that were brought about by media advocacy. Most of the changes in public policy regarding smoking can be traced to extensive and often carefully orchestrated media advocacy. In our own work we have used advocacy of this sort among store owners and community leaders to build support for an intervention to reward store clerks for not selling tobacco to young people (Biglan, Henderson, et al., 1995).

Fawcett, Seekins, and Jason (1987) reported the use of data summaries to influence the legislatures in Kansas and Illinois. For example, a report that described the deaths and injuries among children who were not in child safety restraints, the low incidence of safety restraint use, and the broad public support for legislation was sent to a random half of the senators in the Illinois legislature. Significantly more of those who received the report voted for child passenger safety legislation.

Media campaigns may also be relevant to bringing about direct changes in the behavior of parents and youth. The possibility that media can be used to influence parenting skills has apparently not been examined. Evidence of the efficacy of media to promote specific behaviors comes from studies of health behavior (Farquhar, 1991; Flay, 1987a, 1987b; Flynn et al., 1992), crime prevention (O'Keefe & Reid, 1990), alcohol consumption (Barber, Bradshaw, & Walsh, 1989), and drunk driving (Niensted, 1990). Thus, there is good reason to explore the potential of advocacy to affect the prevalence of effective child-rearing practices. Media might influence parents to monitor what their chil-

dren do more extensively and effectively. It might influence voters to support child-friendly policies and programs. It might directly influence young people to engage in positive social behavior or to avoid problem behaviors (e.g., Flynn et al., 1992).

In sum, advocacy via media and personal contacts is an important part of community interventions. Advocacy could help to influence community leaders and organizations to (a) adopt policies and programs that would be beneficial in preventing antisocial behavior and (b) take other actions that would influence the community to adopt more effective child-rearing practices. Media campaigns could directly influence the behavior of parents, teachers, and young people. The efficacy of such advocacy is far from established, however. Experimental studies of the effects of advocacy in influencing community leaders and organizations to adopt policies and programs will be particularly valuable.

### *Community Organizing*

Community organizing is designed to achieve a verbal social system (Biglan, 1995) that includes both the specific policies and programs that are likely to prevent antisocial behavior and the ongoing advocacy and social reinforcement that are needed to establish and maintain those policies and programs. The system consists of not only the specific programs and policies that are likely to affect youth behavior but also the practices of community groups, organizations, and individuals that provide social reinforcement for those who maintain the policies and programs. It includes not only the effective practices of the school staff but also the practices of the school board and parents in recognizing and rewarding the efforts of school staff. It consists of not only the public and charitable funding that the community has cobbled together to fund a parenting skills program but also the Kiwanis and Soroptomist members who made raising these funds their chief goal. In short, the verbal social system in-



cludes the complex set of social interactions that prompt, shape, and reinforce engagement of individual community members and community organizations in the behaviors that are needed to maintain a social system that reinforces positive social behavior among young people and deters problem behavior.

There are numerous examples of how communities can be helped to organize their social system. Ecklein (1984) provides many case studies of organizing, including community development in Appalachia, organizing of the elderly, organizing to combat racism, and organizing for women's rights. Bracht and Kingsbury (1990) describe the organizing of community boards to increase the prevalence of cardiovascular fitness in Minnesota communities. In an example particularly relevant to antisocial behavior, Hawkins and Catalano (1992) describe an approach to assisting communities in identifying the risk factors for substance abuse and other youth problem behaviors and organizing the community to address those risk factors.

In the present case, we are interested in how we might assist a community in influencing its members and organizations to take the coordinated actions needed to implement and maintain the practices described above. A critical first step in this effort will be to analyze how the community is currently organized (Biglan, 1995). Haglund, Weisbrod, and Bracht (1990) have provided a useful framework for such an analysis. They suggest that one must specify each of the organizations in each sector of the community (e.g., business, religious, voluntary civic, governmental) and the actions that they are currently engaging in that are relevant to the goals of the community intervention. It will also be essential to examine the most likely effective consequences for each organization and its leaders and members (Biglan, 1993, 1995). Pretsby, Wandersman, Florin, Rich, and Chavis (1990) provide evidence of the importance of consequences for maintaining participation in voluntary organizations.

The second step might be to bring about a formal organization (such as a community board or task force) to address the issue of antisocial behavior in the community. The board or task force might be created from representatives of organizations in different sectors of the community that are committed to addressing the problem of antisocial behavior. In recruiting people to such an organization, advocacy of the importance of the problem and the promise of possible programs and policies will be essential. It is also important to go beyond "the usual suspects" in working on the problem. There will be no problem getting organizations that are mandated to work with children and families to participate, but if representatives from other powerful sectors of the community (such as business and religion) are not involved, there is a risk that the organization will not have the power to bring about a significant shift in resources that will be needed to change outcomes for children. Similarly, it will be essential to have membership from among at-risk families, because it is unlikely that the effort will meet their needs if they do not have a clear voice in what is needed (Fawcett et al., 1994).

Once a formal organization is created, the next step might be to establish a set of goals and plans for achieving those goals. In our community intervention to prevent tobacco use, other substance use, and other youth problem behaviors, we have developed a modular approach to assist communities in this process. A module is a written description of a set of strategies that existing evidence or prior experience suggests will achieve a particular goal. We created modules on media advocacy, reducing illegal sales of tobacco to young people (Biglan, Henderson, 1995; Henderson et al., 1995), youth antitobacco activities (Hood et al., 1995), and family communications about tobacco use (James et al., 1995). Where possible, we have conducted experimental evaluations of individual modules (Biglan, Henderson, et al., 1995). In addition, we have made available parenting skills training for parents of at-risk middle-

school children (Dishion & Andrews, 1995). Our rationale is that once community members have adopted a goal, they will want input regarding the strategies that might be used to affect the problem. The modules typically provide a menu of possible activities. By laying out numerous previously tried strategies, the community group has plenty of choices of what they might do. The approach is open to changing or embellishing suggested activities or inventing new activities. By including information about the efficacy of strategies, we make it more likely that data-based solutions will be tried.

As the community board and coalition organizations develop their plan, it is essential that they get ongoing feedback about their progress. Fawcett, Paine, Francisco, and Vliet (1993) describe a system for logging the actions of organizations that are working on community health problems. The information can be fed back to organization members, presumably providing reinforcement for their efforts. Other forms of reinforcement can be mobilized, such as awards, media coverage of organization activities, grant funding, and data on the effects of activities.

Several types of research are needed on community organizing. One type involves systems for analyzing community organizations. The optimal analytic system will inventory what community organizations are doing that might affect children and families, identify important consequences for organization members and leaders, and specify what role each organization might be willing to play in community-change efforts. A second type of research will develop systems for measuring the activities of community organizations. The Fawcett et al. (1993) assessment procedure, mentioned above, merits further evaluation. A third type of research will measure the impact of specific community organizing procedures in bringing about (a) support for efforts to change child-rearing practices, (b) the formation of organizations or coalitions of organizations to work on child-rearing issues, (c) the development of goals and plans,

and (d) the implementation of planned activities.

#### THE QUESTION OF WHO DECIDES WHAT HAPPENS IN THE COMMUNITY

Fawcett et al. (1993) have noted that many of the community interventions to affect health are organized in a top-down fashion, such that both the goals and the strategies for intervention are dictated by the funding agency and the researchers. Examples include the Minnesota Heart Health Project (Luepker et al., 1994) and the COMMIT (1995a, 1995b) community intervention to reduce adult smoking. The goal of COMMIT was to induce heavy smokers to quit. A staff paid by the research institute was hired. They helped to recruit a community board. The board and staff were given a set of required strategies and a list of optional strategies that could be pursued.

There are both ethical and strategic reasons for keeping the ultimate decisions about the goals and procedures of community interventions in the hands of community members (Biglan, 1995; Fawcett, 1990; Kelly, 1988). As a practical matter, communities are more likely to devote time and effort to changing patterns of behavior that they view as important. Although further empirical evidence is needed, it is likely that community members will make a greater commitment to the implementation of strategies that they have chosen or developed (e.g., Kanfer & Grimm, 1978; Peters, 1988). Moreover, at present we have few specific strategies to offer for community interventions to affect antisocial behavior. It is from the active involvement of community members that effective strategies will emerge.

Researchers working on community interventions have been particularly careful to formulate ethical guidelines for how researchers might collaborate with community members in the conduct of research (Fawcett, 1990; Kelly, 1988; Rappaport, 1990). The present remarks are offered with these guidelines in mind. If be-

havioral scientists are going to contribute to the reduction of the incidence and prevalence of antisocial behavior in American communities, we can do so only if we develop ways of working with communities that are truly collaborative (Kelly, 1988). In doing so, we should remember that we may have to go to extra lengths to ensure that the families most in need have a voice in how the community can improve outcomes for children (Fawcett, 1990; Rappaport, 1990).

### CONCLUSION

Some of our research should begin to focus on affecting the incidence and prevalence of antisocial behavior. Such a focus will lead us to focus on increasing the prevalence of validated interventions such as parenting skills training, family support, and the school practices described by Mayer (1995). Although there are a variety of social units that might be the focus of such research, there are good methodological and conceptual reasons for conducting studies in small communities. Interventions in small communities can test advocacy and community organizing procedures for mobilizing the social systems of the community to implement validated interventions and to develop and test additional strategies for preventing antisocial behavior that take advantage of the community as a social system. It may be particularly worthwhile for communities to explore ways of increasing the supervision of young people.

Both research and theoretical analysis are needed to clarify and refine the concepts of advocacy and community organizing. These complex independent variables are essential for inducing previously uninvolved sectors of the community to work on improving communities' child-rearing practices.

Many of the things discussed in this paper may strike some behavior analysts as too far afield from the precise analysis of the contingencies that affect behavior. I have tried to give an account of how some common community intervention techniques can be understood in

terms of the contingencies of reinforcement and relational frames. I do so, not for rhetorical purposes, but because I am convinced that more fine-grained behavioral analyses of these procedures will lead to more focused and effective interventions.

If I have failed to be convincing, however, let me ask the reader to look at the issue from another angle. The National Academy of Sciences recently released an analysis of the problem of violence in the United States (Reiss, Miczek, & Roth, 1994; Reiss & Roth, 1993a, 1993b, 1994). This work will be taken by most policy makers to be the behavioral sciences' definitive statement on violence. Yet, in keeping with the dominance of mechanistic, correlational model building in the behavioral sciences (Biglan & Hayes, in press), the volumes devote most of their space to analyses of the correlates of violent behavior. Far more consideration is given to the biological factors associated with violent behavior than to the manipulable environmental variables that shape the development of such behavior and would have to be changed if we are to prevent it. It seems to be assumed that if we understand all of the behavior-behavior relationships (Hayes & Brownstein, 1992) involved in violence, preventive approaches will somehow emerge.

I submit that the contextualist program of behavior analysis is the approach most likely to contribute to reducing the appalling level of antisocial behavior in this society. That will happen, however, only if we use what we know about the behavior of individuals and families to build a science that tells us how to help entire communities improve their child-rearing practices.

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