Community-Based Programs for Youth:  
Lessons Learned From General Developmental Research and From  
Experimental and Quasi-experimental Evaluations

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INTRODUCTION

For the last 18 months, we have worked with the National Research Council Panel on Community Level Program for Youth. Eccles chaired this panel. In the process, we have learned a great deal about community-based programs. In this paper, we first very briefly summarize what we (Eccles and Templeton) learned about the general assets adolescents need for both well-being during adolescence and a successful transition to adulthood. (Eccles has sent an expanded paper on this topic which can be obtained from the Series organizers.) We also include a very brief summary of what the general developmental literature tells us about the essential characteristics of social contexts that support positive youth development as a guide for the kinds of general characteristics that should typify community-based programs. This list provides a framework against which to think about the evaluation studies of programs for youth summarized here. The bulk of this paper, then, focuses on experimental and quasi-experimental studies of programs for youth. We begin with a very general discussion of the limitations and advantages of such evaluation studies as they are applied specifically to community-based programs for youth. We then summarize what we have learned from such studies.

First, before one can evaluate community-based programs about youth, one needs to decide what youth outcomes (i.e., psychological and social assets) these programs should be facilitating. Many people have suggested a variety of such assets. These lists include confidence in one’s ability to influence the world and achieve one’s goals (a sense of personal efficacy), a desire to engage in important activities (intrinsic motivation), a desire to master the learning tasks one is confronted with in life (mastery
motivation), good mental health (including positive self-regard), a strong sense of social
and emotional connectedness and support security, the ability to control and regulate
one’s emotions (good emotional coping skills), a sense of optimism, confidence that what
one does really makes a difference – that what you do matters, coherent and positive
personal and social identities, the skills necessary to succeed in school and then the labor
market, and an attachment to conventional prosocial institutions such as schools, faith-
based institutions, families, and community organizations.

Recently, the Search Institute has provided an extensive list of personal and social
assets along with the best review of supporting empirical research (Scales & Leffert,
1999) and measurement tools for communities to use in assessing the extent to which
their youth have these assets. Their set falls into 6 general areas: Commitment to
learning, positive values, social competencies (including planning skills and both
interpersonal and cultural competence), positive personal identity, commitment to
positive use of time, and a sense of autonomy and "mattering". Others have added good
physical health, cultural knowledge and skills, ability to navigate across multiple cultural
settings and groups, creativity, the skills needed to get and keep a job, and strong
institutional attachments. For example, in one of the most parsimonious lists, Connell
and his colleagues (Connell et al., 2000) have proposed three critical assets: the ability to
be productive, the ability to connect, and the ability to navigate. Finally, in a recent
consensus meeting of practitioners (see Roth and Brooks-Gunn, 2000), youth
development advocates and youth development researchers met and agreed upon the
following set:

- Caring and compassion
- Character
- Competence in academic, social and vocational arenas
- Confidence
- Connection

In looking at the experimental evaluations, the NRC committee paid particular
attention to the extent to which the evaluations focused on these kinds of personal and
social assets as the desired outcomes of the programs being evaluated.
Second, the NRC looked at the existing developmental literatures to determine what the critical components of positive social contexts might be. From this review, Eccles and Templeton concluded that the following emerged with strong support across studies of families, peer groups, schools, communities, and out-of-school programs for youth:

- Adequate provisions for physical and psychological safety, developmentally appropriate levels of structure and adult supervision
- Supportive relationships with adults
- Supportive and respectful relationships among peers
- Opportunities to development a strong sense of belonging
- Opportunities to experience mastery and mattering
- Opportunities to learn the cognitive and non-cognitive skills essential for succeeding in school, work, and other prosocial social and institutional settings
- Strong positive social norms for behavior.

Eccles and Templeton also concluded that programs work better if they are well-linked to the other programs, families and schools in which the youth participate. In reviewing the numerous experimental and quasi-experimental evaluations of youth serving programs, we paid particular attention to whether the programs had these characteristics. We turn now to a discussion of the experimental and quasi-experimental evaluations of community based programs for youth. First we discuss general issues about doing this type of evaluation with community-based programs for youth. Then we summarize our conclusions regarding the existing reviews of this type of evaluation study. We end with our conclusion about the implications of these evaluations for the importance of the contextual characteristics listed above.

**Considerations in Doing Experimental and Quasi-experimental Evaluations of Community-Based Programs for Youth**

Every social program has many stakeholders, including government officials, journalists, taxpayers, program developers, program staff, parents, and children. Stakeholders want to know what works. Some concentrate on learning about the
effectiveness of details from within a program; others on the overall effect of a given program; and others on related kinds of programs. But whatever the central focus, all stakeholders want to know whether something makes a difference in the lives of young people and communities. A variety of methods have been developed to answer this question. In this paper we focus on evaluations using experimental or quasi-experimental methods of evaluation. Although these methods are often considered to be the "gold standard" of program evaluation, they are quite expensive and difficult to implement. Consequently, before reviewing the evidence of what works from such evaluations, we discuss when such methods should be used and how they should be done.

First one needs to ask which programs should be evaluated using this method? Critical to this issue is the very definition of a community-based program for youth. Benson and Saito (2000) classified the field of youth development settings into four general categories: programs, organizations, socializing systems, and community. Programs themselves are also comprised of general and specific activities. In contrast, organizations represent settings in which a wide variety of programs, activities, and relationships occur. Examples include school-based after-school centers, parks and recreation centers and leagues, community centers, amateur sports leagues, faith-based centers, and the myriad places and opportunities developed by community-based and national youth organizations such as the YMCA, YWCA, 4-H, Boys' and Girls' Clubs, Girls', Inc., Beacons, and the 21st Century Learning Centers. Socializing systems are the more informal systems that influence youth development such as families, faith-based institutions, and libraries. Community is the geographical and political place in which programs and organizations operate, as well as the social norms, resources, relationships, and informal settings that surround the developing youth. Increased theoretical and policy attention is being focused on community as the best focal level for thinking about adequate provision of programs to support youth development.

Evaluation can take place at many levels, ranging from policy evaluation at the macro level to a micro level examination of components of a specific program, such as a homework assistance program. The different interests of diverse stakeholders often determine the level at which evaluation takes place. Inherent in the classification system offered by Benson and Saito (2000) is the notion that "higher order levels" are composed
of "lower order levels." For example, national organizations such as Boys and Girls Clubs and Girls Inc. are comprised of many different programs; programs are made up of activities, and activities can be broken into specific activity components. Many funders and stakeholders are interested in whether the "higher order" level of the organization is working rather than the more specific programs and activities since they usually fund an organization specifically and then rely on the organization staff to make more specific decisions about the specific programs or activities to include. However, the most comprehensive theories about programming effects usually focus on either the program itself or the activities within the program. Some of these program activities are also widely used (e.g., mentoring, service learning) and therefore need to be evaluated in order to justify their inclusion in so many larger organizations.

Most of the program evaluations discussed in this paper focus on this level – that is the activity or the program rather than the organization or the socializing system. These programs or programming units are often either included as part of large national organizations or are offered as stand alone programs that can be implemented in a variety of settings. This is a good level at which to do evaluation for two reasons (1) Such programs and activities are simple enough to allow for explicit theories regarding the nature of the proposed impact of the program on youth development and (2) such activities are small enough to make random assignment to the treatment and control groups possible. They are also usually sufficiently well developed that manuals and essential materials can be designed and disseminated to organizations throughout the country.

We believe that programs rather than organizations should be the major focus of the kind of expensive and complex evaluations proposed in this paper. In addition we believe that experimental evaluations of programs and activities should focus on those programs likely to be widely used in organizations that draw heavily on public funds. Given that these programs are provided to large numbers of youth and are likely to be incorporated into many organizations, it is important that we know that they are effective – that is that they actually influence positive development in youth. Not all community programs for youth need such an evaluation because not all community programs have such aspirations and outreach. Nonetheless, small community-based programs can use
experimental procedures to monitor their own programs and to guide program
development.

We were struck in our reviewing of the newly emerging programs with a new
trend – a trend toward large scale community development efforts to increase the range of
programs available to youth. Many positive youth development advocates are now
stressing the need for this approach to youth programming (see for example Connell et
al., 2000). It is unlikely that experimental randomized trial designs are appropriate for
studying such community wide initiatives. Instead approaches more closely linked to the
new theory based models of program evaluation (e.g., Connell et al, 2000; Gambone,

There are also a variety of challenges to evaluating large nationally visible
organizations and programs. First, national organizations differ in their local
programming. Consequently, even if one could successfully implement a truly
randomized trial evaluation design for specific sites, it is not clear that the information
gained would generalize to other sites. In addition, since these organizations are complex
and offer a varied assortment of programs, the level of evaluation needs to be quite
general. For example, one could assess whether an organization provides the kinds of
general environmental conditions outlined above and then whether participation in the
organization leads to increases in the very general level outcomes outlined above. One
might also step back and evaluate the organizational characteristics needed to support
high-quality programming for youth by randomly assigning some of the organizational
sites to one form of management and other sites to different forms of management. Such
information would be very helpful in furthering our understanding of the reasons why
organizations and programs often fail due to inadequate political, economic, and
community social supports as well as why programs found to be effective in one setting
are not effective in other settings.

Evaluating programs (as opposed to organizations) has different challenges.
Some community programs are associated with organizations, such as schools or YMCAs
that already have an infrastructure in place to implement the program; others do not and
thus must deal with organizational start-up issues in addition to program implementation
issues. Most community programs (except some that are nested within the school day)
are also voluntary. Although parents may try to insist that their children attend, their ability to enforce their desires on their children declines as their children move through adolescence. Finally, as noted above, many community organizations for youth include a diverse array of programs from which youth select. Often their selections can vary from week to week or day to day—making each individual youth's experiences at the organization more unique than his or her experiences at school.

Each of these program characteristics has implications for program evaluation. For example, the voluntary nature of most community programs creates a problem with selection bias. Typically school-based programs benefit from the benign coercion schools have over students while they are in the building or on the school grounds. Student representatives can be randomly selected from the student body and then randomly assigned to different program options in order to examine the relative effectiveness of these different options. In contrast, joining and attending non-school community programs or non-mandatory school programs is usually voluntary. Consequently researchers are faced with uncontrolled factors that influence attendance. In general, it is more difficult to control for these various variables when evaluating voluntary community programs and most community programs for youth fall into this category.

Similarly, the diverse nature of many community programs for youth makes exact specification of the treatment problematic. Because individuals can select which parts of the programming to attend and how often, the evaluators often know little about each individual's exposure to various aspects of the centers programming. Such variation makes it difficult to determine which aspects of the programming are responsible for which developmental outcomes.

Finally, the evolving nature of many community programs also poses problems for evaluation. Experimental methods, preferred by many in the scientific community, assume a static linear system. Community programs are dynamic—shifting, for example, in response to seasonal activity structures, changing clientele, changing staff, and information derived from on-going reflective practice and self-evaluation. Work by McLaughlin and her colleagues (McLaughlin, 2000; McLaughlin, Irby, & Langman, 1994) suggests that the most successful community programs for youth are quite dynamic–
frequently adapting programs to the clientele as well as involving the youth themselves in designing new aspects of the program. This work also indicates that a cookie-cutter model of importing canned programs tested elsewhere on a different population is usually not very successful. To the extent that this is true, evaluating programs with experimental designs is both difficult and of questionable utility.

 Nonetheless, for the reasons outlined above, youth-serving organizations and the programs they provide are coming under increasing pressure to do rigorous "scientifically" based evaluations that provide as definitive as possible an answer to the question of "effect". In the next section, we discuss the most rigorous such method (the randomized trial) within a much more comprehensive perspective on program evaluation based on the work of Tom Cook (e.g., Cook et al., 1993, 1999). Bear in mind however that, although the randomized trial is the most rigorous way to assess impact, we believe that randomized trial evaluations focused only on youth outcomes do not provide the breadth of information needed to fully understand if, when, and why programs are effective. Answering this broader set of questions requires a more comprehensive approach to program evaluation.

**Comprehensive Experimental and Quasi-experimental Evaluations**

A comprehensive program evaluation effort should address at least the following four questions:

1. Is the theory of the program explicit and plausible?
2. How well has it been implemented?
3. Is the program effective?
4. If effective, why?

In this section, we briefly discuss these questions. However, it is important to note that it is very difficult to answer all four well in one study and evaluations should not routinely be expected to do so. The questions have a logical ordering: rigorous investigation of the last two questions requires high quality answers to the first two. For example, to evaluate program effectiveness well, the theory linking program
characteristics to changes in the “outcome” variables needs to be well specified so that both the program characteristics and the “outcome” variables can be adequately operationalized and measured. In addition, it is critical that the program was well implemented before one assesses “outcomes”. The appropriate questions to answer in any specific evaluation depend in large part on the stage of maturity of a program, whether previous questions have been answered, and the financial and human resources available.

**Is the Theory of the Program Plausible and Explicit?**

Good causal analysis requires a clear, substantive theory that explicitly states the processes by which change will occur. Ideally, this theory should be the driving force in program development and should guide the decision of what to measure and how. At the program operation level, the theory should explicitly state the components that must be present for the expected effects to occur (i.e. the specific aspects of the programs—such as good adult role models—that mediate the programs’ effects on such “outcomes” as increasing self-confidence) and the various characteristics of the program, the youth, and the community in which the programs is placed that influence just how effective the programs is with specific individuals (i.e., the moderators of the program’s effectiveness). These components must then be measured to evaluate whether they are in place in the form and quantity expected.

At a more abstract level, the theory must also be plausible, taking into account current knowledge in the relevant basic sciences, the nature of the target population, and the setting in which the program intervention takes place. Once specified, these causal models can be used for two purposes: (1) to design the assessment of the strengths of the program implementation; and (2) to judge how plausible it is to infer that the observed results are due to processes built into the program theory.

Rarely do we find a well-specified model underlying either program design or program evaluation. It is likely that the development of such theoretical models probably requires a prolonged and genuine collaboration between basic researchers, applied researchers, program developers, providers, and program evaluators. More complex
models that involve theorizing at the community, program, cultural, and individual levels are needed. Gambone, Connell, and their colleagues developed one such model (see Connell et al., 2000). Another formed the basis for Public/Private Venture's new project around community change for youth development (Gambone, 1997). But even these are quite general and need further explication to fully inform program design and evaluation. Cook and his colleagues developed a more comprehensive model in their efforts to evaluate the Comer School Intervention (Cook et al., 1999). Their model provides an excellent example of the kinds of theoretical program models that would be useful for evaluation of community programs for youth

**How Well Was the Program Implemented?**

Part of the program's operational theory deals with the treatment components—or components of the program activities—and "dosage" necessary to achieve the expected outcomes. An analysis of the implementation of the components of a program is therefore necessary to determine whether participants received the intended treatment. Unfortunately, many outcome evaluations conclude that a program is not effective without having completed an appropriate implementation analysis. Without such an analysis, it is impossible to know if the lack of effectiveness is due to the failure of the program theory, to a poor implementation of what might otherwise be an effective treatment, or to poor evaluation that failed to detect true effects. If evaluators find that participants did not receive the planned treatment and that the expected effects did not occur, then valuable information has been gained. Although the proposed theory of change was not tested, it is obvious that there needs to be greater attention to the factors that support or undermine successful implementation. Obviously, it is impossible to achieve perfect implementation in the real world of social programming, but we have much to learn from programs even when the expected effects do not occur.

In addition, programs in the early stages of delivery should focus on implementation analysis. During this stage of development, it is likely that the program itself will change as the realities of the place, time, and people involved require adaptation. This process of growth should be carefully studied for the information it
provides to our basic understanding of social systems and human development. Evaluation focused on program effectiveness is not appropriate until the program has matured, the theory of change has developed through the process of studying implementation and the appropriate indicators of both the treatment and the outcomes have been developed.

In determining how well a program was implemented for a comparison group design, it is important not to forget that the comparison group is never a "no treatment" group. It is essential to describe what happens in the comparison groups to see whether their behavior might have been influenced by knowledge of what treatment group members were doing or whether they spontaneously received services—or were provided opportunities that have similar characteristics to the services under evaluation.

Both quantitative and qualitative methods should be used to assess how well a program is being implemented. Good quantitative analysis requires a clear program theory and quantitative measures that can be used repeatedly over time to determine the extent to which the program is moving toward sound implementation. When done well, these quantitative analyses can provide a good assessment of how well a specific and fixed intervention has been implemented.

The best qualitative methods for studying and assessing implementation involve long-term field observations and interviews. Ethnographic studies allow researchers to examine unexpected events in depth, to understand important mediating processes not part of the original theory, and to describe how the program evolves over time. Such methods require a substantial time investment. But we believe these kinds of qualitative, ethnographic studies are necessary for collecting the type of in-depth information needed to understand either implementation or program effects.

**Is the Program Effective In Terms Of Its Planned Goals?**

Another way to state this question is would the observed changes in the youth have occurred without the program? Although this question is often not a top priority for practitioners, it is of primary importance to stakeholders, such as taxpayers and funders,
who are looking for accountability in results from the programs. It is, however, essential that this question not be asked too early before a program is fully established.

The best way to answer this question with certainty is through an evaluation that is experimental or quasi-experimental in design. However, despite the fact that experimental designs with random assignment allow the highest level of confidence in evaluating planned program effects, true experimental designs are not always feasible or practical. Strong quasi-experimental designs are often more realistic. A strong quasi-experimental design entails two things at a minimum: (1) Extensive knowledge of the pretest, which should include pretest knowledge on the same measures that are used for the posttest; and (2) comparison groups that are selected to be minimally different from the program groups, perhaps because of careful matching in ways that also avoid statistical regression problems.

Done properly, both experimental and quasi-experimental methods provide quite valid information about program effectiveness. Internal validity is addressed by random assignment of subjects to control and experimental groups. Pretest measures are used to make sure the groups are similar on the major “outcome” and “moderator” variables prior to the program intervention, and tests can be used to determine whether the two groups remain similar over time (that is, that those who drop out of the study from the two groups are similar to each other – leaving the remaining members of the two groups similar to each other on the pretest measures). Analyzing the experimental-control group contrast in order to assess whether there are differences between the groups on valid and useful outcome measures gives us sound evidence of the effectiveness of the program.

However, as we discussed earlier, doing rigorous experimental and quasi-experimental evaluation studies is very difficult for community programs for youth because such programs by their very nature make randomized trial designs very difficult to implement. Consequently, stakeholders should be sure they need this level of evaluation before asking for it. Also, as discussed in the next chapter and as pointed out in Chapters 3 and 4, there is good reason to believe that the best programs for youth are dynamic and evolving in nature. In other words they are continually experimenting with ways to improve and are better characterized as a learning system than as a tightly specified program. Such programs are almost impossible to evaluate with a randomized
trial design. Box (1958) has provided an alternative model of evaluation that is better suited to this type of situation—the "evolutionary evaluation method." Essentially Box lays out a method for doing mini-randomized trials within an organization to test the effectiveness of new activities and program modifications. As far as we know this method has not been used in community programs for youth. But it would a useful tool for organizations to use as they make changes in their array of programs.

Given the difficulties noted above with implementing random assignment evaluation for community programs for youth, some evaluators have suggested an alternative—theory-based evaluation (e.g., Connell et al., 2000). These evaluation theorists claim that theory-based evaluation can be used to study the effectiveness of social programs. They argue that many social and physical scientists test their causal hypotheses by comparing obtained data with predicted patterns of data. The predicted patterns are derived from strong theory. They propose that a similar strategy is more useful than randomized trials for studying the effectiveness of many social programs, particularly those based on strong and complex theories of change. Although this remains a controversial claim, we (the authors of this paper) believe this approach provides a very useful alternative to random assignment evaluation particularly when more complex organizations and community wide initiatives are the target of study. Not surprisingly, many foundations and some scholars are now turning to theory-based evaluation as an alternative to experiments, especially in complex settings like communities.

Theory-based evaluation acknowledges the importance of substantive theory, quantitative assessment, and causal modeling, but it does not require experimental or even quasi-experimental design. Instead it focuses on causal modeling derived from a well-specified theory of change. First, the researchers, usually in collaboration with the program developers, work out a comprehensive model of change that specifies all of the relations (both mediated and moderated relations) among the various contextual characteristics and youth “outcome” characteristics. Often these theoretical models include several layers of hypothesized relations between different aspects of the context as well as between different aspects of the context and youth outcomes. The models lay out a predicted sequence of contextual changes that must occur before one can expect to changes in youth “outcomes”. Thus these models propose which contextual features must
change first in order to produce changes in other contextual features as well as which contextual features are likely to influence on change on which specific youth outcome measures. Finally, these models sometimes specify how characteristics of the youth themselves, as well as the program personnel, are likely to affect the relations outlined in the general model. For example, the most comprehensive of such models hypothesize differential effectiveness of program characteristics for various groups of youth and program personnel.

Measures are developed and then collected on all of the causal links between contextual or program characteristics and “outcome” variables. In the best of such designs, these measures are collected over time so that the hypothesized meditational and moderational relations can be tested as the program is implemented. The researchers then use the data collected from these measures to do causal analyses, typically using sophisticated longitudinal data analytic techniques. If the causal modeling analyses indicate that the obtained data are consistent with what the program theory predicts, then the researchers are willing to conclude that the theory is valid and the program is successful for the reasons outlined in the theory.

Even if time does not permit assessing all the postulated causal links, information on the quality of initial program implementation is typically gathered because implementation variables are usually the first constructs in the causal model of the program. Thus even if the hypothesized youth outcome results are not initially obtained, the early data provide some evidence about the extent to which the implementation is proceeding as predicted by the theory. The evaluators can then recommend that further evaluations be conducted when sufficient time has passed for the proposed mediating mechanisms to have their full effect on the proposed outcomes.

If Effective, Why?

Mixed methods are the most appropriate way to answer the question of why a program is effective. Theory-based evaluation is especially appropriate here and depends on the following steps (Cook et al., in press).
1. Clearly stating the theory a program is following in order to bring about change. This theory should explicitly detail the program constructs and both mediator and moderator relations that are supposed to occur if the intended program intervention is to impact major target outcomes.

2. Collecting both qualitative and quantitative data over time to measure all of the constructs specified in the program's theory of change.

3. Analyzing the data to assess the extent to which the predicted relations among the “treatment” and the “outcome” variables have actually occurred in the predicted time sequence. If the data collection is limited to only part of the postulated causal chain, then only part of the model can be tested. The goal, however, should be to test the complete program theory.

A qualitative approach to theory-based evaluation collects and synthesizes data on why an effect came about; through this process, this approach provides the basis to derive subsequent theories of why the change occurred. The qualitative data are used to rule out as many alternative theories as possible. The theory is revised until it explains as much of the phenomenon as possible.

Both quantitative and quantitative implementation data can tell us a great deal about why programs fail as well. In addition, these studies make it clear how the programs are nested into larger social systems that need to be taken into account. When adequate supports are not available in these larger social systems, it is unlikely that specific programs will be able to be implemented well and sustained over time.

**Summary**

We have outlined an idealized comprehensive view of experimental and quasi-experimental program evaluation. On the one hand, this type of evaluation can provide valid and very useful information about a program’s effectiveness. Comprehensive evaluations provide valid, useful information about the plausibility of the program theory, about implementation quality, about effects on individual program participants, about differential effects on different kinds of participants, about community-level effects, and about the processes causally generating effects. On the other hand, this type of
evaluation is expensive and time-consuming and is probably not needed for most programs. In fact, it is really only critical for the kinds of programs that are national in scope, draw on large amounts of public funds, serve many different types of youth, and are likely to be adopted by many organizations around the country. In addition, such an evaluation is only sensible once the program has reached maturity and has worked out the details of implementation and sustainability. Nonetheless, small, local programs can implement various subcomponents of the evaluation techniques outlined with other types of self-study.

We move now to a review of the application of this type of evaluation by summarizing some of the major experimental and quasi-experimental program evaluations of community programs for youth. Very few of the program evaluations we found, used the kind of comprehensive approach just summarized. Most included only one component—the experimental or quasi-experimental design. Consequently, we actually learned very little about why program effects were or were not obtained despite the experimental nature of the evaluation.

**REVIEW OF EVALUATION STUDIES OF PROGRAMS FOR YOUTH**

In this section, we summarize the results of seven major reviews of evaluation studies of programs for youth drawn from the fields of mental health, violence prevention, teenage pregnancy, and positive youth development. The reviews appeared in either published, professionally reviewed journals or select government documents between 1997 and 2000. In the latter category, only government documents using rigorous methods of review were included in order to reduce the potential biases associated with reviews conducted by groups with high stakes in positive or negative conclusions. The most often cited positive youth development programs are summarized in Table 1.
Mental Health Programs

**Durlak and Wells**

Durlak and Wells (1997, 1998) conducted two meta-analytical reviews of primary and secondary prevention mental health programs done prior to 1992 for youth under the age of 19. (Primary prevention programs attempt to intervene with normal populations to prevent problems from developing. Secondary prevention programs target individuals already at-risk or exhibiting problems). Both meta-analyses included only programs with a control group of some type (e.g., a group that is not participating in the program or a group that is on a waiting list to participate in the program). Randomized designs were used in 61 percent of the primary prevention program evaluations and 71 percent of the secondary prevention program evaluations. The primary prevention review (Durlak and Wells, 1997) included 177 programs; the secondary prevention review (Durlak and Wells, 1998) included 130 evaluations. Finally, most of these programs took place in schools, which is likely the reason that these studies had such low attrition rates (people leaving the program before completion and final testing).

In general, the results suggest that preventive mental health programs based on well-established principles of clinical intervention can be effective across a variety of psychological outcome measures for periods of up to two years following the intervention exposure. They are particularly effective at increasing competencies such as assertiveness, communication skills, feelings of self-confidence, and skill performance. More specifically, the meta-analysis of the primary prevention programs (Durlak and Wells, 1997) revealed that most types of programs significantly reduced problems (e.g., anxiety, behavior problems, and depressive symptoms) and increased competencies.

This meta-analysis compared the effects of environment-centered vs. person-centered approaches. Person-centered programs worked directly with individuals using techniques based on social learning theory [either modeling appropriate behaviors or reinforcing appropriate behaviors] and other direct instructional approaches focused on educational and interpersonal problem solving. Environment-centered programs tried to change either the home setting (through parent education) or the school setting (though teacher training in interactive instructional techniques and classroom management skills). All of the person-centered programs were effective for some outcomes, particularly for
increasing competencies. Of the environment-centered approaches, only school-based programs were effective and these were more effective at increasing competencies than reducing problems. Most of the school-based environment-centered programs focused on changing the psychological and social aspects of the classroom environment through increasing either interactive instructional techniques or effective classroom management techniques.

It is particularly interesting that 9 of the 177 school programs produced small iatrogenic effects (problem behaviors in the experimental group increased). Typically, these effects resulted when the experimental group was composed primarily of adolescents already engaging in high levels of aggressive problem behaviors.

In their secondary prevention meta-analysis, Durlak and Wells (1998) compared the effectiveness of behavioral, cognitive-behavioral, or non-behavioral treatments. In general, all three treatments were effective at both problem reduction and competency enhancement. In addition, cognitive-behavior treatment was more effective than either behavioral treatment or non-behavioral treatment at reducing mental health problems, and the behavioral treatments were more effective than the non-behavioral treatment at improving children's competencies.

In terms of testing theories of change, these studies and these meta-analyses tell us much less. The data on program goals and procedures were the only indicators of theory and implementation provided in most of the studies. Only 64 (36 %) of the primary program evaluations stated specific program goals; only 29.3 percent indicated that an intervention program manual was available. We need to know much more about the theory underlying the predicted treatment effects and about the quality of the implementation before we can reach firm conclusions on what aspects of the programs are actually responsible for the treatment effects. This is particularly important if these types of programs are to be implemented as part of positive youth development programs in community-based settings outside of school hours. We have no idea of the extent to which youth would voluntarily continue to participate in these types of intervention programs.
Greenberg and Colleagues

Greenberg and colleagues (1999) reviewed 130 universal, selective, or indicated mental disorder prevention programs for children and adolescents. The universal prevention programs targeted normal populations. The selective programs targeted individuals or subgroups identified as at risk for developing mental disorders. The indicated prevention programs targeted individuals identified as having early warning signs of mental disorders, but not yet meeting diagnostic criteria. From the sample of 130 programs, they reviewed 34 that met the following criteria: a randomized experimental design or quasi-experimental design with a comparison group; pre- and post-test measures; a written manual specifying the theory and procedures used in the program intervention; and a clearly defined sample, with adequate information about their behavior and social characteristics; and some evidence of positive mental health outcomes. Follow-up assessments were preferred but not required. Many of the programs evaluated were school-based, in part because experimental control is more feasible in this context. In general, Greenberg et al. concluded:

1. Multi-year preventive programs produce longer term effects than short-term program interventions
2. Preventive program interventions should be directed at risk and protective factors rather than at categorical problem behaviors such as school dropout, delinquency, substance abuse, and teenage pregnancy.
3. The few studies with follow-up data suggest possible "sleeper effects" in program benefits (that is, some programs showed a greater effect at a time somewhat distant from the end of the treatment than immediately following the intervention). If this is true, programs that do not collect follow-up data may underestimate the impact of their program.
4. Prevention programs targeting multiple domains (i.e. individual, school, and community) are more effective than programs targeting one domain.

We looked more closely at whether these conclusions held true for the 10 programs targeting 10 to 18 year olds.
Do short-term program interventions produce time-limited benefits? This was difficult to determine for this subset of programs because half of the eight short-term program evaluations (less than one year) did not do follow-up testing. Of the three programs that did, two (the Adolescent Transition Project and Coping with Stress Course) found mixed results and one (the Penn Prevention Project) found positive follow-up effects.

After 12 weekly 90-minute sessions focused on life skills training using a variety of social learning, direct instruction, and role modeling, the parents and adolescents in the Adolescent Transition Project reported significantly less home problem behavior at the follow-up assessment than at the pretest for all treatment groups; in contrast, however, there was an increase in the teacher reports of school problem behavior for the adolescents in the Teen focus treatment group.

In the Coping with Stress Course, adolescents with elevated self-reported depressive symptomatology were targeted for fifteen 45 minute-long group sessions focused on learning life skills using a variety of social learning and modeling techniques. Adolescent's reports of depressive symptomatology declined from pre to post test. This decline disappeared at the 12-month follow-up. In contrast, however, there were fewer cases of MDD or Dysthymia [a milder from of depression] in the treatment group than in the control group at the follow-up testing.

Only the Penn Prevention Project found unambiguous evidence of both follow-up and "sleeper effects." This selected intervention program targeted children ages 10 to 13 years at risk due to elevated depressive symptoms or family conflict. Intervention groups met weekly for 12 weeks after school for 1.5 hours. The youth were taught life skills and self-management skills using a variety of social learning, direct instruction and role modeling techniques. Cognitive behavioral techniques were also used to help the youth learn new more effective explanatory styles. Post-intervention data showed fewer depressive symptoms, better classroom behavior, and reduced likelihood of attributing negative events to stable enduring causes for the treatment group. While levels of experimental and controls group's depressive symptomatology increased over the 24-month follow-up period in the Penn Prevention Program, this increase was larger in the control group than in the treatment group. Also, even though there were no significant
differences at the posttest, parents of the intervention group reported more improvements in the children's home behavior at the 24-month follow-up than parents of the control group. Effects were maintained at the 12, 18, and 24 month follow-ups. Interestingly, although this program is considered short-term, it was the only program of the six with follow-up data suggesting a possible "sleeper effect" in program benefits. This calls into question the claim that short-term interventions yield only short-term effects.

Do multi-year programs foster more enduring benefits than short-term program interventions? Four programs come closest to meeting the multi-year criteria, but only two, the Improving Social Awareness-Social Problem Solving (ISA-SPS) and the Bullying Prevention Program, actually extended beyond one year. The ISA-SPS two-year program targeted the transition to middle school by focusing on changing the school culture. The program also taught social skills related to decision making, conflict management, and social awareness. Follow-up effects were evident at six years after the program intervention.

The Bullying Prevention Program, part of a national campaign against bullying in Norway, lasted two years. It is a school-based universal prevention program focused on reducing bullying problems by increasing awareness and knowledge of the problem, involving teachers and parents, establishing clear rules against bullying behavior, and providing support and protection for bullying victims. The positive effects of this program were maintained at least through the 20-month follow-up assessment.

The other two programs, Big Brothers Big Sisters and The School Transition Environmental Project, were 9-12 months in length. Mentors in the Big Brothers Big Sisters program met with their assigned child 3 times per month for 3 to 4 hours for at least 1 year. Treatment effects were found across multiple outcome measures ranging from hitting behavior to academic performance. Follow-up data were not collected.

The School Transitional Environmental Project focused on changing the school social climate to assist in the transition to middle school in large schools with many feeder schools. Adopting the middle school philosophy of advisories, homeroom teachers were assigned to smaller cohorts to function as a liaison and guidance counselor. They meet with their students daily and with their students' families on a regular basis. The effects of the program intervention were positive, but a follow-up did not test for the
stability of the effects over time.

In sum, positive long-term effects were found in the two longer-term programs that tested for follow-up effects. However, with only two programs as examples, it would be unfair to conclude that multi-year programs contribute to longer lasting effects than short-term programs, especially given the evidence of sustained effects from two of the short-term programs discussed earlier.

Are programs targeting multiple levels and settings (i.e. individual, school, community) more effective than programs targeting one domain? The programs most relevant to youth give mixed support for this conclusion. On the one hand, the eight programs concentrating on individual change achieved positive post-intervention effects. The two programs with follow-up data, the Penn Prevention Project and the Coping with Stress Course, also showed evidence of sustained effects at follow-up. Thus programs targeting the individual can be effective. However, it is quite likely that these programs also indirectly created changes in other domains such as the family or school. On the other hand, the four programs targeting multiple levels also yielded positive post-intervention effects and the three programs with follow-up data showed long-term effectiveness as well.

In summary, from the 12 programs targeting youth ages 10 to 18, we can draw several conclusions. Short-term programs can be just as effective as programs lasting nine months to two years at preventing problem behaviors and promoting positive youth development. Program interventions concentrating on individual change seem to be as effective as those focusing on multiple domains are. One program, a selected intervention, demonstrated evidence of a "sleeper effect". Thus, from these evaluations, it appears that mental disorder prevention programs can be designed to support positive psychological and emotional development. By and large, the effective programs used skill building instruction and extensive opportunities to practice these new skills at the individual level, and social support and social norm building strategies at the school level. Future evaluation research in this domain should focus on the causal links between program interventions and outcomes. In addition, it is not clear which of the programs can be successfully implemented in non-school settings with voluntary participation.
Summary

By and large, the program interventions designed to promote positive mental health can be quite effective, and when assessed, appear to have long-term positive consequences. On the one hand, programs based on clinical theories of behavior change and sound instructional practices are effective at both reducing problem behaviors and increasing a wide range of social and emotional competencies. On the other hand, generalizability is an issue due to the very small number of replications particularly in non-school settings. We do not know how well such programs will work in community based programs in which participation is entirely voluntary. Nonetheless, there is sufficient evidence to conclude that programs such as these reviewed, targeting the prevention of mental disorders, can be effective in both reducing problems and increasing social and emotional competencies.

Violence Prevention Programs

The Center for the Study and Prevention of Violence at the University of Colorado at Boulder published a series of "Blueprints" describing program interventions effective in preventing violence. The Blueprints series was developed to give practical information to communities to help them select a program intervention that best matched their needs and resources. Out of the 450 delinquency, drug, and violence prevention programs they reviewed, the Blueprints highlighted ten that met most of the following criteria: an experimental design with random assignment or a strong quasi-experimental design; evidence of a statistically significant deterrent (or marginal deterrent) effect on delinquency, drug use, and/or violent behavior; at least one additional site replication with experimental design and demonstrated effects; and evidence that the deterrent effect was sustained for at least one year post-treatment.

Of the ten model programs, six included youth ages 10 to 18 in their target population: Big Brothers Big Sisters, Quantum Opportunities, Midwestern Prevention Project, Life Skills Training, Multisystemic Therapy, and Bullying Prevention Program. The Bullying Prevention Program was described earlier. The other 5 are summarized briefly here (see Table 1 for more details).

Big Brothers Big Sisters (BBBS) is a community-based mentoring program that
matches an adult volunteer (Big Brother or Big Sister) to a 10 to 16 year old (Little Brother or Little Sister) with the expectation that a caring and supportive relationship will develop. The match is well supported by mentor training, and both ongoing supervision and monitoring of the relationship by a professional staff member.

The Quantum Opportunities Program (QOP) was designed to serve very poor adolescents living in high-risk neighborhoods by providing comprehensive education, service, and development activities, as well as financial incentives, from ninth grade through high school graduation. Adolescents from families receiving public assistance entered the program in the ninth grade and continue for four years through high school.

The Midwestern Prevention Program (MPP) is a comprehensive, community-based, multi-faceted program for the prevention of adolescent drug abuse, with a major emphasis on cigarette smoking, alcohol use, and marijuana use. The program targets young people in sixth and seventh grade and includes program interventions with the community, schools, and families.

The Life Skills Training program is a school-based universal prevention program designed to prevent drug use. The program intervention is a curriculum to teach general life skills and social resistance skills training.

Multisystemic Therapy (MST) uses a family ecological systems approach to help serious violent or substance abusing juvenile offenders. The therapy focuses on getting families involved in changing those aspects of the youth's setting (i.e. peers, school, family, community) that contribute to the problem behavior. The primary method is teaching effective parenting skills and helping parents overcome such barriers to effective parenting as parental drug abuse and lack of a social support network in the community.

In an effort to understand the source of change, Elliot et al. (1999) looked for evidence that change in risk or protective factors mediated change in violent behavior. They found that program evaluations either had not collected the necessary data to analyze the causal processes or had not reported on the analysis. Likewise, because the studies evaluated whole program packages, rather than specific program components, it was not possible to determine exactly what worked in any given program. Nonetheless, these ten programs do provide models of what can be done in communities to decrease rates of violence. Interestingly, most of the programs involved the kinds of experiences
and settings outlined earlier as critical for promoting positive youth development. Teaching life skills and providing better adult social supports were common across all of the effective programs.

**Teen Pregnancy Prevention Programs**

Kirby (1998) reviewed evaluations of primary prevention programs designed to reduce sexual risk-taking and teen pregnancy. These programs met the following criteria: published in 1980 or later, used experimental or quasi-experimental design; included a minimum sample size of 100 in combined experimental and control groups; targeted 12-18 year olds; conducted in the United States or Canada; and measured program impact on sexual or contraceptive behavior or pregnancy or birth rates. Kirby summarized the strengths and limitations of each evaluation based on the following methodological principles: sampling; random assignment; sample size; long-term follow-up; measurement of behavior (sexual and contraceptive behaviors); statistical analyses; publication of results; replication; and independent evaluation. Kirby concluded that few studies abide by high standards for each principle, thus limiting generalizations about which specific programs or types of programs reduce sexual risk-taking and teen pregnancy.

The review divided programs into three groups based on whether they focused primarily on sexual antecedents (i.e. age, gender, pubertal timing), on non-sexual antecedents (i.e. poverty, parental education, parental support, drug and alcohol use), or on a combination of sexual and non-sexual antecedents. We are most interested in the latter two groups because of their fit with a youth development framework. Youth development programs were further categorized as service-learning, vocational education and employment, and other. All three categories focused on improving education and life options as the means to reduce pregnancy and birth rates.

Service learning programs consisted of unpaid service time in the community as well as structured time for training, preparation, and reflection. The results for such programs were equivocal. On the one hand, Teen Outreach Program (TOP) participants reported lower rates of pregnancy and school failure than the controls during the school year in which they participated in the program intervention. The Teen Outreach Program
(TOP) is a national volunteer service program designed to prevent adolescent problem behaviors by promoting healthy social development in high school students. The program targets high school-aged adolescents. Similarly, a health education curriculum combined with service learning was effective at reducing reported sexual activity. On the other hand, although a quasi-experimental evaluation of Learn and Serve programs showed a similar short-term trend in reduced pregnancy rates, the result was not statistically significant and the trend disappeared one year later.

Vocational education and employment programs included academic education and either vocational education or actual jobs. Again the results were equivocal. On the one hand, the Youth Incentive Entitlement Pilot Projects (YIEPP) was effective at reducing birth rates and increasing both teen employment and school enrollment. This program guaranteed part-time employment to youth during the school year and full-time employment during the summer if they remained in high school. On the other hand, four very rigorously evaluated employment and education programs were not effective in reducing pregnancies or birth rates. This evidence suggests that vocational and employment programs are not effective in decreasing pregnancy or birth rates.

In summary, the strongest evidence for program effectiveness using a youth development framework comes from the Teen Outreach Program. Why was this service-learning program effective while the others were not? Again, we do not have an answer for this question because causal links in the interventions were not evaluated. Therefore, we do not know whether to attribute the success of TOP to the service-learning component or to other characteristics of the program such as strong bonds with the adults in the program. Nonetheless, the program evaluations do offer promise that a youth development approach may be effective in providing youth opportunities that reduce their risk for teenage pregnancy.

Positive Youth Development Programs
Catalano and Hawkins et al.

The Hawkins and Catalano et al. Positive Youth Development report (see Catalano et al., 1998, 1999; Hawkins et al., 1999), funded by Department of Health and Human Services (DHHS), examined evaluations of positive youth development
programs. The authors solicited information on promotion/prevention programs from a wide variety of sources. Only research designs using a control or strong comparison group with measures of youth behavioral outcomes were included. The programs selected had to include at least one of the following objectives identified by the authors as important for positive youth development:

- Promote bonding
- Foster resilience
- Promote social, emotional, cognitive, behavioral, and moral competence
- Foster self-determination, spirituality, self-efficacy, a clear and positive identity, belief in the future, and/or prosocial norms
- Provide recognition for positive behavior and/or opportunities for prosocial involvement

Seventy-seven program evaluations were reviewed and twenty-five were chosen for the report (see Table 1 for details). The other 52 programs were excluded because they either did not meet scientific criteria or there was no evidence of effectiveness of the program components.

The authors concluded that the most effective programs sought to strengthen social, emotional, cognitive and/or behavioral competencies, self-efficacy, and family and community social norms for healthy social and individual behavior. To achieve these goals, most program interventions targeted a combination of social settings (family, school, church, community, and work). Of the social settings mentioned, 88 percent had a school component, 60 percent had a family component, and 48 percent had a community component.

Regarding positive youth development goals, competence, self-efficacy, and prosocial norms were present in all 25 programs. Opportunities for prosocial involvement and recognized positive behavior were provided in 88 percent of the programs. Social bonding was promoted in 76 percent of the programs. The other five constructs (positive identity, self-determination, belief in the future, resiliency, and spirituality) occurred in less than half of the programs.
Catalano and Hawkins et al. identified two general program strategies that were used to promote positive youth development: skill building and environmental/organizational change. A focus on skill building, primarily social or cognitive behavioral skills, occurred in 96 percent of the programs; decision-making and self-management skills in 73 percent; coping skills in 62 percent; and refusal-resistance skills in 50 percent. Environmental/organizational change programs focused on changing teacher classroom practices and peer social norms. Overall, the characteristics and strategies of effective positive youth development programs summarized in this review match the personal and contextual features summarized at the start of this paper as important for healthy adolescent development.

Unfortunately these positive youth development program evaluations had many of the same limitations found in the previous reviews. Of the 25 programs meeting the inclusion criteria, only 64 percent used experimental designs with randomization and only half gathered any follow-up data. None included comprehensive information about the program, the implementation process, the youth development constructs being addressed, and the relation between the implementation information and outcomes. Also, assessment measures were rarely adequate to track positive youth development over time, and problem behaviors were measured much more frequently than positive behaviors.

In summary, 25 well-evaluated programs give support that a positive youth development approach can reduce problem behaviors and increase personal assets. Skill building and environmental change were the two most common strategies of effective programs. All 25 of the programs targeted competence, self-efficacy, and prosocial norms. And, as has been true in the previous reviews, there was very little information about why programs work due to the lack of attention given to understanding causal processes at work.

**Roth and Brooks-Gunn et al.**

Roth et al. (1998, see also Roth & Brooks-Gunn, 2000) reviewed over 60 evaluations of prevention and intervention programs for adolescents to evaluate the usefulness of the youth development framework. They defined youth development programs as "developmentally-appropriate programs designed to prepare adolescents for
productive adulthood by providing opportunities and supports to help them gain the competencies and knowledge needed to meet the increasing challenges they will face as they mature.” Of the 60 programs reviewed, 15 were selected for inclusion in the review (see Table 1 for details). These fifteen shared the following characteristics: a positive youth development focus; an experimental or quasi-experimental design; and a focus on youth not currently demonstrating problem behaviors. The programs were grouped in three categories listed in order of how closely they matched a youth development framework: (a) positive-behavior focused; competency/asset enhancing programs; (b) problem-behavior focused; competency/asset enhancing programs; and (c) resistance skills-based prevention programs.

The authors concluded that programs incorporating more elements of the youth development framework showed more positive outcomes. Youth development programs decreased adolescent risk-taking behaviors and increased competencies. The evaluations supported the importance of a caring adult-adolescent relationship and life skill development. In addition, they concluded that longer-term programs that engaged youth throughout adolescence were the most effective, suggesting the possibility of cumulative effects.

This review stands out because it included a framework to categorize youth development programs, it focused on community-based (rather than school-based) programs, and it insisted on rigorous standards of evaluation before concluding that a program was effective. Thus it provides credibility to community youth development programs by demonstrating effectiveness with rigorous methodological standards. Like the previous reviews, life skill training and strong adult support were common components of many of the effective programs. But we still do not know much about either the long-term effects or the generalizability of these programs. We also know very little about which specific aspects of the programs were most effective for any particular outcome or population group.

**Adventure Education**

Although adventure education programs do not take place in communities and the evaluations of these programs suffer from the same methodological problems we have
encountered with other fields, this review is included because their success can inform us of potential program components important for healthy development. Common features of adventure programs include: wilderness or backcountry settings; groups of less than 16; mentally and/or physically challenging objectives; intense social interactions often relating to group problem solving and decision making; trained non-directive leaders; and average duration of 2-4 weeks.

Hattie and colleagues (1997) performed a meta-analysis of the effects of adventure programs. They found short-term positive effects that were maintained, and sometimes even increased, over time. Adventure programs had their greatest effects on psychological, emotional, and cognitive assets summarized at the start of this paper (such as self-control, confidence in one's abilities to be effective, good decision-making, improved school achievement, leadership, independence, assertiveness, emotional stability, social comparison, time management, and flexibility). Longer programs (more than 20 days) were more effective than shorter programs.

Summary and Conclusions

Few evaluations meet the criteria laid out at the start of chapter for high quality evaluation. Although many use a rigorous experimental or quasi-experimental design, few have a well articulated theory of change guiding program design implementation, selection of outcomes, or specification of the mediating and moderating conditions that might connect the program characteristics to the youth outcomes. Few have included high quality implementation-evaluation techniques. Consequently, it is very difficult to determine why the program either succeeds or fails to support positive youth development.

Closely linked to the scarcity of theory, there is little overlap between the measures collected in most of the evaluations summarized in these reports and the assets and characteristics of settings outlined at the beginning of this paper. In part this reflects the scarcity of well-validated measures of these psychological and contextual characteristics. In part it reflects the disconnection between research and practice traditions.
Despite these shortcomings, we can draw some conclusions with regard to the outcome and contextual characteristics outlined at the beginning of this paper. Mapping this framework of assets and features of settings to promote adolescent development onto the community programs reviewed was a challenge. We know from the evaluations that programs can be effective in promoting healthy development; we know much less about why. Each program consisted of several components that appeared to be consistent with the assets and contextual features summarized earlier. However, without appropriate information, we cannot say much about which particular component or combination of components responsible for the effect. Without this information, we cannot decisively state, for example, which and how many of the characteristics of settings summarized earlier were critical for the success of these programs. Nonetheless, in this section we attempt to loosely bridge this gap by comparing program interventions with our framework.

Social and Emotional Support from Adults

Social and emotional support was a major component of most of the programs reviewed. Mentoring activities are the most salient example of an effort to provide increased social and emotional support. But most of the programs provided youth with some form of supportive contact with non-familial adults. In many cases "mentoring" was not explicitly stated as a program goal, but the adult-adolescent contact in these programs often took the form of mentoring. For example, Quantum Opportunities used a case-management approach to tailor their program to meet individual needs and circumstances. In addition, many of the programs officially designated mentoring as the central component of the program. The best example of this is Big Brothers Big Sisters. The positive effects of mentoring were clearly supported in the evaluation of the BBBS program. Follow up was done to understand the factors contributing to positive supportive mentoring relationships. Through telephone interviews with 1101 mentors in 98 mentoring programs and through youth focus groups and youth interview data (Herrera et al., 2000), the evaluators found that mentors with the closest and most supportive relationships reported more than 10 hours of contact per month, shared interests between the mentor and mentee, and shared decision making about activities.
They also found that the most supportive relationships were between mentors and elementary school aged youth.

**Opportunities to Belong**

We hypothesized earlier that healthy development is promoted by fostering a sense of belonging, an area where the Quantum Opportunities Program excelled. Instilling a sense of belonging was at the core of the QOP mission as reflected in their motto, "Once in QOP, always in QOP". If participants stopped attending QOP activities and disappeared from the program, program staff tracked them down to find out what was wrong, to assure them they were still part of their QOP family and to coax them back to the program. This attitude of refusing to give up on youth was considered by Hahn (1994) to be a crucial component of the program.

**Pro-Social Norms**

Basically all of the programs, even when not explicitly stated as a program goal, promoted pro-social norms. However, the programs with community service component best exemplify this feature. Two of the four model programs, Quantum Opportunities and the Teen Outreach Program, had community service components as part of their program intervention. Participants in the Across Ages program were matched with a mentor who was 55 years old or older. These young people received classroom-based social problem-solving skills training and participated in community service activities with their mentors. In many cases, parents also participated in workshops to enhance their parenting skills in the areas of providing opportunities for prosocial behavior, rewarding positive behavior, and strengthening parent-child bonds.

**Opportunities to Experience Mastery and to Engage in Activities that Matter**

Providing opportunities for autonomy, mattering, taking responsibility, and challenge seems especially important for older adolescents as they approach the transition to adulthood, however most program interventions did not address opportunities for efficacy directly. Two of the model programs, Quantum Opportunities and the Teen Outreach Program, were successful in involving high school students in community
service, life and family skills training, and support in planning for college and jobs. Although we can only hypothesize as to the reason for their success, it is possible that these experiences and activities in both programs provided opportunities to experience both mastery and mattering.

**Opportunities for Skill Building**

Opportunities for skill building were plentiful in the programs reviewed. An emphasis on social skills was a frequent program goal. Skills in resistance were common in programs primarily focused on preventing problems such as drug and alcohol use, teen pregnancy, and HIV/AIDS (see for example program descriptions for ENABL, Life Skills Training, and Project ALERT). Also, many of the programs focused specifically on the parent-youth relationship and included building youth communication skills with the parents, as well as training specifically for the parents (e.g., Adolescent Transitions Project, Creating Lasting Connections, Functional Family Therapy, Improving Social Awareness-Social Problem Solving, Midwestern Prevention Project, Social Competence Program for Young Adolescents, Teen Outreach Program).

Other programs focused on individual cognitive, social, and emotional skill development. Some focused on such social and emotional skills as coping and self-regulation skills (Coping with Stress Course, Functional Family Therapy, Penn Prevention Project). Others provided employment/economic management skills through part-time employment with mentoring, encouragement for opening savings accounts, financial incentives for participation (Quantum Opportunities, Summer Training and Education Program, Louisiana State Youth Opportunities).

**Integration of Family, Schools, and Community**

Several programs excelled in integrating family, school, and community into their program interventions. The Midwestern Prevention Project (MPP) included a set of programs activities to prevent adolescent drug use: (1) mass media programming with news clips, commercials, and talk show discussions on drug use in incorporated with information on their program; (2) a school-based program teaching resistance and counteraction skills for drug use; and (3) parent education and organizing. Project
Northland also used a community-wide approach. Students received skills training to enhance their social competency in dealing with their parents, their peers, and the norms surrounding alcohol use. Parent education and involvement was also stressed and community-level changes in alcohol-related programs and policies were also targeted. Finally, the Valued Youth Partnership Program participants were given training in how to tutor and then engaged in tutoring of younger students for at least four hours per week. Parents were involved in school activities, and students were exposed to role models in the community through presentations and field trips.

Other Features

The two contextual characteristics from our list that were not easy to identify in program descriptions are appropriate structure and physical and psychological safety because these two characteristics received little mention in the program descriptions. Perhaps this omission reflects that fact that these characteristics are considered so basic that they are not worthy of explicit mention. One of the fundamental reasons for community programming for youth is to provide safe places for youth to go. Wisdom would dictate then that programs must enable youth to feel and be psychologically and physically safe. Programs would need to include clear and consistent rules, expectations, and boundaries. Nonetheless, the absence of these features is likely to be a major reason why programs fail and why some programs produce negative results. Because such programs are unlikely to be candidates for rigorous evaluation, it is unlikely the consequences of the absence of these characteristics will be documented in experimental and quasi-experimental evaluations.
References


<table>
<thead>
<tr>
<th>Program Name</th>
<th>Description</th>
<th>Youth Outcomes</th>
<th>Program Context Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent Transitions</td>
<td>Location: family, school, community</td>
<td>↑ social learning, ↓ negative engagement with family, conflict, negative family events, youth aggression (increased school behavior problems for Teen focus group at one yr follow-up)</td>
<td>Emotional and Social Support, Belonging, Pro-Social Norms, Opportunities for Skill Building, Integration with Family, Schools, and Community</td>
</tr>
<tr>
<td>Project</td>
<td>Sessions: 12 over 18 hrs</td>
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<tr>
<td>Age: 10-14</td>
<td>Content: youth self regulation skills training (teen focus group), parent management skills training (parent focus group), consultant to improve parent-youth communication (teen/parent focus group)</td>
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<tr>
<td>Grade: 6th – 8th</td>
<td>Location: family, school, community</td>
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<tr>
<td>Brainpower Program</td>
<td>Location: school</td>
<td>↓ aggressive behavior following the intervention</td>
<td>Belonging, Opportunities for Skill Building</td>
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<tr>
<td>Age: 10-12 (indicated)</td>
<td>Sessions: 12 lessons (60-90 minutes each)</td>
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<td></td>
<td>Content: social competency; focus on improving the accuracy of children's perceptions and interpretations of others' actions.</td>
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<tr>
<td>Bicultural Competence Skills</td>
<td>Location: community</td>
<td>↑ self-control, assertiveness, healthy coping, substance abuse knowledge, ↓ alcohol, tobacco and other drug use</td>
<td>Belonging, Pro-Social Norms, Opportunities for Skill Building</td>
</tr>
<tr>
<td>Age: 11-12</td>
<td>Sessions: 10</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Content: skills training to promote competence and positive identity based on bicultural fluency</td>
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<tr>
<td>Big Brothers /Big Sisters</td>
<td>Location: community</td>
<td>↑ GPA, parental trust, ↓ hitting behavior, likelihood of initiating alcohol and drug use, skipping school, lying to parents</td>
<td>Emotional and Social Support, Belonging, Pro-Social Norms, Physical and Psychological Safety, Opportunity for Mastery and Mattering, Opportunities for Skill Building</td>
</tr>
<tr>
<td>Age: 10-16</td>
<td>Sessions: 9-12hrs/mth for one year</td>
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<td></td>
<td>Content: activities with mentor</td>
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<tr>
<td>Bullying Prevention Program</td>
<td>Location: school</td>
<td>↓ 50% or more in bully/victim problems for boys and girls across all grades (4-9), with more marked effects after 2 years than after 1 year. (sleeper effects)</td>
<td>Pro-Social Norms, Physical and Psychological Safety, Opportunities for Skill Building</td>
</tr>
<tr>
<td>Grade: 4th-7th Norway; 9th-8th US equivalent universal</td>
<td>Sessions: 9-12hrs/mth for one year</td>
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<td></td>
<td>Content: 32-page booklet included information on the scope, cause and effects of school bullying and detailed suggestions for reducing and preventing bullying. Abbreviated bullying info to families with school-age children. A 25-minute video with vignettes of bullying situations. Students completed a brief bullying questionnaire related to bullying to increase awareness and promote discussion of the problem of bullying.</td>
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<tr>
<td>Counselor-CARE</td>
<td>Location: school</td>
<td>↑ self-esteem, ↓ suicide-risk behaviors and anger problems, reports of depression</td>
<td>Emotional and Social Support</td>
</tr>
<tr>
<td>Grade: 9th-12th (indicated)</td>
<td>Sessions: 1, 3.5-4hrs</td>
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<td></td>
<td>Content: brief assessment and resource identification program using computer program and counselor</td>
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<tr>
<td>Program</td>
<td>Grade</td>
<td>Location</td>
<td>Sessions</td>
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<tr>
<td>Coping and Support Training</td>
<td>9th-12th</td>
<td>school</td>
<td>12-sessions</td>
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<tr>
<td>The Child Development Project</td>
<td>3rd-6th</td>
<td>family and school</td>
<td>integrated curriculum</td>
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<tr>
<td>Coping with Stress Course</td>
<td>9th-10th</td>
<td>after school</td>
<td>15, 45min each</td>
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<tr>
<td>Creating Lasting Connections</td>
<td>12-14</td>
<td>family, church, community</td>
<td>youth (15hrs); parents</td>
</tr>
<tr>
<td>ENABL</td>
<td>12-13</td>
<td>school classroom, community organization</td>
<td>5, 1hr each</td>
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<tr>
<td>Friendly PEERsuasion</td>
<td>11-14</td>
<td>Girls’ Inc.</td>
<td>14, one hr each</td>
</tr>
<tr>
<td>Functional Family Therapy</td>
<td>11-18 indicated</td>
<td>family</td>
<td>8-12hrs, 26 hrs max.</td>
</tr>
<tr>
<td>Growing Healthy</td>
<td>4th-7th</td>
<td>school</td>
<td>43-56 lessons over 1 or 2 yrs</td>
</tr>
<tr>
<td>Program</td>
<td>Grade</td>
<td>Location</td>
<td>Sessions</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------------</td>
<td>---------------------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>The Improving Social Awareness – Social</td>
<td>5th</td>
<td>school</td>
<td>2 yrs</td>
</tr>
<tr>
<td>Problem Solving (ISA-SPS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know Your Body</td>
<td>4th-9th</td>
<td>school</td>
<td>2 hrs/wk for 6 yrs</td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Skills Training</td>
<td>7th-9th</td>
<td>school</td>
<td>2 sessions/wk for 15 wks (Y1); 10 booster sessions (Y2); 5 booster sessions (Y3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lousiana State Youth Opportunities</td>
<td>14-16</td>
<td>school, community</td>
<td>summer, 8 weeks</td>
</tr>
<tr>
<td>Project</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midwestern Prevention Project</td>
<td>6th-7th</td>
<td>family, school, community</td>
<td>school program (10), homework activities with parents (10hrs)</td>
</tr>
<tr>
<td>Project</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multisystemic Therapy (MST) indicated</td>
<td></td>
<td>family, community</td>
<td>60 hrs over 4 months</td>
</tr>
<tr>
<td>Project</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Penn Prevention Project</td>
<td>10-13</td>
<td>after school</td>
<td>1.5 hrs/week for 12 wks</td>
</tr>
<tr>
<td>Project</td>
<td>selected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>Grade</td>
<td>Location</td>
<td>Sessions</td>
</tr>
<tr>
<td>---------</td>
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</tr>
<tr>
<td>Project ALERT</td>
<td>7th – 8th</td>
<td>school</td>
<td>10 (7th), 3 booster (8th)</td>
</tr>
<tr>
<td>Project Northland</td>
<td>6th–8th</td>
<td>family, school, community</td>
<td>weekly activities and/or training over 3 yrs</td>
</tr>
<tr>
<td>Positive Youth Development Program</td>
<td>11-14</td>
<td>school</td>
<td>20</td>
</tr>
<tr>
<td>Quantum Opportunities</td>
<td>9th – 12th</td>
<td>school, community, work</td>
<td>education-related activities (250hrs), development activities (250hrs), service activities (250hrs) each year for 4 yrs.</td>
</tr>
<tr>
<td>Reducing the Risk</td>
<td>10th</td>
<td>health education classes</td>
<td>15</td>
</tr>
<tr>
<td>Responding in Peaceful and Positive Ways</td>
<td>family, school, community</td>
<td>25 over school yr</td>
<td>social/cognitive skill-building to promote nonviolent</td>
</tr>
<tr>
<td>Grade: 6th</td>
<td>School Transitional Environment Project</td>
<td>Location: school, family</td>
<td>Grade: 6th-7th</td>
</tr>
<tr>
<td>---</td>
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<tr>
<td>conflict resolution and positive communication; activities included team building and small group work, role playing, and relaxation techniques.</td>
<td>Location: school, family</td>
<td>Sessions: transition to middle school yr</td>
<td>Students placed in cohort, homeroom teacher becomes advisor to cohort and liaison between students, family and school. Homeroom teacher meets with other teachers to identify students needing counseling or support.</td>
</tr>
<tr>
<td>reports of behavior only)</td>
<td>↓ better adjustment on measures of anxiety, depression, self-esteem and delinquent behavior; better teacher ratings of classroom behavioral adjustment; grades and attendance patterns</td>
<td>↓ levels of school transitional stress</td>
<td>↑ peer involvement, social acceptance, problem-solving, use of conflict resolution strategies, positive solutions</td>
</tr>
<tr>
<td>↓ weapon carrying, in-school suspensions</td>
<td>Emotional and Social Support</td>
<td>Belonging</td>
<td>Integration with Schools</td>
</tr>
<tr>
<td>Heightened levels of school transitional stress</td>
<td>Emotional and Social Support</td>
<td>Belonging</td>
<td>Integration with Schools</td>
</tr>
<tr>
<td>Teen Outreach Program (TOP)</td>
<td>Grade: 10th</td>
<td>Location: school and community</td>
<td>Sessions: (school year) 45hrs volunteer service, weekly classroom discussions and activities</td>
</tr>
<tr>
<td>Teen Incentives Program</td>
<td>Grade: 9th</td>
<td>Location: after school program</td>
<td>Sessions: 14 weeks</td>
</tr>
<tr>
<td>Valued Youth Partnership</td>
<td>Age: 12</td>
<td>Location: family, school, community</td>
<td>Sessions: 30 over school yr, 4 yrs of tutoring/week</td>
</tr>
<tr>
<td>Woodrock Youth Development Project</td>
<td>Age: 6-14</td>
<td>Location: family, school, community</td>
<td>Sessions: weekly classes and activities, daily mentoring, home visits and contacts</td>
</tr>
<tr>
<td>relations classes to develop resiliency skills, peer tutors, homework assistance, extracurricular activities (weekend retreats, after school clubs, crisis intervention, summer program), parent training and involvement</td>
<td>subgroups) Wrong direction outcome on attitudes toward drug use in older subgroup.</td>
<td>Integration with Family, Schools, and Community</td>
<td></td>
</tr>
</tbody>
</table>