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ABSTRACT

This report, prepared by the Delinquency and School Environments Program, describes further interim results of the program's national evaluation of the Alternative Education Program of the Office of Juvenile Justice and Delinquency Prevention (OJJDP). The report is directed primarily to project implementers and to the OJJDP and is organized in two sections: the first presents a discussion of topics relevant to the entire study. Chapter 1 recapitulates briefly the first chapter of the first interim report to provide a quick introduction for those unfamiliar with the Alternative Education Program. Chapter 2 reviews chapters 2-4 of the first interim report to outline the record of accomplishment of earlier delinquency prevention efforts, and the program development evaluation. Chapter 3 describes changes made in the measures used in the school action effectiveness study. Chapter 4 describes the kinds of delinquency prevention projects in the initiative, the major influences on the evaluation, and the development of the prevention projects during the second year of the Alternative Education Program. Chapter 5 provides an overview of the school-level evaluation results. Chapter 6 summarizes information about the effects of interventions targeted at high-risk individuals for projects that have such targeted interventions as distinct, evaluatable components. The final chapter draws implications and makes recommendations. Part 2 of the report consists of 14 independent reports of the prevention project. The appendices contain detailed statistical tables and other material relating to the results summarized in part 1. (JAC)

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REPORT NUMBER 342

JUNE 1983

THE SCHOOL ACTION EFFECTIVENESS STUDY: SECOND INTERIM REPORT PART I

Gary D. Gotfredson, Denise C. Gotfredson, and Michael S. Cook

The Johns Hopkins University

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THE SCHOOL ACTION EFFECTIVENESS STUDY:

SECOND INTERIM REPORT

PART I

Gary D. Gottfredson, Denise C. Gottfredson, and Michael S. Cook

Editors

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The Center

The Center for Social Organization of Schools has two primary objectives: to develop a scientific knowledge of how schools affect their students, and to use this knowledge to develop better school practices and organization.

The Center works through three research programs to achieve its objectives. The School Organization Program investigates how school and classroom organization affects student learning and other outcomes. Current studies focus on parental involvement, microcomputers, use of time in schools, cooperative learning, and other organizational factors. The Education and Work Program examines the relationship between schooling and students' later-life occupational and educational success. Current projects include studies of the competencies required in the workplace, the sources of training and experience that lead to employment, college students' major field choices, and employment of urban minority youth. The Delinquency and School Environments Program researches the problem of crime, violence, vandalism, and disorder in schools and the role that schools play in delinquency. Ongoing studies address the need to develop a strong theory of delinquent behavior while examining school effects on delinquency and evaluating delinquency prevention programs in and outside of schools.

The Center also supports a Fellowships in Education Research program that provides opportunities for talented young researchers to conduct and publish significant research and encourages the participation of women and minorities in research on education.

This report, prepared by the Delinquency and School Environments Program, describes further interim results of the program's national evaluation of the Office of Juvenile Justice and Delinquency Prevention's (OJJDP's) Alternative Education program. First interim results were reported in CSOS Report No. 325, April 1982.

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Preface

The School Action Effectiveness Study (SAES) is the national evaluation of the Office for Juvenile Justice and Delinquency Prevention's (OJJDP's) Alternative Education Program. The study is rooted in the perception that reducing the risk of youth crime requires the collaborative effort of practitioners, researchers, and project sponsors. Together, these groups can create change and examine its consequences in settings where answers are needed and problems are real.

The study is also rooted in the notion that theory is an essential ingredient of both program development and evaluation research. Consequently, SAES aims to implement the Program Development Evaluation (PDE) method, collaborating with practitioners in specifying theory-based research questions and designing evaluations as an aid to organizational self-study and the development of effective programs to prevent youth crime.

As evaluators, we are assisting in the development of effective projects; critically assessing project effectiveness, and contributing to knowledge about ways to reduce youth crime. At root, we share with OJJDP and the legislators who created that agency the conviction that the public deserves delinquency prevention and educational efforts whose effectiveness has been demonstrated. In a Federal demonstration program such as the Alternative Education Initiative, the expenditure of public funds is justified by the evaluation of the resulting effort to learn how to develop and implement similar projects effectively. The current evaluation, although accounting for a small fraction of the cost of the Alternative Education Program, has the important mission of summarizing and making available for transfer to others the knowledge gained in the broader program.

We have not assumed that this important task will be easy to accomplish, and we are gratified that we have been as successful as we have been in translating our ambitions into reality. The excellent rapport and cooperation we have with the Federal agencies involved, and with most of the action projects, have been critical in this success.

This interim report summarizes some of what we have learned in the second year of the SAES. We are pleased that evaluation is becoming routinized as an expected and well-understood part of the activities of most projects.

We are presently in a third year of interaction with 14 of the 17 projects with whom we began working in 1980--those that continue to operate. In most cases, evaluation designs that are stronger than those possible in the first two years are now being implemented. Because sounder projects and sounder evaluation designs were available in the second year of operation than in the first, the current report is more informative in describing the effects of project interventions than was our first interim report. Future reports should be even more productive in assessing project effects on students and schools.

In our first interim report readers may find information about each delinquency prevention project's history, its start-up activities, and its successes and problems in

implementation during its first year. Also in that report may be found some organizational diagnoses, and some ideas about improving projects. Occasionally, you will find preliminary attempts to assess effectiveness. These preliminary attempts were not--nor were they intended to be--authoritative and conclusive statements. They were intended to provide information useful for project development.

Effective projects develop over time, incorporating feedback from their own observations and those of evaluators to become stronger. This second report is therefore, like the first, directed primarily to project implementers and to OJJDP and its technical assistance contractor, who have a stake in fostering project development or in planning new initiatives. This report also contains information about the progress of each project in achieving the results sought by OJJDP in its initiative. Part two of this report describes each individual project separately, and focuses on the extent to which each individual project is meeting its own goals and objectives, and describes the problems and achievements of each.

Acknowledgments

This interim report is the product of many people's contributions, and it is possible to describe only some of these contributions here. The thousands of youths and teachers who shared their views about their schools and provided information about themselves made major contributions to the empirical basis for this report. The principals of participating schools, who facilitated both project development and evaluation, were essential contributors to the development of knowledge. We hope that all of these participants will be rewarded for their help by having their views heeded and acted upon.

Micahael S. Cook, Deborah Daniels, Denise C. Gottfredson, Deborah K. Ogawa, Donald E. Rickert, Jr., Norm Ringel, and Jane St. John, worked long and hard with action project personnel in workshops, site visits, and on the phone to prepare for the surveys, to evolve Program Development Evaluation plans, and to draft project narratives. Lois Hybl arranged workshops, organized documents, typed manuscripts, prepared graphs, and provided some much needed order and predictability for the project. Helene Kapinos kept the PDE worksheets flowing, maintained our calendars, coordinated the flow of day-to-day data entry tasks performed by the research assistants, and helped us maintain the complex and massive data files created by this large project. This report is possible because of their help and practical wisdom.

Ann Birdseye, Doris Coaxum, Barbara Dilligard, Martha Stewart, Hilda Gutierrez, Glen Bader, Chester Wooten, Richard Smith, Charles Almo, Herman Steptoe, Mary Lewis, Preston Elrod, Paul Friday, Vanita Vactor, Bill, Harris, David Bailey, Anita Batisti, Anadia Andrews, Jeanette Bass, Tyrone Seals, Phyllis Betz, Ciorah Montes, Nilda Rodriguez, Chris Lopez, Philip Cano, Nancy Cohen, Marilyn McKnight, Prentice Deadrick, Dave Reiss, Joan Bellafonataine, Joe Nathan, Mark Gilbert-Cougar, Nic Cooper, Sally Wizotsky, Sonny Luster, William Kottman, Tom Leighty, Roy Mahoney, and Pat Kenny were prevention project personnel who contributed in basic ways to the work reported here. They provided the theories that guided much of the instrument and scale construction, developed project plans using evaluation terminology, and made the action projects and data collection go.

Denise C. Gottfredson performed the superhuman task of coordinating and managing all of the data; Gary Gottfredson and Donald E. Rickert modified the survey instruments used in the project's first year. Michael Cook, Denise Gottfredson, Donald Rickert, and Jane St. John, put in many long days analyzing data under great time pressure. Others who assisted with data analysis and management include: Stewart Gavurin, Richard D. Joffe, Robert Kirchner, Helene Kapinos, Abhijit Mazumder, Andrea Nuzzolo, and Deborah K. Ogawa. Raul Romero translated some new items for the student questionnaire into Spanish, and Dennis Dillon and Mary Ellen Hartmann of Intran Corporation produced the optically scannable instruments.

Roberta Dorn and Barbara Tatem Kelley of the Office for Juvenile Justice and Delinquency Prevention cleared the way for this project to proceed, and helped to resolve nearly countless problems along the way.

Opinions expresssed are the authors' or editors', and do not necessarily reflect the position or policy of any agency or institution.

Organization of the Report

The remainder of this report is organized into two sections. The first of these discusses topics relevant to the entire study. Chapter 1 recapitulates in briefer form the first chapter of the first interim report to provide readers unfamiliar with the Alternative Education Program and the School Action Effectiveness Study with a quick introduction. Chapter 2 recapitualates in briefer form chapters 2 through 4 of the first interim report to acquaint those who have not read that document with important information about (a) the record of accomplishment in earlier delinquency prevention efforts, (b) conditions necessary to make inferences about prevention project effectiveness, and (c) program development evaluation. Chapter 3 describes changes made in the measures used in the school action effectiveness study, summarizing the psychometric properties of instruments redesigned for easier comprehension by school officials or improved through new research. Chapter 4 provides brief descriptions of the kinds of delinquency prevention projects in the initiative. It also describes major influences on the evaluation and the development of the prevention projects during the second year of the Alternative Education Program. Chapter 5 provides an overview of the school-level evaluation results for the results sought by OJJDP. Chapter 6 summarizes information about the effects of interventions targeted at high-risk individuals for projects that have such targeted interventions as distinct, evaluatable components. Chapter 7 draws implications of the study that seem appropriate at the present time, and makes recommendations for future work to reduce youth crime.

Part II of this report consists of independent reports on the prevention project. Most chapters were drafted by the field worker assigned to that project. Therefore, they generally have the benefit of having been given direct attention by the member of the evaluation team most familiar with that particular alternative education project. At the same time, however, the involvement of multiple authors, each with a different background and perspective on evaluation, leads to some unevenness in presentation. Some authors have bluntly provided the good and the bad news in a straightforward fashion. Others have leaned toward

presenting the projects in ways that make their strengths salient. In the editorial process we have not tried to eradicate the personal and stylistic differences that exist among the authors of the separate project reports. The reader is therefore urged to consider each of these a distinct essay, and to avoid making comparisons across projects on the basis of these individually drafted accounts. Many readers may be interested in reading Part I of this report, selectively dipping into Part II to learn more about specific projects.

Appendices contain detailed statistical tables and other material relating to the results summarized in Part I.

GDG

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Additional Materials Not Included in Part I:

Appendices
- A: Norms for School Climate Measures
- B: Profile Sheets for School Climate Measures
- C: Worksheets for Using School Assessment Results
- D: Detailed Climate Results for 1981 and 1982
- E: Total Enrollment, Number in Sample, and Completion Rates for Spring 1982 SAES Student Survey

Part I

School Action Effectiveness Study Overview

Introduction to the School Action Effectiveness Study

The Alternative Education Program

The Office of Juvenile Justice and Delinquency Prevention (OJJDP) funded 17 demonstration projects in the fall of 1980 and the early months of 1981 as part of a Program in Delinquency Prevention through Alternative Education. This OJJDP initiative is premised in part on the observation that delinquent behavior is associated with a number of school-related or school-based problems, including disruptive classroom conduct, absenteeism, truancy, and dropout (Bachman, O'Malley, & Johnston, 1978; Gottfredson, 1981, 1983b; OJJDP, 1980).

An educational approach to delinquency prevention is strongly suggested by the most widely influencial contemporary theory of delinquency (Hirschi, 1969), in which commitment to educational or other conventional goals, attachments to teachers and the school, and belief in rules are viewed as bonds of social control which prevent delinquent behavior. Learning theory, especially social learning theory (Bandura, 1971), provides an explication of the ways in which these elements of the social bond may be strengthened by appropriate educational interventions. Social learning theory also helps to explain how the influence of alternative school organization, and the influence of peers, teachers, and parents, can converge in preventing, or failing to prevent, delinquency. These theoretical perspectives find substantial support in the evidence provided by research; they concur in implying that alternative education programs can be structured in ways that will reduce delinquent behavior (Gottfredson, 1983b; Hawkins & Wall, 1979).

Both primary and secondary prevention of delinquency might be achieved in alternative education programs through their effects on the academic and social development of the youth involved.

The demonstration program is for the most part targeted at schools serving grades 6 through 12 in relatively high crime communities, with high rates of delinquency, dropout, suspensions, expulsions, absenteeism, and youth unemployment. Projects funded as part of this program were to be aimed at achieving (a) decreases in delinquent behavior in and around schools, (b) decreases in dropouts, suspensions, expulsions, and truancy, (c) increases in attendance, (d) increases in academic success in school with consequent increases in graduation rates, and (e) improvements in the early post-schooling labor market experiences, or in the post-secondary training or education, of youth associated with participating schools. The first of these results sought is known to be associated with the results "b" through "d" in the foregoing list, which are generally regarded as important risk factors for subsequent delinquent behavior. The final result sought would likely be influenced by interventions that reduce the risk of delinquency, and is of special importance to the Department of Labor (which transferred funds to OJJDP to support part of this initiative).

The achievement of these objectives requires some reorganization

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For a more extended discussion of the topics presented here, see the first interim report.

of school policies, practices, and environments. Specifically, the OJJDP program announcement called for achieving the following objectives which were seen as instrumental in fostering the attainment of the overarching program goals: (a) limiting or decreasing referrals to the juvenile justice system; (b) making school discipline fair and consistent while providing for due process; (c) increasing youth, parent, and community agency participation in school decision making to reduce student alienation and feelings of powerlessness; (d) decreasing the grouping of students according to inappropriate criteria (such as social class or race) which, accompanied by improved learning environments, should preclude labeling effects and stigmatization while enhancing educational success; and (e) providing a structure for learning that promotes educational and social development because it is tailored to realistic levels of performance for individual students.

Some of these instrumental objectives are in accord with research on the characteristics of schools and communities that are associated with victimization (Gottfredson & Daiger, 1979; National Institute of Education, 1978). Others accord with advice offered by national advisory panels (e.g., President's Commission on Law Enforcement and Administration of Justice, 1967), or practitioners (McPartland & McDill, 1977).

These OJJDP-generated project specifications constitute the first of three bases for an evaluation. The second basis is goals and objectives of each of the seventeen delinquency prevention projects. The third basis for the evaluation is the broader literature on the prevention of youth crime, which specifies some intermediary objectives that are important for delinquency prevention efforts (see Gottfredson, 1981, and Empey, 1981, for reviews of this literature).

Evaluation Aims

The overarching goal of the School Action Effectiveness Study is to create transferable and scientifically sound knowledge about delinquency prevention theory and practice. But a complex evaluation such as the School Action Effectiveness Study must accomplish many aims if it is to be effective. As Ogawa (1982) makes clear, previous delinquency prevention efforts and their evaluations have been fraught with problems of incomplete implementation, weak evaluations, and lack of intermediary and outcome measures required to assess the efforts.

Not only delinquency prevention programs suffer from these problems. Sarason (1971) describes the disappointing degree of implementation of attempted educational innovations such as the "new math." Whereas the developers of the innovation intended to alter the ways teachers interact with students, the major outcome was the use of some new math books. Many educational evaluations are, as Charters and Jones (1973) put it, evaluations of "non-events." Likewise, theory is lacking in many delinquency prevention and correctional programs, but is an essential element in the programs and their evaluations (Empey, 1980; Glaser, 1977; Gottfredson, 1982a). The SAES has taken steps to avoid evaluating non-events, and also to avoid the other problems from which earlier prevention evaluations have suffered.

Reducing youth crime in America is bound to be at least as difficult as building a space shuttle. But those who envision programs to pre-

vent delinquency or to rehabilitate youthful offenders all too often hope for effectiveness without developing plausible plans or using the technology needed to raise their inert and clumsy programs from the ground. Developing effective programs to reduce youth crime will not be easy. Much worthwhile technology has been developed, but usually this technology goes underutilized or is misapplied in schools.

The history of previous delinquency prevention efforts implies that most previous programs have been poorly implemented, implausible from the outset, or poorly evaluated. This history implies that concerted effort is required to implement highly plausible programs with strength and fidelity, and to evaluate these programs rigorously.

The scientific literature provides good reason to believe that the risk of delinquent behavior can be reduced, the evaluation literature provides strong grounds for insisting on strong, theoretically based, and well evaluated programs. The School Action Effectiveness Study was designed to strengthen the projects being implemented in the Alternative Education Program, evaluate them rigorously, and create transferable knowledge about delinquency prevention.

Planning and Implementation

The history of evaluation research in delinquency prevention is replete with examples of programs in which the implementation was undocumented or not carried out as planned (Dixon & Wright, 1974; Krisberg, 1978; Ogawa, 1982). Knowing the fidelity with which program plans are implemented, the strength of the "treatment," and the context within which the program operates is essential for three reasons. First, any evaluation result--either positive or negative--is of little value unless the nature of the program is well described. Second, information derived from monitoring the activities and the implementation of plans is needed to strengthen the integrity of the program, and to detect unforseen consequences or potential breakdowns in project plans or the evaluation design. Third, negative results of summative evaluations have sometimes led observers to conclude that the interventions intended to be implemented do not work, whereas the interventions may not in fact have been implemented, implying a quite different conclusion (Sechrest, White, & Brown, 1979). Knowledge of what was actually implemented is essential in drawing conclusions from tests of any planned intervention.

Strength and integrity of planned interventions. Assessment of the planning and implementation process consists of two distinct components (Sechrest, West, Phillips, Redner, & Yeaton, 1979). The first relates to considerations of the strength of the intervention plan. This is essentially a matter of the construct validity of the measures intended to be taken in an intervention. Several procedures are available to assess the strength of delinquency prevention programs. These include: (a) analysis of the plausibility of the plans' theoretical premises, and determination of how closely the specifics of the plans are linked to delinquency prevention theories; (b) expert judgments about the likelihood that the project as specified will produce the desired outcomes; and (c) comparisons of the intended programs with the range of current or past efforts at delinquency prevention (in this way a program that was otherwise unremarkable but resembled

a previous ineffective effort might be judged a weak program). In addition to a theoretical basis, parameters involved in making assessments of strength include staff stability or qualifications, intensity and duration of treatment, focus of effort, clarity of plans, and the extent to which the plans involve different responses to different persons (e.g., individualized instruction). In general, replications of previously tested or well engineered interventions, comprehensive attempts to cope with the multiple causes of a problem, treatments with clearly spelled out treatment protocols or implementation manuals, or primary prevention efforts that affect a substantial proportion of an environment's inhabitants are likely to be stronger than those that lack these characteristics.

The second aspect of assessing program implementation relates to the integrity or fidelity with which plans are implemented. Clear plans are more likely to be implemented with fidelity than diffuse plans, fuzzy promises, or vague project descriptions. Some components of implementation that must be monitored or observed are (a) staffing patterns (including experience, training, numbers, and stability), (b) methods used to select, admit, or reject the youth involved in each project and each of its components, (c) the differential assignment of youth to alternative programs, or the basis for individualization of instruction, (d) the nature, duration, circumstances, and frequency of services to individuals or groups, (e) methods used to determine who (including students) is involved in implementation, (f) the interventions' elements and their duration, (g) the degree of project staff commitment, (h) project supervisory and management practices, and (i) curricular materials, individualized education plans, lesson plans, diagnostic protocols, treatment plans, and the like.

The importance of this aspect of assessing implementation can scarcely be overestimated. The scope of the alternative education action projects, encompassing as they do many distinct components, makes the faithful implementation of all plans unlikely. A failure to obtain sound evidence about the strength and integrity of these prevention projects could lead to erroneous conclusions about the efficacy of the delinquency prevention ideas behind these projects.

Evaluation, the Sponsor, and the Action Projects

The Alternative Education Program is sponsored by the Office of Juvenile Justice and Delinquency Prevention, with supplemental funding provided through OJJDP by the Department of Labor. Three divisions of OJJDP are involved directly in this program. First, the Special Emphasis Division has programmatic responsibility for the grant awards made to the 17 action projects listed in Tables 1 and 2.[1] Second, the Technical Assistance and Training Division has responsibility for providing assistance in project development, and works through contractors to do so. Initially, the Westinghouse National Issues Center was assigned these technical assistance tasks as part of its larger contract to provide assistance for OJJDP's Delinquency Prevention

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1. An 18th project was funded too late to be included in this evaluation. Initially denied a grant under the Alternative Education Program, it successfully challenged this denial and was eventually awarded a grant.

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Research and Development efforts. Late in the first year of operation of the Alternative Education Program, Westinghouse was replaced by Polaris Research and Development in this role. Third, the National Institute for Juvenile Justice and Delinquency Prevention is responsible for the evaluation. The Institute made a grant to the Johns Hopkins University to perform this evaluation, and the University subcontracted part of the work to its collaborator, the Social Action Research Center. In short, a total of 23 organizational entities are directly involved in this effort. The participation of each is essential to the successful conduct of the evaluation. The degree of collaboration and cooperation among these groups has generally been exemplary.

Past Efforts

Examples of highly plausible, well implemented, and carefully evaluated delinquency prevention projects are extremely rare. Dixon and Wright (1975) reviewed 95 delinquency prevention reports published after 1965 and concluded that there is a paucity of evidence about the effectiveness of existing programs. Dixon and Wright attributed part of the unimpressive record of accomplishment in this area to unclear project objectives, difficulties in implementing rigorous designs and collecting meaningful measurements.

More recently Krisberg (1979) reviewed 16 exploratory delinquency prevention projects funded by OJJDP. After the first year of operation, only one of these projects had implemented even a quasi-experimental design. Not only were most of the projects unevaluatable because of problems in data collection and the lack of comparable control groups, but none of the 16 projects had articulated a useful theory about delinquency in their catchment areas or spelled out how their services would reduce the problem. Krisberg concluded that goals were often too ambiguous, not clearly related to the problems the projects were intended to address, and that projects had engaged in incomplete planning.

In short, most previous evaluations in the delinqeuncy prevention area have suffered from evaluation design flaws, the use of irrelevant measures or no measures at all, dependence on a single source of information, a dearth of theory, and ambiguity about intent.

There are, however, a few good examples of delinquency prevention demonstration projects. The Empey and Lubeck (1971) and Empey and Erikson (1972) reports show how theory can be integrated with delinquency prevention efforts. And Alexander and Parsons (1973) illustrate a family intervention that involved (a) a clearly described intervention, (b) process evaluation, (c) careful summative evaluation using clearly defined and nonreactive behavioral criteria in a persuasive evaluation design. Similarly, the results of interventions described by Reid and Patterson (1976) are impressive. These few examples illustrate that high quality and well evaluated projects <u>can</u> be implemented.

The present evaluation attempts to build on the previous experience in this area to anticipate and avoid as many pitfalls as possible. We aim to clarify prevention project goals and theory and their linkages with short-term or intermediary objectives and the interventions aimed at bringing these objective about. We also aim to facilitate the development of workable structures for managing project implementation and evaluation.

Inferences about Project Effectiveness

Once a project has implemented a plausible intervention intended to influence student attitudes, behavior, or development, assessing the consequences of that intervention becomes important. Making this assessment is not always easy.

For a more extended discussion of the topics presented here, see chapters 2 through 4 of the first interim report.

Young people are growing and changing all the time. Rates of participation in delinquent behavior apparently rise and then fall with age. Scholastic competencies usually grow over time, but at different rates for different people. Students make new friends and abandon old ones, and every parent knows that his or her child's tendency to conform or rebel is different at different stages of development. Isolating the influence of some specific experience, intervention, or set of interventions is therefore difficult.

Making inferences about the causes of some difference in student outcomes--about the effects of planned interventions--is, however, a major goal of evaluation. Put another way, an aim of a thorough evaluation is to determine whether an observed difference in student behavior or attitudes (if any difference is observed at all) can reasonably be attributed to a specified intervention. Certain conditions make the search for the effects of an intervention easier; other conditions preclude making any confident inferences. An excellent discussion of the conditions that make inference possible is provided by Cook and Campbell (1979), and readers may want to consult their book for elaboration.

Creating these conditions is what evaluators mean by "evaluation design." Most projects participating in the Alternative Education Program did not anticipate fully the need to create rigorous evaluation designs. In the first interim report, we described at length a number of objections raised at one time or another by project implementers to the rigorous evaluation of their projects.

The Current Effort

A major accomplishment of the Alternative Education Program in its first two years of operation is that it has succeeded in implementing evaluation designs for a number of the prevention projects that are much stronger than those typically found in this area. In the second year of operation, six projects successfully implemented true randomized field trials. Several other projects implemented carefully thought out quasi-experimental designs.

A second major accomplishment of the Alternative Education Program in its first two years of operation is that it has succeeded in collecting outcome measures that are clearly relevant to the Program's goals. Whereas the collection of information about delinquent behavior was resisted by several projects in the first year of operation, by year two only one project was unable to assist the evaluation in collecting this information (the Harlem project).

Strengthening Prevention Projects through Evaluation

A Program Development Evaluation (PDE) method provides the structure for the evaluation of the various projects in the Alternative Education Program. This method is intended to anticipate and foster the development of these projects by involving project personnel in a cycle of evaluation activities. The method is intended to (a) make rigorous evaluation possible, (b) make the evaluation relevant not only to national concerns but also to the concerns of project personnel and managers, (c) document project implementation, (d) facilitate project implementation, (e) tie the evaluation explicitly to theory, and

(f) integrate research with project operations so that projects develop by using the results of research in project planning. Related structures, differing somewhat in detail, are provided by Empey (1980) and Tharp and Gallimore (n.d.).

PDE

The Program Development Evaluation method provides this strategy and structure, in part through the following components (for more details, see the first interim report; or see Gottfredson, 1982a; and Gottfredson, Rickert, Gottfredson, & Advani, 1983).

Clear Goals. A project without clear goals is on the road to nowhere. Clear measurable goals help a project focus its activities and they provide an integrating theme for a delinquency prevention effort. In using the PDE method, researchers and project implementers work together to design an agenda to achieve clearly articulated goals.

Explicit Theory. Theory helps to organize knowledge, provides a guide for developing or selecting an intervention, and provides a base for assessing the program's effectiveness. Behind every delinquency prevention project lies a set of ideas, or practical "theories." If left unarticulated, these ideas provide little guidance for project development. The more carefully thought through these ideas are, the more useful they are in guiding project decision making.

Intervention. The program components--the actions taken by a program to move closer to achieving its goals--are rooted in clear-headed thinking about goals and the program's theory of action. Interventions are implemented with an experimenting spirit. Each element of a program can be evaluated through evidence about how well it is being implemented and what it is accomplishing.

Forcefield Analysis. All actions occur in a dynamic program environment in which available resources co-exist with obstacles to action. Initial analysis of this forcefield increases the likelihood that interventions and research designs will be implemented as intended. But periodic further analyses are needed because initial analyses may be incomplete or incorrect, because perceptions change over time, and because the project's actions change the forcefield.

Plans. Effective programs derive plans for implementation that are derived from the forcefield analyses; they use available resources to overcome obstacles to implementation. A fully articulated plan includes standards for implementing each intervention and managing the overall program. A careful plan details each of the following:

- o Critical benchmarks--key points at which a decision, agreement, action, or arrangement must occur to keep the project moving forward.
- o Implementation standards--observable quality control standards that let everyone involved with a program know what constitutes acceptable performance.
- o Task statements--Details of who will do what by when.

Ongoing Process

The Program Development Evaluation method stresses the collaboration of researchers and project implementors at each and all stages of the change process. The develop-

mental expectation is symbolized in Figure 1, which illustrates the components of the PDE method. In applying this method, a detailed Program Development Evaluation Plan is created together with implementers of each project. The management plan for the program is computerized, and is updated every six weeks. Quality control checks on the implementation of the plan are made frequently by project implementers, and information on the accomplishment of key performance standards, objectives, and goals is entered into the computer. Information flows from the projects to the researchers and back again as a spiral of program development unwinds. Information feedback is used to improve the prevention programs and the ways they are managed.

We have attempted to apply the foregoing method with all of the projects involved in the Alternative Education Program. We have, of course, met with mixed success. The magnitude of the task of working with so many projects with extremely limited resources has meant that even in working with those projects most eager to implement this method we have not implemented it nearly as fully as would be desirable.

An Update on the Measures used in the School Action Effectiveness Study

Measurement is a central component of sound program development efforts, and measurement is essential in program evaluation. This chapter is a guide to using and interpreting measures of school climate, individual psychosocial development, and delinquent behavior that are used in the Alternative Education Evaluation. It serves as a manual to help readers interpret results of the School Action Effectiveness Study.

Measuring Individuals and Organizations

A two-tiered set of measures are used to assess the outcomes of the Alternative Education Program. One tier assesses the characteristics of individual students and individual teachers that are relevant to organizational climate, or to important personal outcomes. The other consists of school-level climate measures that directly assess some important dimensions on which schools vary.

The psychometric work reported here was sponsored in part by a grant from the National Institute of Education, U.S. Department of Education. The opinions expressed do not necessarily reflect the positions or policies of any agency. This chapter is abridged substantially, but covers some material covered in the first interim report, and it reports on improved methods of presenting results. Material presented in some detail in the first interim report is repeated here because it is necessary for an understanding of the results presented elsewhere in this report.

The measures are divided into these two classifications for an important reason. We have all experienced differences in the psychosocial climates of different organizations, and we can easily appreciate that organizations differ in the environments that they provide. Yet we also know that different individuals often have different views of the characteristics of the same organization. Therefore, in assessing a given climate, it is important to average across many different reports--in essence treating individual differences as error. These differences are, however, the very reason we measure individuals. Accordingly, two distinct sets of measures are called for. Besides the general climate assessments, individual measures are needed for personalizing instruction and for comparing the effectiveness of alternative educational treatments received by some people in a given school or community.

The measures described here were developed specifically for the School Action Effectiveness Study (SAES) because no comprehensive and psychometrically adequate battery was available elsewhere. They are rooted directly in a program of research on delinquency and school environments conducted over the past several years at the Johns Hopkins University. The development of the instruments used was guided in part by an examination of instruments used in the National Institute of Education's (1978) Safe School Study, instruments suggested by Fox and associates (1974), the School Initiative Evaluation questionnaires (Grant, Grant, Daniels, Neto, & Yamasaki, 1979), and a number of other instruments used in major

social surveys or for individual assessment in recent years. Relevant items (with necessary modifications) from other devices are sometimes used.

Decisions about useful measures are based on a review of the goals and objectives of the OJJDP Alternative Education Program and of the various alternative education projects being evaluated, on current delinquency theory (Hirschi, 1969; Gold, 1978; Lemert, 1972; Greenberg, 1977) on Gottfredson's (1983b) account of some implications of delinquency theory and strategies for organizational change. Many discussions with prevention project personnel--using the Program Development Evaluation framework--of the goals and objectives of their particular delinquency prevention efforts contributed greatly to the formulation of the measurement needs.

Some Essential Psychometric Concepts

In order to use the measures about to be described in an informed manner, it is important to understand several ideas: (a) the relative nature of psychosocial measurement, (b) reliability and (c) construct validity.[1] The following paragraphs review these ideas.

Relative Measurement

We have few absolute measures in behavioral science. In other words, simple counts of "units" of achievement or interpersonal competency or fairness or delinquency are impossible to obtain. Instead, we typically express their levels in relative terms. For example, achievement test results are often presented in terms of percentile rank or standard score form. These forms of expression involve statements of the standing of an individual (or organization) relative to some norm group of people (or organizations). For example, a percentile rank of 76 on an individual test would mean that out of 100 individuals representative of the population on which the test's norms are based, 76 persons would have a score lower than this one. We use both percentile ranks and raw score means and standard deviations to present results. (The mean is the arithmetic average of a set of scores, and a standard deviation is a unit of dispersion or spread.)

In interpreting such scores it is important to bear in mind that they express scores relative to other scores in the study sample. Different samples of people or of schools will differ somewhat in their means scores (and also in their dispersion). Therefore a score that is, for example, at the 65th percentile relative to one norm group could be at the 30th percentile relative to another norm group. There is no such thing as a magically "correct" or even "most appropriate" norm group.

Please note that the psychometric use of the word "norms" has little or nothing to do with some everyday language uses of the word. In everyday language we sometimes use "norm" to mean an ideal or required standard. It is quite possible for a school to have students who show an "average" degree of satisfaction with school but who are rather uncomfortable--or who are average in reading achievement according to large city norms, but who do not read well at all. In interpreting any particular results, readers should probably consider both their own "ideal" norms and the "statistical" norms presented here.

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1. For more thorough discussion see Thorndike (1971).

Reliability

Chance, sloppiness, ambiguity, temporal instability, and heterogeneity of meaning or interpretation can influence any measure. Measurements of the distance between Baltimore and New York made by the odometers in a number of different cars would tend to agree pretty well, but not perfectly. They would have high, but not perfect, reliability. Reliability is a technical term used to describe the relative contributions of measurement error and "true" score variability to a scale or other measure. Technically, reliability is the proportion of the variance (a statistic summarizing variability) that is not error to the total variance in the score. Because there are many ways of defining error, there are many ways of estimating reliability (Stanley, 1971).

The reliability coefficients reported in this chapter are of two kinds. One kind is based on the analysis of items administered on a single occasion and therefore excludes temporal instability from the definition of error. They can be interpreted as an index of how well the scales measure whatever they measure at a given point in time. This kind of reliability coefficient is called a "homogeneity" coefficient; we estimate it using coefficient alpha. The second kind is based on the stability of scores over time. We estimate it by correlating scores obtained by individuals or schools in the Spring of 1981 with scores for the same individuals or schools obtained in the Spring of 1982. This kind of reliability estimate is called a "retest" reliability; it is a measure of the stability over time of a score.

Knowledge of the reliability of a test or other index is important because a low homogeneity coefficient means that the device does not measure anything well. A high homogeneity coefficient means that the device measures something. (What that something is, is what construct validity is all about.) Homogeneity coefficients can range from 0 to 1.0. A reliability of 1.0 is high, meaning that the score contains no error. A high retest reliability means that a stable characteristic of a person or organization is being measured. High retest reliabilities may mean that (a) the characteristic is resistant to change, (b) that the environment is preventing the individual or organization to change, or that (c) nothing has been done to change the characteristic.

Over the years practitioners have developed rules of thumb for acceptable levels of reliability for different purposes. In general, it is not sound practice to use tests with reliabilities much below .7 or .8 for individual diagnosis, personnel decisions, and so forth. This is because one would want to be reasonably certain that a score is reasonably error-free when making important decisions about individuals. When interpretations of patterns or profiles are to be made, it is especially important that reliability be this high, or higher.

For evaluation purposes, lower levels of reliability of measurement at the individual level are acceptable and are sometimes to be preferred, because of three related considerations. First, because the scores of many individuals are usually averaged in an evaluation, dependable estimates of true-score means can be obtained even with rather unreliable individual measures (see Stanley, 1971). Second, the longer the scale (i.e., the more

items), the more reliable it is, other things being equal, but it is often difficult, time consuming, or costly to administer long scales. As an alternative, using short scales with many persons gains good estimates of group means. Third, in an evaluation it is necessary to measure many things. This is because prevention programs have many goals and objectives, and because it is always wise to search for unanticipated positive outcomes or side-effects of a program. But administering many highly reliable (i.e., long) scales is prohibitive. Fortunately, a large test group again comes to the rescue. Using short scales with many people solves the problem and yields satisfactory estimates of true-score means.

As a rule of thumb, scales with reliabilities as low as .5 (or even lower) are adequate for use in an evaluation, provided that the project being evaluated uses randomization as a selection device, or that any selection is absolutely independent of (i.e., unrelated to) the goals or objectives of the program. In such an evaluation, it is not necessary to attempt to adjust for pre-existing or spurious group differences on outcomes. When it is necessary to make such adjustments by using statistical "controls," reliabilities for the control variables must be as high as possible. The rule of .5 is too lax in this case because when the "control" variables are unreliable they do an inadequate job of correcting for spurious differences between groups. Therefore, to enable a sound evaluation, a project which does not randomize should use more reliable (i.e., longer) scales encompassing measures of all relevant characteristics in which the treatment and comparison groups may differ.

Validity

Validity has to do with the meaning and interpretation of an index or score. The exploration of meaning is a never-ending process, because it is so closely linked with theory. Theory involves constructs or ideas about the causes or nature of phenomena. Often, measurement has meaning only in the context of some theory. For example, some educators have a theory that a general ability called intelligence underlies much human performance, or at least scholastic achievement. The measurement of intelligence using a paper and pencil verbal ability test may make sense in terms of this theory. Because the theory predicts that this test will correlate with school grades, evidence about the validity of a test for measuring the construct of intelligence can come from an examination of the empirical relation between test scores and school grades. The same evidence provides information about the utility of the theory. Theories and measures are thus validated in a common process. We speak of a test as validated when empirical evidence has in general shown the test results to follow the predictions of a theory that has been useful.

In addition, when there is agreement about what a construct means, some evidence about validity can come from an examination of the item content of a test. For example, most of us would probably agree that a test to see how many bricks a person can load on a truck in an hour is a poor test of verbal ability, and that a list of multiple-choice vocabulary items would provide a more valid measure of that construct. (Similarly, the vocabulary test would be a poor test of endurance.) Therefore, deliberately including items to measure a given construct in itself can provide some

limited degree of confidence in a scale's construct validity.

The evidence is strengthened if the scale shows expected patterns of correlations with other scales. And it is especially strengthened if applicable experimental manipulations influence scores in predicted ways. Other evidence of validity can come from an examination of differences in scores on the scale among groups known or believed to differ in the characteristic being measured. For widely used instruments, these kinds of evidence accumulate over time. Eventually, a basis for judgment about a scale's construct validity emerges--although different judges often disagree.

Subsequent sections describe the origins, development, and some psychometric properties of a two-level set of assessments of schools and their inhabitants. These sections are intended to provide information about reliability and validity, and to describe the normative interpretation of these assessments.

Measures of Students

Five sets of measures of individual students have been developed from discussions with the staff of delinquency prevention projects about the problems they faced and what they hoped to accomplish, the demands of evaluating a program with overarching goals of school organizational change and delinquency prevention, and the theory of delinquency prevention. These measures of students are needed to assess project effectiveness under difficult field research conditions and to learn more about what works for whom.

Social Background

Measures of social background or family characteristics are needed for two reasons: (a) They provide essential statistical controls to aid in demonstrating project effectiveness when evaluation designs calling for statistical adjustments are necessary, or when stronger designs fall apart. (b) In a few cases, projects aim to alter family characteristics--usually the extent to which parents value education and encourage their children to perform well in school.

Accordingly, the following two measures were developed:

Parental Education. This two-item scale is based on decades of research that show parental education to be a powerful antecedent of schooling outcomes, especially of persistence in education (Sewell, Haller, & Portes, 1969a). The two items ask how much education a student's father and mother completed. The scale has a reliability coefficient of .78 overall, although the coefficient for the small group of Native Americans in the sample is only .51.[2] Table 1 displays the

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2. Somewhat more detailed results of the examination of homogeneity coefficients for measures employed in the first year of this evaluation are presented in the first interim report. Some improvements in the measures are reflected in results presented here. Homogeneity coefficients reported here were calculated from a 10% sample of the whites, a 10% sample of Blacks, a 10% sample for the combined groups, a 20% sample of mainland Hispanic youths, and a 100% sample of all other groups measured in the Spring of 1982. Reliability coefficients are re-estimated here because of a new scor-

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Table 2

Reliability Coefficients (Alpha) for Individual-Level Student Scales by Gender

Scale	Male	Females	Total Sample	Number of items
Family background				
Parental education	76	72	78	2
Parental emphasis on education	57	51	50	4
Social relations				
Attachment to parents	61	60	60	6
Negative peer influence	63	67	65	9
Attitudes and social development				
Alienation	60	44	51	6
Attachment to school	76	75	76	10
Belief in rules	52	54	53	6
Interpersonal competency	43	47	42	5
Involvement	60	62	62	12
Positive self-concept	58	60	61	12
Practical knowledge	73	75	75	7
Rebellious autonomy	49	49	47	3
Internal control	58	56	52	7
Behavior				
School effort	62	56	59	5
School non-attendance	61	62	61	2
Self-reported delinquency (total)	84	85	85	19
Self-reported drug use	78	77	75	5
Self-reported serious delinquency	77	80	83	11
School experiences				
School punishments	54	53	54	4
School rewards	63	58	56	4
Victimization	58	73	69	7
Validity				
Invalidity	44	45	44	5

Note: Decimals are omitted.

scale's homogeneity estimates for six ethnic groups. Table 2 displays the scale's reliability estimates for males and females and for the total (combined) sample. This measure may be taken as an indicator of family socio-economic status. It is known to be a good predictor of schooling outcomes such as persistence and grades (Bachman, Johnson, & O'Malley, 1978; Jencks, 1979), but it is usually only weakly related to delinquent behavior at the individual level--although perhaps it has a stronger relation to more serious delinquency (Tittle & Villimez, 1978; Gottfredson, 1981a).

Parental Emphasis on Education. This four-item scale asks for information about the degree of parental attention to the student's school performance and parental expectations for school persistence. It was suggested by prevention project theories that attributed student non-attendance to a lack of parental encouragement or "value" on education. And, parental influence is demonstrably predictive of student persistence in school (Otto, 1976). The scale is only moderately reliable--.50 overall, with homogeneity coefficients ranging from .45 to .57 for race-sex subgroups. The scale has moderate negative correlations with self-reported delinquency (see Gottfredson et al., 1982, Table 4), and has an expected, but small, positive correlation with student reports of effort spent on school work.

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ing procedure implemented in year two to increase the interpretability of the results, and because some measures (Alienation and Internal Control) were lengthened by adding new items.

Social Relations

Three measures of a student's social relations were developed because of (a) empirical and theoretical links between bonds of affection or respect for others and conforming (non-delinquent) behavior, (b) powerful statistical associations between delinquent behavior and delinquent peer influence, (c) the central place given to peer influence in the theories of several of the prevention projects, and (d) the explicit assumption made by several projects that parental supervision governs student attendance.

Attachment to Parents. This scale, intended to measure Hirschi's construct of the same name, incorporates several items closely related to items shown in earlier studies to be correlated with delinquent behavior (Hirschi, 1969; Hindelang, Hirschi, & Weis, 1981; D. Gottfredson, 1981b). An attempt has been made to engineer a potent scale by including six items related to this construct. The scale, asking students how close they are to their parents, how much they like them, and so forth, has an overall reliability of .60. It correlates as expected with self-reported delinquent behavior (see Chapter 4 (this volume) and Gottfredson, Ogawa, Rickert, & Gottfredson, 1982), in accord with Hirschi's (1969) theory that attachment to parents creates a stake in conforming behavior. This agreement provides some evidence of the construct validity of this scale.

Negative Peer Influence. This scale measures a construct central to the explanations of delinquency and non-attendance formulated by several of the action projects. It is rooted directly in earlier research (summarized by Empey, 1978) that shows delinquent peer associa-

tions to be powerful predictors of delinquent involvement. In addition, it incorporates items related to dropout, similar to those used in earlier studies of persistence in schooling (Bachman et al., 1978). It is an attempt to engineer a long, powerful, and broad-based measure of negative peer influence. This nine-item scale has reliabilties ranging from .55 to .70 across subgroups and, it is a potent correlate of delinquent behavior (Chapter 4, this volume; and Gottfredson, 1982). It contains items asking whether the student's best friend is interested in school, thinks getting good grades is important, thinks school is a pain, or has been involved in delinquent activities.

Attitudes and Psychosocial Development

Psychosocial development is a major goal of the Alternative Education Program. In this area, there was considerable prior work to build on in choosing measures to include in the battery.

Alienation. The six-item Alienation Scale is based in part on Srole's (1956) Anomia Scale, but fewer items are included, and the wording of items has been changed to give them more school-related content and to make them sound a little less bizarre. Alienation items used in the School Initiative Evaluation (Grant et al., 1979) and in other previous studies were modified for use here. Items include, "These days I get the feeling that I'm just not a part of things." And, "I feel no one really cares much about what happens to me." Overall, this short scale has a reliability of .51. (The reliability is improved over the 4-item version used in 1981.) As expected, the scale correlates positively with self-reported delinquent behavior, and negatively with reports of effort expended on school work (see Gottfredson et al., 1982, Table 4; and Chapter 4, this volume).

Attachment to School. This is a central construct for many projects whose major goal or objective is the development of positive student attitudes toward school. The construct is also central to social control theories of delinquency (Hirschi, 1969) that view attachment to school as a major social bond restraining individuals from participation in delinquent behavior. Consequently, we have constructed a relatively long and broad-based measure of attachment to school. This 10-item scale has reliabilities ranging from .66 to .82 across subgroups--.76 overall. Items ask the students if they like the school, if they like the classes, how important getting good grades is, and so forth. The scale is, as expected, a powerful correlate of delinquent behavior (negative) and effort expended at schoolwork (positive) (Gottfredson et al., 1982).

Belief. The expectation that individuals differ in the extent to which they believe in the moral validity of conventional social rules, and that the degree of belief influences behavior, is widely shared. A common goal of peer-group-based interventions to prevent delinquency is to strengthen belief by using peer pressure. The item content of Gough's (1964) Socialization scale (which was developed through empirical efforts to discriminate between adult offenders and non-offenders) lends support to this popular notion. And, belief is a central construct in social control theory, which postulates that people differ in the degree to which they have internalized rules, and that they therefore are constrained from involvement in delinquent behavior

to different degrees. Much empirical evidence supports this idea (e.g., D. Gottfredson, 1981b; Hirschi, 1969).

Consequently, in order to measure this aspect of psychosocial development we have assembled a short scale from well-worn items used in other research, whose characteristics were known. The six-item scale contains items such as, "It is all right to get around the law if you can;" "Taking things from stores doesn't hurt anyone;" and "People who leave things around deserve it if their things get taken." The scale has a reliability of .53 overall; its reliability is lower for the Spanish-speaking and Spanish surnamed subsamples, and higher for the other subsamples. The scale has a substantial negative correlation with with delinquent behavior (Gottfredson et al., 1982; Chapter 4, this volume), as earlier research and theory imply it should.

Interpersonal Competency. This scale is composed of four items from Holland and Baird's (1968) Interpersonal Competency Scale. It consistently has moderate reliability and correlates positively with other measures of psychological health or adjustment, and negatively with measures of alienation. The fifth item was written by Holland especially for the present purpose, to give the scale more school-related content. It has a reliability coefficient overall of .42. This measure correlates positively with reported effort expended on school work, and it is nearly independent (uncorrelated with) self-reported delinquent behavior (Gottfredson et al., 1982). This accords with other evidence that delinquent involvement is only modestly associated with psychological health (Waldo & Dinitz, 1967; cf. Quay, 1964).

Involvement. This scale is intended to measure a central construct in social control theory that does not appear to have been well measured in the past. The idea is that involvement in conventional activities creates a stake in conformity, because a person involved in rewarding activities has something to lose by misconduct. This scale (not to be confused with environmental measures of student influence or involvement in decision-making) is composed of 12 items (most of which were adapted from the recent National Longitudinal Study questionnaire) asking about a student's participation in a wide variety of in-school activities. It has an overall reliability of .62, but does not correlate as expected with reports of delinquent behavior, casting some doubt on its construct validity or on the utility of the involvement construct in theories of delinquency. Although this scale was intended to serve as an important intermediary outcome measure, its utility is in doubt.

Positive Self-Concept. A number of self-esteem scales with well-researched properties are available (Robinson & Shaver, 1973, review more than 30 measures). To create a short scale, items previously used by Rosenberg (1965) and an item similar to one used by Coopersmith (1967) were subjected to analysis along with another set of items constructed to capture aspects of self-concept specific to schooling and delinquency. This scale also is based partly in the labelling perspective (Lemmert, 1972), which implies that if people are treated as slow learners or delinquents, they will come to incorporate aspects of those social definitions into their own self-concepts. Positive self-concept, therefore, is an important intermediary outcome according to labelling theory.

According to this perspective, effective alternative education projects would increase scores on the positive self-concept scale, and a program with unexpected negative side-effects could decrease scores.

Item analysis did not justify treating self-esteem as a separate scale from these labelling outcomes, because items are about equally correlated across the two sets. Weak items were excluded, leaving a 12-item scale with reliabilities ranging from .52 to .65 across subgroups, .61 overall. Items include, "My teachers think I am a slow learner;" "Sometimes I think I am no good at all;" "I am the kind of person who will always be able to make it if I try;" and "I do not mind stealing from someone--that is just the kind of person I am." The scale correlates .48 with reported effort on school work, and -.24 with self-reported delinquency, and it correlates -.39 with alienation and .39 with interpersonal competency (Gottfredson et al., 1982), lending support to its construct validity.

Practical Knowledge. To provide a simple measure of self-reported competencies needed for coping with everyday life, a seven-item measure was created for the evaluation. Although this self-report scale may be a poor substitute for a more comprehensive or task sample approach, it seemed the only way to build a measure of this kind of social development into a multi-purpose battery. The scale has a reliability coefficient of .75 overall, and good item properties across all groups studied. It is relatively independent of the other measures of attitudes and behavior. Because it has not been well-studied, it should be interpreted cautiously.

Rebellious Autonomy. In talking with persons running the delinquency prevention projects, especially the Peer Culture Development Project in Chicago, explanations of the problem of delinquency sometimes involved a kind of peer or gang culture that resembles Miller's (1958) characterization of subcultural socialization. The peer or gang culture may incorporate a set of socially-shared expectations that are different from what might be called middle-class expectations. Differences may be so great that in behaving according to the "lower-class" system a person may violate norms of middle-class culture, and may appear to be deliberately non-conforming or malicious to a "middle-class" observer. In particular, middle class concerns with achievement may not be shared by "lower class" youth (cf. Attachment to School and Educational Expectations). Instead, these "lower-class" youths, according to Miller are concerned with trouble, toughness, smartness (i.e., manipulative skill), excitement, fate (explaining events by reference to chance or luck), and autonomy (an ambivalent relation to authority--overtly desiring not to be pushed around but covertly desiring to be cared for and controlled).

Because of this recurrent theme in our discussions with action project personnel, it seemed important to incorporate brief measures of this type of "subcultural" value system. Item analyses of a larger set of items implied that three of these items formed a scale for all race-sex subgroups. The deletion of poor items, however, narrowed the content of the set down to items that appear to reflect a rebellious autonomy: "Whether or not I spend time on homework is my own business;" "I should not have to explain to anyone how I spend my money;" and "I don't like anybody telling me what to do." The scale has a reliability of .47 overall. The scale correlates as expected with Delinquent Behavior and Belief

(Gottfredson et al., 1982; Chapter 4, this volume).

Internal Control. A number of the prevention projects view delinquent behavior as a result of weak internal controls, that is of a person's sense of powerlessness over the environment. If what one does makes little difference for the rewards, punishments, or achievements one experiences, then one is free to engage in unrestrained, self-gratifying delinquent behavior. These speculations appeared to us to be related to Rotter's (1966) notions of internal and external control. Accordingly, we attempted to include a small number of items related to this construct in surveys conducted in the first year of the evaluation. Item analyses did not support the utility of a scale based on those items, and renewed attempts to develop a suitable measure were made in the second year. The scale that finally emerged has an overall reliability coefficient of .52, and works reasonably well for each race and sex subgroup. A sample item is, "Much of what happens to me is just a matter of chance."

Self-Reported Behavior

At bottom, it is the behavior of the young people subject to the influence of the Alternative Education Program that is important. The measurement of behavior is therefore essential to the evaluation. One source of information about the behavior of individuals is the archival records that are maintained in various ways by schools and criminal justice agencies. Those archival records are, however, subject to many limitations: They vary in completeness, accuracy, and availability. Different behaviors are recorded in different places, and they are recorded in different ways. And, official records measure not only the behavior of the people who are their subject, but also the behavior of school and justice system officials who make decisions about what to record.

Accordingly, to provide for the systematic measurement of behavior in parallel ways for all of the prevention projects, we have developed several self-report measures. These self-reports are also subject to limitations, but they do make rapid analysis possible, they are parallel across all projects, and previous research generally supports their use (Hindelang et al., 1981).

School Effort. That students who earn low grades in school tend to drop out of school and to engage in delinquent behavior more than others are two of the best documented and consistent findings in the literature (D. Gottfredson, 1981). Social class and ability are modestly associated with these same outcomes but do not completely account for these associations. Therefore, it seems likely that these outcomes are determined at least in part by grades--the major, if infrequently applied, reward system of traditional schooling. Grades in school are not determined solely by ability and social class, of course. Industrial psychology's instrumentality theory (Porter & Lawler, 1968) suggests a mechanism whereby effort is expended if valued rewards are perceived as attainable, and in which effort is one of the determinants of both performance and rewards. Therefore effort is an important intermediary outcome variable that should be assessed in the evaluation of a program designed to prevent delinquency and foster persistence in schooling.

Unable to locate existing questionnaire measures of this construct, we developed one. This five-item scale has a reliability of .59 overall. (It is somewhat less reliable for Puerto Rican subsample,

presumably because some of its item content deals with homework, which is rarely assigned in Puerto Rico.) The scale includes these items: "Compared to other students, how hard do you work in school?"; "I turn my homework in on time"; and "I don't bother with homework or class assignments." As expected, females score higher on this scale on the average than do males. It correlates .39 with self-reported grades and .34 with attachment to school (Gottfredson, et al., 1982), supporting its interpretation as a measure of effort expended on school work.

School Non-Attendance. The Alternative Education Program is intended to demonstrate and evaluate projects that aim to increase attendance. Dependable attendance data are not always available from school records, so a brief self-report measure of attendance was incorporated in the questionnaire to provide back-up data. This decision proved to be wise. Attendance data from school records proved erratic, incomplete, error-ridden, and slow in coming.

Two items, one asking how often the student cuts school all day and one asking about class skipping, compose this brief scale, with an overall reliability of .61.

Self-Reported Delinquency (Total). One way to find out what people do is to ask them. Naturally, not everyone tells the truth, perhaps especially when the questions are sensitive. A common assumption is that people will conceal information about their participation in illegal behavior, and so under-report. At the same time, the rates of delinquent behavior estimated by the self-report method are higher than those derived from official records (Empey & Erikson, 1966). There is thus a great deal of debate among criminologists about the appropriate way to measure criminal behavior.

Although there is no need to go into the arguments in any detail here, a major issue is that typical self-report measures (e.g., Nye, 1958) tend to measure minor "offenses," some of which are not "crimes," or would not be crimes if committed by an adult. Elliot and Ageton (1980) have recently presented evidence that self-report scales involving more serious offenses tend to resemble measures based on official data more than do scales involving only trivial items. Hindelang, Hirschi, and Weis (1981) have recently published a disquisition on the measurement of delinquency by self-report and official measures.

The bottom line, insofar as it can be perceived at present, is that fairly long, variety-type scales involving a range of serious delinquent behavior do produce results that parallel official records <u>for some subgroups</u> but not for others. Hindelang et al. (1981) report validity coefficients for a number of alternative measures that imply very low validity of self-reported data for officially "delinquent" black males, and much better validity for other subgroups. This is a difficulty that should be kept in mind in interpreting these self-reported data.[3]

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3. This difficulty appears related to a similar problem of differential reliability in studies of educational persistence (Bielby, Hauser, & Featherman, 1977; D. Gottfredson, 1981a), and this potential problem increases the importance of obtaining official data for purposes of evaluation. The differential vali-

Measures

The specific self-report measures used here are modified from those used by Elliot and Ageton (1980) and by Hindelang, Hirschi, and Weis (1981). Many of Elliot's items were used, but a "last-year variety" scale format was used because the Hindelang et al. (1981) results suggested the usefulness of this format. These items ask, "In the last year have you..." Respondents indicate, for example, whether they have "stolen or tried to steal something worth more than $50."

A 19-item scale constructed in this way has very nice characteristics--considering that only a small proportion of respondents answer yes to any given question. Overall, reliability is .85. The subgroup reliabilities range from .83 to .88.[4]

Self-Reported Drug Involvement. Prevention project personnel have shown considerable interest in a component of delinquent behavior involving drug use. To provide a measure to meet their needs, we have also scored a five-item subset of the longer (total) S-R delinquency scale. It is composed of items asking about the use of cigarettes, liquor, marijuana, and other drugs, and about going to school "high." (A sixth item about glue sniffing was left out because the analyses did not support its inclusion for all ethnic groups.) This group of items closely resembles the Hindelang et al. (1981) Drug Index. It has an overall reliability of .75.

Self-Reported Serious Delinquency. A second subscale was constructed to measure only conduct that nearly everyone would regard as criminal. It includes 11 items (including one about selling drugs that Hindelang et al. would place in the drug cluster) and has an overall reliability of .83.

Measures of School Experiences

It is anticipated that the projects in the Alternative Education Program will expand the range of school rewards beyond those represented by traditional classroom grades. Accordingly, in an effort to assess this important but hard-to-measure set of outcomes, we have developed two scales to measure students' rewarding and punishing experiences. School rewards and punishments make sense intuitively as probable causes of school attachment, effort, and persistence.

One kind of school experience is of special importance: victimization. A key measure of the success of the delinquency prevention projects under study is the level of personal victimization experienced by persons in those schools. Accordingly, victimization experiences must be measured to assess the effectiveness of the projects, and to learn more about the victimization experience itself.

School Punishments. This four-item scale is an index of the negative sanctions an individual student

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ity problem is discussed in Part II of the present report (Daniels & Gottfredson, 1983) but is not resolved.

4. In our first interim report we estimated reliabilities for more narrowly defined subgroups. The single lowest coefficient was for Asian-American females, who report almost no delinquent behavior. The reliability for that group was .63. These reliabilities compare favorably to those obtained by Hindelang et al. (1981) with a 63-item last-year variety scale--.83 to .92 for black and white males and females.

experiences. It asks whether the student was required to stay after school, given an extra assignment, or had his or her grade lowered as a punishment. Its reliability coefficient for the total sample is .54. According to this index males experience more punishment, as expected, and the scale correlates .30 with self-reported delinquency, -.28 with positive self-concept, -.30 with belief, -.22 with school effort, and .24 with negative peer influence (Gottfredson et al., 1982).

School Rewards. This six-item scale is an index of the positive sanctions an individual student experiences. It includes reports of incidents in which the teacher complimented the student's work, the student was given a prize or award, or the student won an award for his or her class. The reliability coefficient for the entire sample is .56. The scale is relatively independent of sex, and is correlated .25 with school attachment (Gottfredson et al., 1982).

Victimization. A final measure of school experiences deals with personal victimization. It is intended for use in assessing the amount of crime in the environment, and it is used in the aggregate to characterize the school. The Victimization Scale is also intended for use in research on the victimization experience. The scale's characteristics at the individual level are therefore of interest. Containing five items, the scale has a reliability coefficient of .69. Victimization is correlated .24 with self-reported delinquency, implying a moderate tendency for persons who are victimized to engage more in delinquent behavior themselves; It correlates -.27 with school attachment and -.28 with self-esteem; its highest correlate among the variables examined is punishment (.35)--students who report more frequent personal victimization also more often report being punished in school (Gottfredson et al., 1982).

Quality Control

There is always some concern that students may not faithfully complete their questionnaires, that they may fool around or give silly answers. As a check on this, a scale was included to detect unusual or nonsensical responses.

Invalidity. This five-item scale is composed of items that a careful respondent would answer in only one way. It is keyed so that a rare response earns a point. This scale is used as a check on the results and as a quality control mechanism. Invalidity scales are intended not to measure a reliable characteristic of individuals and hence usually have low reliabilities. The overall reliability of this scale is .44.

Stability of Student Measures Over Time

One-year re-test reliabilities of each of the measures of student characteristics described above are presented in Table 3. These stability coefficients provide information about the degree to which young people tend to retain their relative standing on these measures from year to year.

Re-test reliabilities for several measures not already described are also presented in Table 3. These personal characteristics were measured using single items (so it is not possible to calculate homogeneity coefficients. They are described in the following list.

Educational Expectation. An item asked students how far in school they expected to go. The response,

Table 3

One-Year Retest Reliabilities of Student Characteristics

Student characteristic	Males r_{xx}	Males N	Females r_{xx}	Females N
Family background				
Parental Education	.70	546	.72	626
Parental Emphasis on Education	.34	373	.39	471
Social relations				
Attachment to Parents	.38	879	.47	1007
Negative Peer Influence	.44	849	.39	1007
Attitudes and psychosocial development				
Alienation[a]	.33	674	.39	870
Attachment to School	.53	791	.46	975
Belief in Rules	.38	662	.40	888
Interpersonal Competency	.32	602	.32	810
Involvement	.37	747	.50	888
Positive Self-Concept	.45	576	.50	798
Practical Knowledge	.36	669	.43	893
Rebellious Autonomy	.37	552	.40	766
Educational Expectation	.48	959	.41	1081
Behavior				
School Effort	.46	851	.40	966
School Non-Attendance	.42	969	.45	1081
Self-Reported Delinquency (total)	.63	419	.55	584
Self-Reported Substance Use	.66	416	.60	583
Self-Reported Serious Delinquency	.46	390	.30	563
School experiences				
School Punishments	.27	805	.32	979
School Rewards	.33	804	.32	982
Victimization	.35	788	.23	961
Self-reported Grades	.41	991	.52	1085
Validity indicator				
Invalidity	.32	677	.31	396

Note. Reliabilities calculated on a random half sample of students who completed questionnaires in both 1981 and 1982.

[a]An improved Alienation Scale was available in 1982. The correlation reported is the correlation between this improved measure and a less reliable measure used in 1981.

Table 4

Reliability Coefficients for the Individual-Level Teacher Scales, Number of Items in Each Scale, and Scale Means and Standard Deviations

Scale	Alpha	N of items	Mean	SD
Prointegration Attitude	.69	4	11.56	2.88
Job Satisfaction	.80	3	8.42	1.70
Interaction with Students	.67	6	13.79	4.20
Type A Sanctions	.47	5	.09	2.82
Type B Sanctions	.60	5	13.42	3.08
Victimization	.67	8	1.23	1.45
Classroom Disruption	.78	2	4.60	1.38
Low Expectations	.57	2	65.06	44.47
Professional Development	.74	8	-.39	4.67
Nonauthoritarian Attitude	.54	3	7.43	2.17

Note. Reliabilities and scale means and SD's are based on results from the 1981 Spring administration of these scales and are calculated on the "holdout" sample (see Gottfredson et al., 1982). N's range from 555 to 643 due to item nonresponse.

which is intended to provide an indicator of commitment to a conventional goal, has a re-test reliability of .48 for males and .41 for females. Educational expectations generally have substantial negative correlations with delinquent behavior (D. Gottfredson, 1981). The correlation in a random half of the 1982 survey data between this item and Self-Reported Delinquent Behavior was -.12 ($p < .001$) for boys and -.08 ($p < .01$) for girls.

Self-reported Grades. We anticipated the potential necessity of having a questionnaire-based measure of school performance to supplement data collected from school records. Accordingly, a self-report of school grades was included in the questionnaire. This item has a re-test reliability of .41 for boys and .52 for girls.

Measures of Teachers

The second largest group of inhabitants of a school environment are the teachers who work there. Students in the aggregate help to create an environment for the teachers, just as teachers create an environment for the students. A characterization of the teachers is therefore important in describing a school.

Several of the action projects' theories lead to interventions geared toward teachers. The interventions are intended to improve classroom management, to change teachers' attitudes, or to involve them in new kinds of activities. One aspect of the evaluation therefore involves the measurement of teacher characteristics.

Pro-Integration Attitude. This four-item scale is a measure of attitudes toward integrated education. It is included because these delinquency and school improvement programs are designed to provide services to heterogeneous groups of students. One component of several projects is training teachers to manage heterogeneous classrooms and to interact with a variety of kinds of students. It has a reliability coefficient of .69 (Table 4) and is relatively independent of the other teacher scales (see Gottfredson et al., 1982). As might be expected, nonwhites tend to score somewhat higher than whites on this scale.

Job Satisfaction. This scale is composed of three of the four items in Hoppock's (1935) scale of the same name, which has been used widely in research. Even shortened to three items it has a reliability of .80. It may confidently be taken as a measure of how well teachers like their jobs.

Interaction with Students. This six-item scale measures the extent of out-of-class interaction that a teacher has with students. Items ask about tutoring individual students before or after school and discussing their personal problems with them. It has a reliability coefficient of .67, and correlates positively with Job Satisfaction, negatively with reports of classroom disruption, and positively with the extent of recent continuing education activities.

Type A Sanctions. This is one of two scales developed in an attempt to describe the types of responses to student conduct used by the classroom teacher. We are unaware of any short questionnaire measures of this aspect of classroom management, but provocative evidence from earlier research (McPartland & McDill, 1977; Gottfredson & Daiger, 1979) suggests that responses to conduct are important in preventing disruption. Therefore we used the best advice we could get to develop

lists of various ways classroom teachers might respond to student behavior. These lists became items in the questionnaire. Through factor analytic examination and internal consistency item analysis, two scales emerged.

The first set of items is termed "Type A" Sanctions. A teacher who reports lowering grades as a punishment, sending misbehaving students out of class, and paddling or reprimanding the students in class is given a high score. The scale has a reliability of .47. Its largest correlate among the other teacher measures is the amount of disruption the teacher reports; it is also moderately negatively correlated with nonauthoritarian attitudes.

Type B Sanctions. This scale was developed in the same way. In contrast to the Type A scale, which seems to include responses rooted in frustration, Type B Sanctions appear to involve a wider range of resources. To earn a high score on this scale, a teacher reports giving extra schoolwork, awarding special privileges for good behavior, taking away privileges for misconduct, calling parents, and referring students to the counselor or elsewhere. This five-item scale has a reliability of .60. It correlates only .16 with Type A Sanctions, even though both scales would be elevated if a teacher frequently had to make some kind of response to misconduct. Gottfredson et al. (1982) examined the construct validity of the two sanctions scales by examining their correlations with responses to a question about home-based reinforcers. The use of home-based reinforcers to extend the range of rewards and punishments in the school appears to be a highly effective strategy (Barth, 1979; Atkeson & Forehand, 1979). Scores on the Type B scale correlated .35 with responses to this item, whereas those on Type A correlate only .07 (n.s.).

Victimization. As one way to measure the amount of delinquent behavior in a school, teachers are asked about their experiences of personal victimization. In the aggregate, these reports may be taken as an indicator of the amount of disorder in the school. An eight-item scale, asking about events ranging from obscene remarks or gestures to physical attack, has a reliability of .67.

Classroom Disruption. A second way to assess the level of student misbehavior experienced by a teacher is provided by a two-item classroom disruption scale. It asks to what degree classroom disruption interferes with teaching, and how much of the teacher's time is devoted to coping with disruptive students. Its reliability is .78.

Low Expectations. A labelling theory perspective implies that teacher expectations for student performance may become incorporated into the student's self-concept and result in misconduct or poor academic performance. To provide a measure of this variable, a two-item Low Expectations Scale asks teachers to judge what percentage of their students are of low ability and have "behavior problems." The scale has a reliability of .57. It correlates -.24 with Job Satisfaction and .43 with Classroom Disruption.

Professional Development. Eight items form a scale measuring the extensiveness of recent continuing education or in-service learning. This scale, with reliability .74, is for use in documenting the implementation of training components. It also helps to lend evidence of con-

struct validity to other teacher measures. Correlations reported by Gottfredson et al. (1982) suggest the interpretation that teachers scoring high in professional development are more satisfied, interact more with students, and are more open to student suggestions.

Non-Authoritarian Attitudes. Intended in part to measure sympathetic attitudes (as one way to get at the "caring, competent teacher" constellation), a measure of punitive moralism is included. To earn a high score on this scale, a teacher rejects such items as, "A few pupils are just young hoodlums and should be treated accordingly." This three-item scale has a reliability of .54.

Stability of the Teacher Measures

We were not permitted to identify teacher questionnaires, and therefore cannot report on the stability over time of the individual-level teacher measures.

Measures of School Climate

The assessment of school climates is fundamentally different from the measurement of individuals. Whereas individual differences are the entire point of measurement at the individual level, these differences are "error" or "noise" in the assessment of an environment based on the reports of its individual inhabitants.

Compositional and Psychosocial Climate Scales

Compositional climate. Environments are sometimes characterized by aggregated or averaged characteristics of individuals. We have constructed compositional climate scales based on such aggregated personal characteristics to describe climates using averaged characteristics of individuals (cf. Astin & Holland, 1961). Compositional climate scales are reported for information about the students and the teachers who inhabit schools. In general, this type of climate scale describes the people who inhabit the schools.

Psychosocial climate scales. An alternative, and for some purposes more useful way, to characterize environments is to regard the inhabitants--teachers and students--as informants about the environment. To construct this kind of climate measure, reports about the environment (rather than about the individuals who inhabit it) are used. For psychosocial climate scales, reports are first averaged, and then item analyses proceed based on school means for the items.

Measures of Psychosocial Climate Based on Student Reports

Community Crime. This is a three-item scale based on averaged responses to questions about whether there are gangs in the student's neighborhood, whether the gangs try to get the student to join and whether the student's parents were robbed in the last year. This scale may be useful in describing the community context of the school (cf. National Institute of Education, 1978). It has a homogeneity coefficient of .59 estimated from the 1982 data (Table 5).

Gangs in School. This scale is composed of averaged responses to questions about whether there are gangs in the school and, if so, how much trouble they cause. The reliability (homogeneity) of this scale is .80.

Safety. This is a 13-item scale asking if students stay away from

Table 5

Reliability Coefficients for the Psychosocial Scales
Based on Student Report and Number of Items in Each Scale

Scale	1981 Alpha	1982 Alpha	One-yr. retest	N of Items
Community Crime	.57	.59	.91	3
Gangs in School	.80	.80	.82	2
Safety	.92	.94	.83	13
Individualized Instruction	.58	.42	.80	2
Disrespect for Students	.78	.85	.83	3
Student-Teacher Interaction	.60	.64	.79	2
Planning and Action	.65	.84	.82	3
Fairness	.62	.76	.76	3
Clarity	.64	.67	.70	4
Student Influence	.62	.74	.84	6
Grouping	.55	.41	.70	3

Note. Alpha reliabilities for 1981 are generally based on a smaller number of schools than those in 1982, which include all schools in the Initiative except those from St. Paul. We assume retest reliabilities are sometimes higher than the alpha coefficients because psychosocial climate scales are based on school-level item means which are themselves very reliable and items are not strictly parallel as assumed by classical true score theory.

any of a list of places in the school. It also asks if students feel safe at school, or if they fear someone will hurt them at school or on the way to school. It resembles what was called "School Climate" in the Schools Initiative Evaluation (Grant et al., 1979). Its reliability coefficient is .94.

Individualized Instruction. This scale is an attempt to use student reports as evidence about the level of individualized instruction characterizing the school as a whole. Individualized instruction, as usually construed, involves the development of individual learning plans, rewards for improvement over past levels of performance, and a pace of instruction suited to the individual. Two aspects of this conception are incorporated in this measure--students' reports that they have individual learning plans, and reports that they can work at their own speed in class. The homogeneity coefficient is .42.

Disrespect for Students. One theoretical perspective (Greenberg, 1977) assumes that delinquency is in part a result of a special status accorded youth, one which isolates them from meaningful adult roles and subjects them to degrading interpersonal exchanges to which adults would not be subjected. This scale is intended to assess the degree to which students feel that a school environment as a whole either degrades them or treats them with dignity. A low score could indicate that students feel they are treated with dignity. Items include, "Students are treated like children here;" "Teachers treat students with respect;" and "Teachers do things to make students feel put down." Its reliability coefficient is .85.

Student-Teacher Interaction. This scale aims to assess the degree of out-of-class positive social interaction with teachers, from the students' point of view. It is based on the averaged responses to two items: "I talk to some of my teachers about things other than schoolwork;" and, "Teachers help me with schoolwork outside of class." Its homogeneity coefficient is .64.

Planning and Action. This scale is intended to assess, from the point of view of the students, the degree to which schools engage in experimenting and problem-solving, or the degree to which they resist change. It is composed of the following three aggregated items: "It is hard to change the way things are done in this school"; "The teachers and principal in this school make plans to solve problems"; and "This school hardly ever tries anything new." It has a homogeneity coefficient of .84.

Fairness. Evidence is accumulating that the degree to which students perceive a school's rules as fair and clear is associated with the degree of orderliness of the school (National Institute of Education, 1978; Gottfredson & Daiger, 1979). Consequently, scales designed to assess these constructs were developed. Fairness is a three-item aggregate-level scale based on student reports that the rules are fair, that the punishment for breaking rules is the same for everyone, and that the principal is fair. It has a reliability of .76.

Clarity. Intended to measure the clarity of school rules from the point of view of the school's students, this scale is composed of questions asking whether everyone knows what the rules are, whether teachers let the students know what is expected, whether the principal is firm. This four-item scale has a reliability coefficient of .67.

Table 6

Reliabilities of School Psychosocial Climate Scales
Based on Teacher Report and Number of Items in Each Scale

Scale	1981 Alpha	1982 Alpha	One-yr. retest	N of Items
Involvement of Parents and Community	.80	.81	.77	6
Individualized Instruction and Grading	.60	.36	.70	4
Resources for Instruction	.86	.81	.81	4
Integration vs. Segregation by Ability or Conduct	.55	.59	.82	6
School Race Relations	.77	.74	.53	2
Teaching Staff Commitment	.82	.91	.73	2
Use of Grades as a Sanction	.84	.65	.56	2
Staff Morale (vs. alienation)	.90	.94	.84	11
Planning and Action	.87	.89	.84	10
Student Influence	.81	.85	.83	5
Smooth Administration	.92	.93	.80	12
Safety[a]		.94	.75	10

Note. Number of schools ranges from 48 to 50 schools for 1981 and ranges from 47 to 49 for 1982. An outlier school was deleted in the 1981 analyses, and all schools with fewer than 10 teachers were deleted in the 1982 analyses. N's for the re-test reliabilities range from 33 to 37 schools. We assume retest reliabilities are sometimes higher than the alpha coefficients because psychosocial climate scales are based on school-level item means which are themselves very reliable and items are not strictly parallel as assumed by classical true score theory.

[a]Reliability not calculated in 1981. Two items relating to classroom disruption included in this scale in 1981 were deleted in 1982, and in results presented for 1981 in this report the 1981 scale is re-scored to correspond with the 1982 scores.

Student Influence. It is often assumed that student influence on the way a school is run may lead to a number of positive outcomes, and an increase in student participation in planning and decision making is sought by OJJDP in the Alternative Education initiative. This six-item scale is intended to assess how much influence students have in their schools. Sample items include: "Students have little say in how the school is run"; "Students have helped to make the school rules"; and "Students are seldom asked to help solve a problem the school is having." The scale's homogeneity coefficient of .74.

Grouping. This scale assesses the students' perceptions of grouping, or segregation of students with special characteristics within the school. It is composed of the following three items: "Students of different races usually end up in different classes"; and, "This school has special classes for slow learners"; and, "There are special classes for trouble makers." It has a homogeneity coefficient of only .41.

Climate Scales Based on Teacher Reports

An alternative perspective on the climate of a school is provided by the reports of teachers. Accordingly, 11 climate scales were constructed from the teacher questionnaire, using averaged teacher responses about their school. Their names and reliabilities are shown in Table 6.

Involvement of Parents and Community. A goal of the Alternative Education Program is to increase the use of community and family resources by schools as a structural school improvement. This scale seeks to assess parent and community involvement according to aggregate teacher reports. It asks about parent influence on policies or practices, direct parent assistance, relations between parents and teachers, and community receptiveness. The six-item scale has a homogeneity coefficient of .81.

Individualized Instruction and Grading. The Alternative Education Program seeks to create structural changes in schools to increase individualized instruction, and this intervention is planned by several of the action projects. Accordingly, this four-item scale aims to measure individualized instruction by asking if individualized learning plans are used, and if grading is based on improvement versus "the curve." The scale has a homogeneity coefficient of .36.

Resources for Instruction. This scale is intended to measure relative levels of resources (equipment, materials, learning opportunities) available in the school. It contains items asking about teaching supplies, space, extra-school settings used for instruction, and timeliness of availability of resources. This four-item scale has a reliability of .81.

Integration vs. Segregation by Ability or Conduct. This scale is also included to measure an aspect of project implementation sought by the Alternative Education Program: the avoidance of tracking or isolation. The six-item scale contains items such as: "Students of mixed ability work together in small groups in my class;" "This school has special classes for slow learners;" and "In this school there are special classes for students who repeatedly misbehave." Its reliability is .59, and the appropriate interpretation of the scale is

unclear. Opinions differ about the wisdom of homogeneous vs. heterogeneous grouping according to student conduct or academic performance, although the current climate, and some evidence (Slavin, 1980), implies that heterogeneous grouping can have some virtue.

School Race Relations. This brief two-item measure asks about race relations from the teacher point of view. It asks how well different groups get along. Its reliability is .74.

Teaching Staff Commitment. Anecdotal and correlational evidence suggests that the commitment of an organization's staff is related to project implementation (Grant et al., 1979; Berman & McLaughlin, 1976). Accordingly, a two-item scale to assess staff commitment was included. Its reliability is .91.

Use of Grades as a Sanction. The use of grades as a response to misconduct is correlated with school disruption rates (Gottfredson & Daiger, 1979). On the face of it, this also appears to be a poor practice because it makes the grading and sanctioning process ambiguous. A two-item index uses teacher reports to characterize the extent of this practice in schools. It has a reliability of .65.

Staff Morale. As with commitment, morale is sometimes suggested as a concomitant of success in implementing innovations, and it is an important characteristic of an organization in its own right. An 11-item scale containing items such as, "Our problems in this school are so big that it is unrealistic to expect teachers to make much of a dent in them;" and "(Is the teaching faculty) frustrated?" Its reliability is .94.

Planning and Action. Presumably, organizations engaging in systematic planning and that are open to change are most likely to successfully implement innovations. Based on this assumption, we constructed a nine-item scale to assess planning and action. It asks, "How often do you work on a planning committee with other teachers?" "(Is the principal) progressive?" "(Is the teaching faculty) open to change?" Its reliability is .89.

Student Influence. Student participation in school decision making is one of the major structural elements the Alternative Education Program wants to create through the action projects. The assumption apparently is that student influence will help to create other beneficial structural changes, or it may contribute to decreased alienation or sense of powerlessness. Measures of student influence used in previous studies (National Institute of Education, 1978; Gottfredson & Daiger, 1979) assessed a limited range of influence, and certainly do not assess the kinds of student influence possible. Therefore, although based on the scale used earlier by Gottfredson & Daiger (1979), this scale is expanded somewhat (to five items). Sample questions are "I often change my lesson plans based on student suggestions;" and "Teachers and their students work together to make rules governing behavior in the classroom." The scale has a reliability coefficient of .85.

Smooth Administration. Our earlier research (Gottfredson & Daiger, 1979) suggests that the way a school is run is important in understanding its climate and in preventing school disruption. To the best of our knowledge, detailed studies of school administration tend to focus on the personal characteristics of administrators (e.g., Miner, 1967),

or are ethnographic accounts of the typical activities of administrators. Here we wished to assess the perceptions of administrative style and procedures from the point of view of the body of teachers who experience them. Accordingly, we constructed a 12-item scale. Typical items are: "Simple, non-time consuming procedures exist for the acquisition and use of resources;" "There is little teacher-administration tension in this school." "(The principal is) open." In a sense this scale represents a global rating of the positiveness with which teachers view the schools's administration, although the item content focuses on both principal behavior and some probable practical consequences of that behavior. Its reliability is .93.

Safety. This 10-item scale measures teachers' perceptions of the safety of their schools. It asks, for example, how safe the classrooms, halls, restrooms, etc. are. Its homogeneity coefficient is .94.

Stability of the Psychosocial Climate Measures

One-year stability coefficients for the psychosocial climate measures derived from student reports are presented in Table 5, and the corresponding information for psychosocial climate measures derived from teacher reports are presented in Table 6. With the exception of the measure of school Race Relations, these climate measures are fairly stable over time.

Interpreting the School Climate Measures

In August 1982 we prepared four kinds of feedback about the schools in which the delinquency prevention projects are operating. This feedback, based on surveys conducted with students and teachers, took the following forms:

- Average characteristics of each school's students.
- Reports by students about each school's psychosocial climate.
- Average characteristics of each school's teachers.
- Reports by teachers about each school's psychosocial climate.

Formative evaluation information of this kind is most useful when the projects have developed clear ideas about what they expect to see. Accordingly, base-line information from surveys conducted in the Spring of 1981 was presented, and projects were asked to make predictions about the Spring 1982 results based on the projects' goals and objectives, and their knowledge of the degree of implementation of their various interventions.

Student Scales

Individual-level student scales report the average item score for all items in the scale. Scale scores are computed such that if a person gave the keyed response to 6 items in a 12-item scale, his or her score would equal .50.[4] As with

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5. For items with more than two response options (e.g., "yes," "no") item responses were dichotomized. This differs from the scoring method used to report scores in our previous reports. In previous reports all of the variability in mulit-option items was utilized by adding together standard scores for items to compose scales of equally

other kinds of psychological measurement, norms are useful in interpreting scores because they tell whether a given score is high or low in reference to an identifiable population. Norms for the school compositional and psychosocial climate scales based on the sample of schools in the Alternative Education Program are provided in Appendix A for this purpose.

Profiling scores. Using these norms a school's climate scale scores can be plotted on a profile sheet for easy interpretation. In August, 1982, such profiles were provided for each school. The space required to profile each school prevents us from presenting the information in full in that form here, the profile sheets shown in Appendix B can be used to plot any schools profile given the norms and the detailed school-by-school results enumerated elsewhere in this report.

The profile sheets provide a verbal interpretation of the climate measure results for a school. This interpretation is based on the translation of percentile ranks into words. The translation table preceding the illustrative profile sheets shows how percentiles map into verbal interpretations.

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weighted items. The modification was introduced to enhance the interpretability the scales for practitioners not accustomed to use of standard scores. An examination of the psychometric properties of both kinds of scales implies that the current procedure is almost as efficient as our original scoring method.

Teacher Scales

Teacher scales are scored by adding together the items that compose a scale with the item response scale constructed so that a high number always corresponds with the "high" end of the scale. The absolute (raw) scores on these scales have no intrinsic meaning, as do the student scales, and they can only be interpreted by reference to norms. Norms are provided in Appendix A for this purpose.

Profiling scores. Teacher climate scales can be profiled in the same way as the student scales using the illustrative profile sheets.

Suggestions for Using Climate Reports in Project Planning

The worksheets provided to projects to facilitate the constructive utilization of the school climate measures are shown in Appendix C. These worksheets are used to make discrepancies between what implementers expect to see and what they actually observe salient. Some projects found it more useful to examine this information in alternative formats.

Using Measures for Individual Students and Teachers

The confidential individual-level measures are presented in the form of statistical summaries for treatment and comparison group youths for each of the delinquency prevention projects. Interpretation of these individual-level measures is made within the context of the evaluation design for each of the various projects, and these results are discussed in the project-specific evaluation reports in Part II of this report for each project that has project components targeted at well-defined groups and an evalua-

tion design that enables an assessment of these project components.

The Utility of Information for Project Managers

In workshops conducted in August, 1981, and again in August, 1982, school profiles were made available to project directors. These profiles provided assessments of schools useful for diagnostic and prescriptive purposes. The efforts of thousands of students and teachers in completing these surveys would go partly to waste if this information were not used in project planning and continued project development. We earnestly hoped that this information would be used, and are gratified that several projects have made extensive use of this information in renewed project planning.

Similarly, interim feedback we have provided to project directors on the characteristics of their clientele (in summary form), and about the effectiveness of their interventions based on the statistical analyses of individual scales is intended to be used in refining interventions. No one expects to see dramatic effects of projects in their developmental stages, but progress in at least some areas is to be expected. Projects will increase in effectiveness largely by using the information provided by this interim feedback. A subsequent chapter provides an overview of the changes in school characteristics across years, and Part II of this interim report describes interim evaluation results for those portions of each project targeted at identifiable groups of youths.

The seventeen delinquency prevention projects that are the focus of the School Action Effectiveness Study are diverse. Providing a brief account of the similarities among them and their major differences is therefore a difficult task: They differ in size, goals, theoretical rationales, stage of development, and in many other ways as well. Nevertheless, it is possible to characterize each project in terms of some crosscutting dimensions.

Crosscutting Dimensions

The first conceptual dimension along which any delinquency prevention project may be placed is a dimension of primary prevention vs. secondary or tertiary prevention.

Primary prevention. Primary prevention is activity directed to reduce the risk of delinquent behavior in a population. Making provision for safe water supplies and environmental sanitation is an example of a primary prevention activity in the health area: It is intended to reduce the population's risk of diseases transmitted by water. The efficacy of this approach to health promotion is unquestionable. Making rules in a school or community clearer and more widely understood is an example of a primary prevention activity in the delinquency prevention area. Such an activity would be intended to reduce the risk that young people in the school's or community's population will engage in delinquent behavior. In primary prevention, the emphasis is on reducing the incidence or severity of some target problem in the population at large.

Secondary prevention. Secondary prevention is activity directed at reducing the occurrence of some negative outcome for persons believed to be at especially high risk of exhibiting that negative outcome. The administration of drugs and the restriction of sodium intake to manage blood pressure for hypertensive individuals who are at high risk of subsequent cardiovascular disease is an example of a secondary prevention activity in the health area. These interventions are intended to reduce the risk of strokes and heart attacks for persons with high blood pressure. Prior research shows that drugs and restricted sodium intake control blood pressure, but that it is difficult to get people to adhere to the prescribed regimens. Providing young people who are performing poorly in school and who are in disciplinary difficulty in school with academic curriculum and learning structures tailored to their needs and using the techniques of applied behavior analysis to assist them in managing their conduct is an example of a secondary prevention activity in the delinquency prevention area: These interventions are intended to reduce the risk of future delinquent behavior for youths already at substantially elevated risk of displaying such behavior. The emphasis in secondary prevention is on reducing the incidence or severity of some target problem in a selected subset of the population that is considered to be at unusual risk.

Tertiary prevention. Tertiary prevention is for the most part synonomous with the colloquial use of the term "rehabilitation." Surgery to remove an inflamed appendix is an example of tertiary prevention in a medical context. A rehabilita-

tion program for incarcerated offenders might be an example of a tertiary prevention program in the delinquency area. Tertiary prevention is usually not regarded as a form of prevention, but rather as a form of remediation.

Individual vs. Environment

A second conceptual dimension along which any delinquency prevention project may be placed is a dimension of a focus on the adaptation of the individual vs. a focus on altering the environment.

Promoting individual adaptation or resistance. The promotion of individual adaptation or resistance to negative sources of influence is activity directed to "innoculate" the individual against sources of harm or to enhance the ability of the person to adjust to or cope with an environment. An example of an intervention aimed at preventing disease through this approach is the innoculation of individuals against smallpox. After introducing a non-virulent strain of a micro-organism, the immune system develops defenses against subsequent invasion by virulent strains of the same organism. For some well understood diseases this approach is of unquestionable utility. An example of an intervention aimed at preventing delinquency through this approach is one aimed at strengthening a person's attachments to prosocial others so that he or she develops greater stakes in conformity. In tertiary prevention, the emphasis is on reducing the further incidence or severity of a target problem in the subset of the population that has already exhibited the problem.

Altering the environment. Interventions adopting an approach of altering the environment aim to eliminate or attenuate sources of influence in the environment that contribute to problems. An example of an intervention in the health area using this approach is the use of dust extractors in grain storage silos to reduce the risk of death resulting from the explosion of the silos. Such interventions have proven to be of considerable value. Examples of interventions adopting an approach of altering the environment in the delinquency prevention area include projects that widely disperse immigrants and families with low socioeconomic status throughout urban areas rather than allowing them to concentrate in urban slums, and interventions that alter the reward structures of schools so that individuals experiencing difficulty in academic work will not experience only failure in school.

A Classification of Prevention Projects

The foregoing two dimensions can be used to create the classification of Alternative Education Prevention prevention projects illustrated in Figure 1.[1] Quadrant 1 (the upper left quadrant) includes primary prevention projects focused mainly on environmental factors that contribute to delinquency. They aim to reduce the risk of youth crime for a total population. The effectiveness of Quadrant 1 interventions should be reflected in epidemiological indicators of youth characteristics and behavior. Their interventions should be such that everyone, or nearly everyone, in the target population is affected by them.

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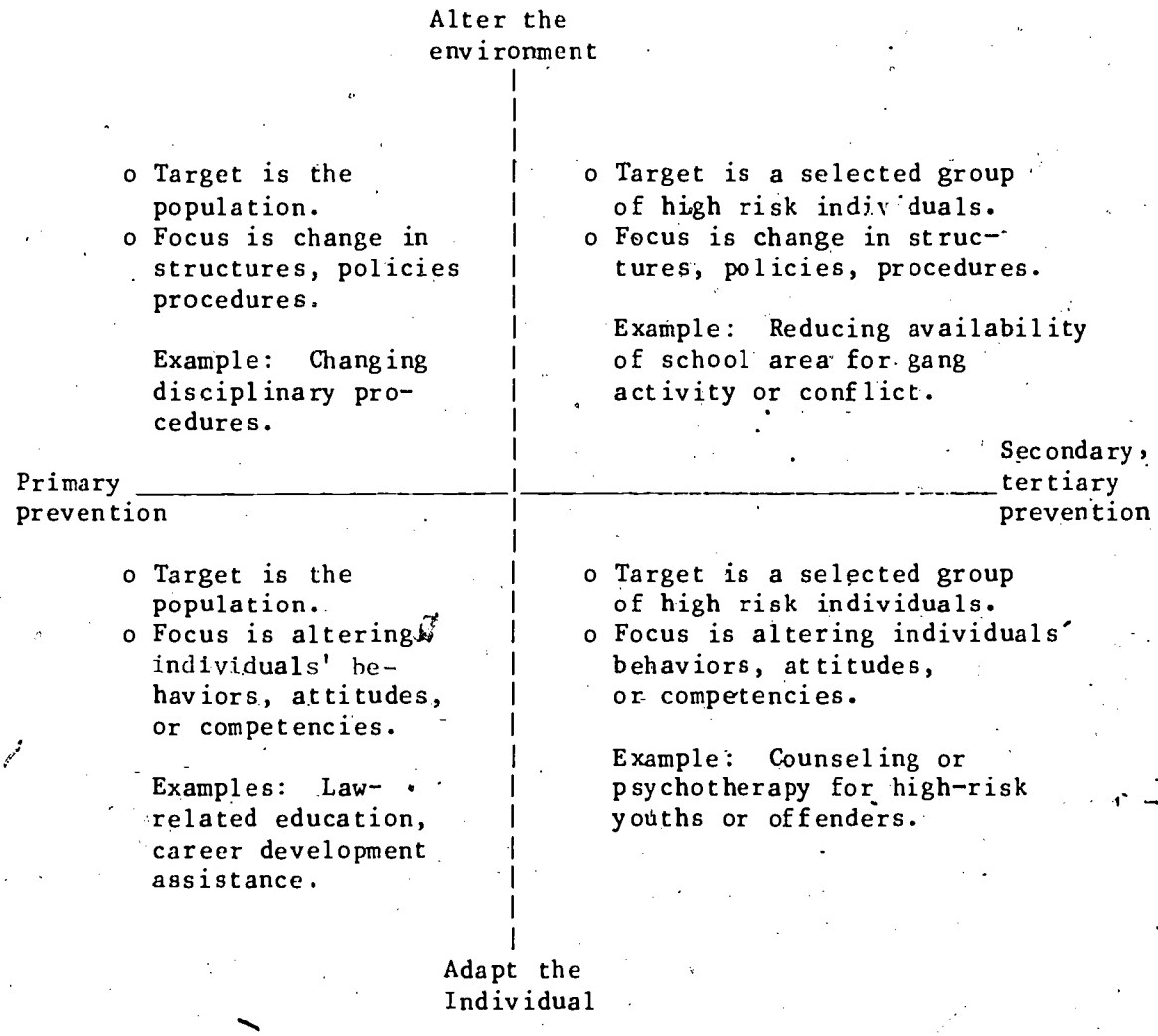
1. For a related classification with different content see Associates for Youth Development, 1980.

Figure 1

A Classification of Preventive Interventions



Quadrant 2 (the upper right quadrant) includes secondary and tertiary prevention and remediation projects focused mainly on environmental factors that contribute to delinquency. They aim to reduce the risk of youth crime for a group of individuals who are at high risk of displaying delinquent behavior. Their effectiveness should be reflected in measures of the personal characteristics and behavior of youths in the selected, high-risk group who receive the direct services or treatments of the project. Quadrant 2 interventions should be such that the treatments are delivered to members of the target group with sufficient strength and integrity to prevent further exposure to environmental conditions promoting delinquent behavior, to create environmental conditions that restrain the individual from delinquent behavior, and (if a tertiary prevention project) remediate existing problems or rehabilitate an offender.

Quadrant 3 (the lower left quadrant) includes primary prevention projects focused mainly on adapting people to their environments. They aim to reduce the risk of youth crime in a total population by enhancing the ability of people in an environment to adjust to or cope with the environment. Quadrant 3 interventions should be such that everyone, or nearly everyone, in the population is affected by the interventions in ways that foster adjustment or adaptation. Their effectiveness should be reflected in epidemiological indicators of the attitudes, behavior, or personal characteristics of the population.

Quadrant 4 (the lower right quadrant) includes projects focused mainly on adapting individuals to the situations in which they find themselves. They aim to reduce the risk of subsequent delinquent behavior by individuals in a target group of high risk individuals. Quadrant 4 interventions should be such that the treatments are delivered to members of the target group with sufficient strength and integrity to develop personal restraints from engaging in delinquent behavior, prevent further development of personal characteristics promoting delinquent behavior, or (if a tertiary prevention project) remediate existing problems. Intervention effectiveness should be reflected in measures of the personal characteristics and behavior of youths in the selected, high-risk group who receive the direct services or treatments of the project.

Like any typology, the present one is an abstraction--these are ideal types. No project is likely to resemble one and only one of these ideal types. In actuality, most projects will have characteristics in common with two or more of these approaches. The typology is nevertheless useful in providing a general characterization of prevention projects.

The Classification Applied to the Alternative Education Projects

In Table 1 the foregoing classification is applied to the 17 projects being evaluated in the School Action Effectiveness Study. We have considered what these prevention projects are doing and what they aim to accomplish, and then used <u>our</u> best judgment in preparing the table. The classification of a particular project in one category or another does <u>not</u> imply that it is a pure type, or even that the classification is particularly apt. The primary classification means that, in our judgment, the project <u>most</u> resembles that type.

Table 1

A Classification of the Alternative Education Projects

Project	Primary type	Secondary type
Compton, CACYD	Secondary/Individual	Primary/Environment
Pasadena, STATUS	Primary/Individual	Primary/Environment
Chicago, PCD	Secondary/Individual	Primary/Environment
Chicago, RETAIN	Secondary/Individual	
Kalamazoo, AEP	Primary/Environment	Secondary/Environment
South Bronx, PREP	Secondary/Environment	Secondary/Individual
East Harlem, AAEP	Primary/Individual	
Puerto Rico, OC	Primary/Environment	Secondary/Individual
Charleston, PATHE	Primary/Environment	Secondary/Individual
Houston, GIS	Secondary/Environment	Secondary/Individual
Virgin Islands, AEP	Secondary/Individual	Primary/Environment
Hayward, LCO	Primary/Environment	
Miami, ACE	Secondary/Environment	Secondary/Individual
New Jersey, EIC-S	Secondary/Environment	Primary/Environment
Plymouth, AEP	Secondary/Individual	
Milwaukee, JVS	Secondary/Individual	
St. Paul, Together	Primary/Environment	Secondary/Individual

For a fuller description of each project see the detailed project descriptions in our first interim report, and in the second interim report, part II. Those fuller descriptions make clear that simple classifications do not portray the full complexity of any of these projects.

What Are The Interventions?

The individual interventions being implemented by the projects span a wide range of educational approaches and techniques. Table 2 categorizes a majority of the interventions being implemented by the projects. An "X" indicates only that we have reason to believe that some version of that particular intervention has actually occurred. No attempt is made here to judge the strength, fidelity, integrity, theoretical reasonableness, or effectiveness of a particular intervention within a project. Many of the interventions are, in fact, only weakly implemented. The main purpose of the table is to give some idea of the scope and diversity of interventions across the entire Alternative Education Program, and within any particular project.

Who Are the Target Populations?

The evaluation's data base shows that a cumulative total of 6,548 youths were the targets of direct interventions between September 1980 and April 1982. The number of youths subject to indirect influence by the projects is larger: A total of 23,934 youths were indirect targets of interventions of projects with primary prevention components in the schools in which they operate. Detailed information on the numbers of youths involved in each project is provided in Table 3. The first column shows the cumulative number of youths receiving direct services as part of the Alternative Education Program. This number ranges from 88 to 1,151 across the projects. The second column shows the number of youths receiving direct services as of April ,1982. The third column shows the number of students indirectly served by projects with appreciable preventive intervention aspects in the 1980-81 academic year, and the fourth column shows the corresponding information for the 1981-82 academic year.

A more detailed description of the youths potentially affected by the Alternative Education Program is provided in Tables 4 through 6. These tables show estimated ethnic group and sex breakdowns. These estimates are made using ethnic and gender self-identification on the Spring 1982 School Action Effectiveness Study surveys.

The Alternative Education Program mainly involves ethnic minorities. Table 4 shows the ethnic composition of public schools in which delinquency prevention projects are operating.[2] Table 4 shows that only 32.7% of the schools' population are white, 36.6% are Black, 24.7% are Spanish-speaking or Spanish surnamed, 1.5% are Native American, 1.7% are Asian-American, and 2.7% gave some other ethnic self-identification. The ethnic composition of

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2. The N's shown in the table are not equal to the N's in Table 3 because of survey or item nonresponse, and because the indirect service totals of Table 3 are derived from principal questionnaires about school enrollment, while the samples for Tables 4 to 6 were drawn from actual school rosters. The table also shows the ethnic composition of several non-intervention schools which serve as "control" schools in the evaluation.

Table 2

Characteristics and Interventions of the Alternative Education Projects

	Project Number																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Project school characteristics																	
Program operates in:																	
Regular school		X	X	X	X	X	X	X	X		X			X	X	X	X
Alternative school	X					X		X		X		X	X	X		X	
Organization of target school(s):																	
Elementary school						X	X								X		
Junior/middle school	X	X			X	X	X	X	X	X	X	X	X	X	X		X
High school	X	X	X	X				X	X	X		X	X	X		X	X
Project interventions																	
Curriculum development		X			X		X	X	X	X					X	X	X
Individualized instruction or tutoring																	
Teacher delivered	X	X		X	X	X	X	X	X	X	X		X	X		X	
Peer delivered								X									
Computer delivered	X											X					X
Vocational/career education	X					X		X	X	X	X		X			X	X
Adaptive/affective education	X	X	X		X	X				X	X		X		X	X	X
Teacher training/development	X	X	X		X	X		X	X	X	X		X	X			X
Individual counseling	X	X		X	X	X	X	X	X	X		X	X	X	X	X	
Group/peer counseling	X		X		X	X			X	X				X	X		X
Change classroom management/organization	X	X			X			X	X		X		X	X			X
Increase extra-curricular activities	X				X	X	X	X	X	X		X	X	X			X
Change school sanction procedures																	
Discipline	X	X	X		X				X	X	X		X		X		X
Suspensions	X	X			X				X	X		X			X		X
Increased student participation in decision making	X	X	X		X	X	X	X	X	X		X	X	X	X		X
Improve school climate	X	X	X		X				X	X			X				X
Involve community in school:																	
Channel resources into school	X				X	X			X	X	X		X	X			X
Parental involvement	X				X	X	X	X	X	X			X	X	X		X
Involvement of persons other than parents	X				X			X	X	X			X	X			X
Improve parent-student relations	X			X	X	X			X					X	X		X
Diversion from juvenile justice system	X		X			X		X		X					X	X	

1=Compton-CACYD
2=Pasadena-STATUS
3=Chicago-PCD
4=Chicago-RETAIN
5=Kalamazoo-AEP
6=South Bronx-PREP
7=East Harlem-AAEP
8=Puerto Rico-OC
9=Charleston-PATHE
10=Houston-GIS
11=Virgin Islands-AEP
12=Hayward-LCO
13=Miami-ACE
14=New Jersey-EIC-S
15=Plymouth-AEP
16=Milwaukee-JVS
17=St. Paul-Together

Table 3

Cumulative and Current Number of Clients Receiving Services

Project	Total Receiving Direct Services		Total Receiving Indirect Services	
	Cumulative to Apr. '82	Current in April '82	1980-81	1981-82
Compton	132	65	0	0
Constitutional Rights Foundation, Pasadena	421[d]	250[d]	3,445	3,069
Peer Culture Development, Chicago	946	432	5,531	5,712
Chicago Board of Education	205	128	0	0
Kalamazoo	115	115	657	665
Bronx	329	150	0	0
Jazzmobile, Harlem	781[a]	251[a]	0	0
Puerto Rico	976[d]	491[d]	2,245	1,608
Charleston	1,151	630	4,597	4,078
Houston	119	75	0	0
Virgin Islands	88	53	0	1,356
Lac Courte Oreilles, Hayward	124[b]	100[b]	100	95
Miami	114	85	0	0
Plymouth-Canton	213	161	0	0
New Jersey	154	154	0	2,812
Jewish Vocational Services, Milwaukee	329[c]	329[c]	0	0
St. Paul	351	318	3,722	4,539

Note. Counts are based on the number of clients who received at least some direct program services, according to information provided to the National Evaluation Management Information System. Clients not named or identified with an ID number are not entered into the MIS. Direct service recipients include all students enrolled in or receiving services through a program component. Indirect or preventative services are recorded only for projects involving a substantial school change or primary prevention component.

[a]Figures do not include students currently enrolled in the elementary school program.

[b]Figures do not include 1981-82 youth center clients.

[c]These figures do not include Return Center clients and MYEC clients who entered the program after the "evaluation phase" which ended in January, 1982.

[d]These figures reflect the number served through May, 1982, because no data were available in April.

Table 4

Ethnic Composition of Schools in the Alternative Education Program
Spring, 1982

City, School, and Project	Row Percentage						Weighted N
	Native American	Asian American	Spanish American	Black	White	Other	
Pasadena, California							
School 70	1.66	6.21	19.45	43.98	23.28	5.43	876
School 82	0.87	2.69	14.38	45.03	31.95	5.08	1377
Project subtotal	1.18	4.06	16.35	44.62	28.58	5.22	2253
Peer Culture Development, Chicago							
School 1370	0.27	0.74	68.41	27.71	2.12	0.74	1097
School 1430	0.55	6.05	61.26	7.86	21.31	2.97	732
School 1820	0.30	1.21	26.02	22.35	49.21	0.91	3298
School 3200	0.00	0.94	30.19	4.72	59.43	4.72	106
School 4720	0.67	1.33	94.00	0.67	3.33	0.00	150
School 5070	1.35	5.41	28.38	43.24	20.27	1.35	74
School 5550	3.26	7.61	56.52	5.43	25.00	2.17	92
School 6010	1.08	1.08	89.17	3.25	4.33	1.08	277
Project subtotal	0.43	1.88	43.77	19.75	32.96	1.22	5826
Chicago Board of Education, Chicago							
School 1240	0.00	0.14	56.32	38.91	0.00	4.63	720
School 1340	0.00	0.59	13.40	50.81	32.99	2.21	679
School 2300	2.82	7.91	59.89	2.26	23.73	3.39	177
School 4440	0.00	2.86	43.81	33.33	17.14	2.86	105
School 4550	0.87	0.00	0.87	98.26	0.00	0.00	115
School 5090	0.55	0.00	32.97	0.55	59.34	6.59	182
School 5750	0.61	0.61	0.61	97.58	0.00	0.61	165
School 5880	1.06	0.24	82.77	11.25	2.08	2.61	410
School 6180	0.79	0.00	15.75	77.95	0.79	4.72	127
Project subtotal	0.50	0.90	39.92	40.45	14.98	3.25	2680
Kalamazoo, Michigan							
School 318	1.27	1.09	3.27	21.82	69.09	3.45	550
School 327	1.69	1.06	1.91	35.55	52.88	1.91	466
Project subtotal	1.47	1.08	2.65	28.11	63.95	2.75	1016

continued

Table 4 (continued)

Ethnic Composition of Schools in the Alternative Education Program
Spring, 1982

City, School, and Project	Row Percentage						Weighted N
	Native American	Asian American	Spanish American	Black	White	Other	
South Bronx, New York							
School 22	2.27	0.97	46.28	44.98	2.91	2.59	309
School 55	0.00	1.64	22.95	70.49	3.28	1.64	61
School 63	3.68	0.00	39.71	52.94	0.74	2.94	136
School 64	3.33	0.00	69.17	20.00	4.17	3.33	120
School 82	1.23	0.41	45.08	50.00	2.46	0.82	244
School 117	2.73	0.78	59.77	31.25	0.39	5.08	256
School 132	0.00	0.00	35.37	60.98	1.22	2.44	82
School 145	1.60	0.40	43.90	51.80	0.80	1.60	378
School 147	3.80	0.80	29.50	63.60	0.80	1.50	200
School 148	2.71	0.68	26.78	66.78	1.02	2.03	295
School 166	1.60	0.00	40.80	54.50	0.60	2.50	629
School 229	2.50	0.50	21.50	72.50	0.00	3.00	200
Project subtotal	2.20	0.40	40.70	52.90	1.20	2.50	2941
East Harlem, New York							
Project subtotal	3.31	0.83	11.57	82.64	0.00	1.65	121
Playa de Ponce, Puerto Rico							
School 1	0.83	2.22	87.50	1.39	7.78	0.28	360
School 2	1.84	0.00	87.56	0.92	8.76	0.92	217
School 3	0.39	0.39	92.52	0.59	5.71	0.39	508
Project subtotal	1.00	0.84	89.79	1.00	6.95	0.42	1195
Charleston, South Carolina							
School 242	0.40	0.40	0.80	41.50	54.80	2.00	451
School 741	1.40	0.76	1.66	95.40	0.00	0.77	393
School 742	0.64	0.51	1.02	96.42	0.26	1.15	392
School 743	1.12	0.00	0.26	97.41	0.43	0.78	382
School 751	0.32	0.50	0.50	98.36	0.00	0.32	313
School 754	0.00	0.47	0.23	99.06	0.23	0.00	426
School 755	0.96	0.14	0.00	98.48	0.00	0.42	717
School 944	1.49	0.29	1.49	66.67	27.57	2.48	339
School 951	1.02	0.00	0.43	78.53	19.00	1.02	623
Project subtotal	0.80	0.30	0.60	85.80	11.50	1.00	4036
St. Croix, Virgin Islands							
Project subtotal	.29	0.00	30.99	65.43	1.19	2.10	1041

continued

Table 4 (continued)

Ethnic Composition of Schools in the Alternative Education Program
Spring, 1982

City, School, and Project	Row Percentage						Weighted N
	Native American	Asian American	Spanish American	Black	White	Other	
Plymouth, Michigan							
School 31	1.68	1.51	1.35	0.17	88.89	6.41	604
School 41	1.68	0.12	1.57	0.00	92.05	4.59	861
School 42	0.00	3.57	0.89	0.00	92.86	2.68	112
School 43	0.00	2.80	0.00	1.87	88.79	6.54	107
Project subtotal	1.44	1.00	1.38	0.18	90.78	5.22	1710
New Jersey							
School 1	1.69	0.00	30.34	15.17	44.94	7.87	178
School 2	1.03	0.69	3.10	14.25	74.84	6.08	924
School 3	4.64	0.00	8.21	67.14	17.14	2.86	280
School 4	1.69	0.56	16.01	12.92	65.17	3.65	356
Project subtotal	1.82	0.48	9.36	22.59	60.50	5.25	1738
St. Paul							
School 210	1.60	3.95	1.68	29.31	59.09	4.37	1207
School 230	1.73	8.63	3.88	3.02	80.58	2.16	1323
School 342	2.98	0.72	0.93	14.94	76.09	4.33	478
School 352	6.82	7.82	5.02	6.69	65.45	8.21	353
Project subtotal	2.39	5.58	2.77	14.75	70.48	4.02	3456
Total	1.50	1.70	24.70	36.60	32.70	2.70	28378

Table 5

Ethnic Self-Identification of Students Receiving Direct Services, Alternative Education Program, Spring 1982

City, School, and Project	Row Percentage						N
	Native American	Asian American	Spanish American	Black	White	Other	
Compton, California							
CACYD	3.51	5.26	8.77	77.19	1.75	3.51	57
Pasadena, California							
School 70	2.43	2.43	24.31	44.98	18.55	7.29	82
School 82	0.96	5.77	11.54	61.54	16.35	3.85	104
Project subtotal	1.61	4.30	17.18	54.22	17.32	5.37	186
Peer Culture Development, Chicago							
School 1370	0.90	0.00	42.34	50.45	6.31	0.00	111
School 1430	3.16	1.05	60.00	18.95	13.68	3.16	95
School 1820	0.00	0.00	12.82	37.18	50.00	0.00	78
School 3200	0.00	0.00	20.83	0.00	75.00	4.17	24
School 4720	0.00	3.85	88.46	0.00	7.69	0.00	26
School 5070	4.55	0.00	27.27	50.00	18.18	0.00	22
School 5550	3.33	6.67	43.33	13.33	33.33	0.00	30
School 6010	2.38	0.00	83.33	4.76	9.52	0.00	42
Project subtotal	1.64	0.93	45.99	28.04	22.66	0.93	428
Chicago Board of Education, Chicago							
School 1240	0.00	0.00	66.67	33.33	0.00	0.00	6
School 1340	0.00	0.00	0.00	0.00	100.00	0.00	1
School 2300	7.14	0.00	57.14	7.14	28.57	0.00	14
School 4440	0.00	0.00	25.00	66.67	8.33	0.00	12
School 5090	0.00	0.00	57.14	7.14	21.43	14.29	14
School 5750	0.00	0.00	0.00	100.00	0.00	0.00	11
School 5880	0.00	6.30	93.70	0.00	0.00	0.00	16
School 6180	7.69	0.00	23.08	69.23	0.00	0.00	13
Project subtotal	2.30	1.15	47.05	36.84	10.36	2.30	87
Kalamazoo, Michigan							
School 318	1.03	1.03	2.06	28.87	63.92	3.09	97

continued

Table 5 (continued)

Ethnic Self-Identification of Students Receiving Direct Services, Alternative Education Program, Spring 1982

City, School, and Project	Row Percentage						N
	Native American	Asian American	Spanish American	Black	White	Other	
South Bronx, New York							
School 53	6.45	0.00	25.81	61.29	0.00	6.45	31
School 55	0.00	0.00	27.27	72.73	0.00	0.00	11
School 63	0.00	0.00	33.33	66.67	0.00	0.00	15
School 64	0.00	0.00	90.00	10.00	0.00	0.00	10
School 82	0.00	0.00	33.33	66.67	0.00	0.00	15
School 117	0.00	0.00	40.00	60.00	0.00	0.00	10
School 132	0.00	0.00	21.43	71.43	0.00	7.14	14
School 147	0.00	0.00	14.29	85.71	0.00	0.00	7
School 148	5.56	0.00	5.56	88.89	0.00	0.00	18
Project subtotal	2.29	0.00	29.77	65.65	0.00	2.29	131
East Harlem, New York							
School 88	4.88	1.22	12.20	79.27	0.00	2.44	82
Playa de Ponce, Puerto Rico							
School 1	0.56	3.39	84.75	2.82	7.91	0.56	177
School 2	2.22	0.00	88.15	1.48	6.67	1.48	135
School 3	0.70	0.35	92.31	1.05	5.59	0.00	286
Project subtotal	1.00	1.17	89.15	1.67	6.51	0.50	599
Charleston, South Carolina (PATHE)							
School 741	3.03	1.52	7.58	87.88	0.00	0.00	66
School 742	2.13	2.13	0.00	95.74	0.00	0.00	47
School 743	1.67	0.00	1.67	95.00	0.00	1.67	60
School 754	0.00	1.72	0.00	96.55	1.72	0.00	58
School 755	0.00	1.59	0.00	98.41	0.00	0.00	63
School 944	0.00	0.00	0.00	66.00	32.00	2.00	50
School 951	0.00	0.00	0.00	87.04	12.96	0.00	54
Project subtotal	1.01	1.01	1.51	89.95	6.03	0.50	398
Houston, Texas							
Project subtotal	0.00	0.00	94.64	0.00	1.79	3.57	56
St. Croix, Virgin Islands							
Project subtotal	3.70	0.00	40.74	48.15	7.41	0.00	27

continued

Table 5 (continued)

Ethnic Self-Identification of Students Receiving Direct Services,
Alternative Education Program, Spring 1982

City, School, and Project	Row Percentage						N
	Native American	Asian American	Spanish American	Black	White	Other	
Heyward (LCO)							
Project subtotal	98.63	0.00	0.00	0.00	1.37	0.00	73
Miami							
Project subtotal	0.00	0.00	16.18	51.47	32.35	0.00	68
Plymouth, Michigan							
Growth Works	0.00	0.00	3.20	0.00	93.50	3.20	31
School 31	0.00	0.00	0.00	0.00	92.90	7.10	14
School 41	5.60	0.00	5.60	0.00	88.90	0.00	18
School 42	3.40	1.70	0.00	0.00	87.90	6.90	58
School 43	2.30	0.00	0.00	2.30	88.40	7.00	43
Project subtotal	2.40	0.60	1.20	0.60	89.60	5.50	164
New Jersey							
School 1	0.00	0.00	63.64	13.64	22.73	0.00	22
School 2	0.00	0.00	0.00	5.26	84.21	10.53	19
School 3	4.17	0.00	8.33	75.00	8.33	4.17	24
School 4	0.00	0.00	4.55	13.64	54.55	27.27	22
Project subtotal	1.15	0.00	19.54	28.74	40.23	10.34	87
St. Paul							
School 210	0.00	0.73	4.06	31.94	61.08	2.18	275
School 230	0.00	0.00	0.00	0.00	100.00	0.00	2
School 342	0.86	0.00	3.83	18.70	74.88	1.72	116
School 352	0.00	19.04	1.82	8.11	62.91	8.11	55
Project subtotal	0.22	2.78	3.71	25.44	65.06	2.78	448

Table 6

Gender Self-Identification of Students in Participating Schools and of Students Receiving Direct Services, Spring 1982

City and School	Total School			Directly Served		
	% Female	% Male	Weighted N	% Female	% Male	N
Compton						
CACYD	--	--	--	38	62	60
Pasadena, California						
School 70	48	52	985	48	52	96
School 82	46	54	1431	55	45	108
Project subtotal	47	53	2416	51	49	205
Peer Culture Development, Chicago						
School 1370	44	56	1120	57	43	113
School 1430	55	45	742	49	51	95
School 1820	50	50	3308	63	37	78
School 3200	53	47	110	52	48	25
School 4720	51	49	149	50	50	26
School 5070	53	47	77	64	36	22
School 5550	46	54	94	53	47	30
School 6010	53	47	287	49	51	43
Project subtotal	50	50	5887	55	45	432
Chicago Board of Education, Chicago						
School 1240	48	52	756	43	57	7
School 1340	52	48	720	100	0	1
School 2300	47	53	177	29	71	14
School 4440	48	52	110	31	69	13
School 4550 (control)	52	48	124	--	--	--
School 5090	51	49	192	38	62	16
School 5750	56	44	169	55	45	11
School 5880	53	47	427	47	53	18
School 6180	60	40	138	67	33	15
Project subtotal	51	49	2813	45	55	95
Kalamazoo, Michigan						
School 318	52	48	[illegible]	45	55	100
School 327	46	54	[illegible]	--	--	--
Project subtotal	49	51	[illegible]	45	55	100

Note: A dash signifies not applicable.

continued

Table 6 (continued)

Gender Self-Identification of Students in Participating Schools and of Students Receiving Direct Services, Spring 1982

City and School	Total School			Directly Served		
	% Female	% Male	Weighted N	% Female	% Male	N
South Bronx, New York						
School 22	51	49	333	--	--	--
School 53 (mini unit)	--	--	--	32	68	34
School 55	56	44	66	38	62	13
School 63	48	52	143	43	57	14
School 64	52	48	131	15	85	13
School 82	48	52	260	33	67	15
School 117	52	48	291	18	82	11
School 132	55	45	87	47	53	17
School 145	56	44	413	--	--	--
School 147	52	48	233	50	50	8
School 148	54	46	326	22	78	18
School 166	50	50	667	--	--	--
School 229	53	47	212	--	--	--
Project subtotal	52	48	3196	33	67	143
East Harlem, New York						
Project subtotal	53	47	137	59	41	92
Puerto Rico						
School 1	51	49	384	59	41	189
School 2	46	54	237	56	44	152
School 3	57	43	526	57	43	293
Project subtotal	52	48	1269	57	43	635
Charleston, South Carolina (PATHE)						
School 242 (control)	47	53	468	--	--	--
School 741	54	46	423	47	53	75
School 742	53	47	427	31	69	52
School 743	44	56	402	48	52	66
School 751 (control)	65	35	323	--	--	--
School 754	50	50	444	52	48	60
School 755	53	47	734	47	53	64
School 944	49	51	363	38	62	53
School 951	47	53	650	38	62	55
Project subtotal	51	49	4235	44	56	425

Note: A dash signifies not applicable.

continued

Table 6 (continued)

Gender Self-Identification of Students in Participating Schools and of Students Receiving Direct Services, Spring 1982

City and School	Total School % Female	Total School % Male	Total School Weighted N	Directly Served % Female	Directly Served % Male	Directly Served N
Houston (GIS)						
Project subtotal	--	--	--	52	48	61
Virgin Islands						
Project subtotal	51	49	1266	28	72	29
Heyward (LCO)						
Project subtotal	--	--	--	46	54	78
Miami						
Project subtotal	--	--	--	46	54	69
Plymouth, Michigan						
Growth Works	--	--	--	23	77	31
School 31	59	41	669	18	82	17
School 41	48	52	919	56	44	18
School 42	53	47	115	48	52	64
School 43	49	51	110	38	62	47
Project subtotal	52	48	1837	39	61	177
New Jersey						
School 1	44	56	192	25	75	24
School 2	52	48	1001	30	70	23
School 3	50	50	316	47	53	34
School 4	55	45	379	30	70	23
Project subtotal	51	49	1888	35	65	104
St. Paul						
School 210	46	54	1209	48	52	277
School 230	47	53	1311	0	100	2
School 342	46	54	488	58	42	117
School 352	48	52	357	56	44	55
Project subtotal	47	53	3463	51	49	451
Total	50	50	29851			

Note: A dash signifies not applicable.

the schools involved differs markedly by city and sometimes within city.

The ethnic breakdown of persons receiving direct services through the Alternative Education Program is presented in Table 5. This table includes all projects providing direct services, regardless of the location of those services. (The project operating in Compton, for example, is included in Table 5 but not Table 4 because it primarily devotes its efforts to a group of high risk youths directly served by its alternative school.) For the most part the ethnicity of youths who receive direct services resembles the ethnic composition of the schools served by the projects.

The gender composition of the school populations and of groups receiving direct services are described in Table 6. As expected, about half of the school populations are male and half female. There are sometimes slightly more males than females among direct service recipients. Males are, of course, more likely to have disciplinary difficulties in school and to engage in delinquent behavior than are females, so this slight predominance of males is to be expected.

How Much Delinquent Behavior Occurs?

To provide some perspective on the youth population involved in the Alternative Education Initiative, it is useful to characterize it in terms of the amount of delinquent behavior these youths engage in. There is no foolproof way to estimate the amount of delinquent behavior any group engages in (see Chapter 3), but one method is to use information derived from voluntary self-report. Accordingly, Table 7 shows the proportion of youths admitting to have committed each of several kinds of delinquent behavior in the past year. These tabulations, which have been statistically adjusted to reflect the populations of the schools involved, imply that these youths (especially the males) have committed a large number of crimes. Note that the table shows only the percentage who admit to each crime at least once. Undoubtedly the total number of crimes committed is much larger.

According to Table 7, the populations of the public and alternative schools involved in the Alternative Education Program engage in a substantial amount of delinquent behavior. Of the males, 13% damaged or destroyed school property at least once, 17% damaged or destroyed other property, 19% carried a concealed weapon, 13% were involved in gang fights, and 10% hit or threatened to hit a teacher. The absolute numbers of males in these schools who engaged in these behaviors are: 2210 vandalized school property, 2852 vandalized other property, 3291 carried a concealed weapon, 3134 stole or tried to steal something worth more than $50, 1035 used strong-arm methods to rob someone. Females engage in each of the foregoing behaviors much less often than males--half as often or less.

The percentages of males and females smoking, drinking and using drugs are more nearly equal. Forty-six percent of the males and 44% of the females report drinking, 23% of males and 20% of females report using marijuana.

Only 24% of the males and 36% of the females report engaging in none of the behaviors listed. A relatively small percentage of youths report engaging in a great variety of delinquent behavior: 7% of the males and 2% of the females reported

Table 7

Percentages of Males and Females Reporting They Committed Each of a Variety of Delinquent Behaviors in Past Year and Estimated Number of Youths Committing, 1982

Behavior	Males		Females	
	%	N	%	N
Damaged or destroyed school property	12.9	2210	6.2	1132
Damaged or destroyed other property	16.7	2852	6.1	1112
Stolen or tried to steal something worth less than $50	7.7	1317	1.8	322
Carried a concealed weapon	19.3	3291	5.8	1050
Been involved in gang fight	13.0	2205	5.2	936
Sold marijuana or other drugs	7.9	1336	4.0	714
Hit or threatened to hit a teacher	10.5	1785	4.7	851
Hit or threatened to hit a student	50.4	8511	31.5	5618
Taken a car without owner's permission	8.4	1429	3.1	553
Used force or strong arm methods to rob	6.1	1035	1.9	338
Stolen or tried to steal something worth more than $50	18.6	3134	10.4	1858
Stolen or tried to steal something from locker or elsewhere at school	13.0	2189	5.0	895
Broken or tried to break into a building or car	7.5	1253	1.7	309
Smoked cigarettes	24.3	4062	33.1	5884
Consumed alcohol	45.7	7566	43.6	7634
Smoked marijuana	23.4	3898	20.2	3586
Taken other drugs	7.7	1285	7.5	1323
Gone to school drunk or high	12.0	2006	8.7	1540
Used inhalants	6.1	1015	5.3	935
None of the above	24.0	3957	35.8	6316
One of the above or fewer	39.9	6593	54.2	9571
Two of the above or fewer	43.2	7128	56.8	10037
Half or more of the above	6.8	1123	2.2	389

Note. Based on weighted tabulations from the Spring, 1982, School Action Effectiveness Study survey. The total weighted N is 19167 males and 19274 females. Percentages exclude non-respondents. N's shown in the table are the estimated number of persons performing each type of behavior in past year but do not include survey or item non-respondents.

engaging in half or more of the behaviors listed in the past year.

Some Consequences of Victimization

Most work on crime neglects the victim, focusing exclusive attention on the offender. Yet it is the victim of crime who most directly experiences the impact of the offense, and the recent report of the President's Task Force on Victims of Crime (1982) begins the task of focusing greater attention on the victim.

Reducing victimization is an important goal of the Alternative Education Program, and results presented in Chapter 5 discuss the achievement in this area through the Program's second year. Data collected as part of the evaluation illustrate how crime may affect the victim. Students who report more extensive victimization in surveys conducted as part of the School Action Effectiveness Study are significantly more alienated (feel they are less connected to the social order), like school significantly less, and have significantly lower self-esteem. When the psychological health of students is studied over time we find evidence of negative effects of victimization on alienation and the amount of effort expended at school work for female students. (A technical account of our preliminary correlational research in this area may be found in Gottfredson (1983a).

Much remains to be done in the area of documenting and measuring the effects of victimization on the victim. We interpret these preliminary results as suggesting negative effects that interfere with the academic work of the victim as well as having serious direct harmful psychological effects, especially for female students.

In short, delinquent behavior and victimization are without question serious problems in the public and alternative schools involved in the Alternative Education Program.

Who Engages in Delinquent Behavior?

Naturally, not all youths engage in delinquent behavior to the same degree. Table 8 shows correlations between the number of different kinds of delinquent behavior admitted and various personal characteristics. The results shown in Table 8 generally accord with the results of previous research, and imply that the youths who engage in more delinquent behavior are characterized by:

- o Weak attachment to parents.
- o Association with delinquent peers.
- o Alienation, or a feeling of not being connected to the social order.
- o Weak attachment or dislike for school.
- o Lack of belief in the validity of rules.
- o Low self-esteem or a delinquent self-concept.
- o Premature and rebellious expressions of autonomy.
- o Little effort expended at schoolwork.
- o Truancy.

Youths engaging in much delinquent behavior are not much different in terms of parental education (a measure of socioeconomic status) than those engaging in little delinquent behavior. The more delinquent youths are punished more in school and also are victimized somewhat more than other students in school.

Table 8

Correlations between Selected Personal Characteristics and Variety of Delinquent Behavior Reported

Characteristic	Males r	Males N	Females r	Females N
Parental Education	.06	328	.12*	448
Attachment to Parents	-.26*	398	-.34*	550
Negative Peer Influence	.52*	446	.42	614
Alienation	.19*	399	.25*	564
Attachment to School	-.36*	427	-.43*	600
Belief in Rules	-.35*	386	-.26*	549
Positive Self-Concept	-.22*	361	-.28*	520
Rebellious Autonomy	.22*	307	.32*	460
School Effort	-.31*	387	-.32*	529
School Nonattendance	.30*	459	.27*	618
School Punishments	.23*	437	.33*	605
Victimization	.16*	432	.23*	605

Note. These correlations are calculated using a random half of the students who completed SAES surveys in the Spring of 1981 that included the self-report delinquency measure. Correlations are computed on this subsample to save the cost of processing a much larger file; the pattern of results would be substantially the same were calculation performed on the entire sample.

*$p < .01$.

The foregoing results are not new to researchers in the delinquency area. They once again suggest the appropriateness of testing interventions to prevent delinquency using alternative education approaches. Interventions in school to alter structural relations in the environment or to enhance the ability of youths to adapt to schooling are suggested by these data. Activities by educators to decrease the negative influence of delinquent peers, to create greater feelings of connectedness to the social order of the school, to increase attachment to or liking for school, to foster belief in the validity of rules, and to develop (or at least not ravage) the students' self concepts may very well reduce youth crime.

In the next chapter we begin to address two questions: "Are the projects participating in the Alternative Education Program providing evidence that they are preventing delinquency?" And, "Are these projects providing evidence that they are influencing the known concomitants of (and presumed risk factors for) delinquent behavior?"

The Environmental Effect of the Alternative Education Program and Population Results for Delinquent Behavior

The Program Announcement for the Program in Delinquency Prevention through Alternative Education (OJJDP, 1980) makes clear that the Office aimed to demonstrate delinquency prevention programs that created structural changes in the organization of schooling to bring about changes in the behavior and psychosocial development of students and teachers in those schools. In other words, the Program aims at delinquency prevention through changes in school climate and changes in the attitudes and behaviors of students and teachers in the schools. These outcomes involve the entire populations of the schools involved. Outcome measures are epidemiological indices of behavior and personal characteristics for schools and measures of school environments. The present chapter reports on progress in these areas.

Overview of the Results Sought by the Program

The results sought by the OJJDP are recounted in Chapter 1. Chapter 3 describes in detail some of the measures we have developed to measure these desired outcomes. The following paragraphs collate measures with results sought.

Measures of Program Goals

Reduce delinquent behavior in and around schools. This goal is of central importance and is measured in several ways. (a) A Self-Reported Delinquent Behavior scale and two scales composed of subsets of items from this scale: Self-Reported Drug Involvement and Self-Reported Serious Delinquent Behavior. The first of these subscales contains only items related to substance use and the second is restricted to the illegal behaviors of greatest seriousness (excluding drug-related items). (b) A Student Victimization scale. (c) Student reports of Gangs in School. (d) Student reports of Safety. (e) Student reports of Community Crime. (f) Teacher reports of Safety. (g) Teacher reports of Victimization. (h) Teacher reports of Classroom Disruption. Additional measures of delinquent behavior were collected from official records for a number of projects, but they were not collected in parallel ways from project to project, and no results based on official records are reported in this chapter. Some results based on official records are included in Part II of this report.

Decrease suspension. This goal is measured in a parallel way for all projects through students' reports of suspension from school. The definition of "suspension" differs greatly from project to project (and school system to school system). School systems often adopt definitional changes to alter the appearance of high suspension rates. Accordingly, although information was collected from school records on suspension, that information may not be regarded as parallel across projects. Those non-uniform data will be used elsewhere, but are not reported here.

Increase attendance. This goal is measured in a parallel way for all projects through students' reports of School Nonattendance. The definition of "attendance" and the methods used to maintain these

data differ greatly from school system to school system. Accordingly, information collected from school records is put to use elsewhere in examining project components within school systems but it is not reported here.

Increase academic success. This goal is measured in a parallel way for all projects through students' reports of their school grades. School systems differ in their grading practices and reporting formats, and they differ in the standardized achievement tests administered and their test administration practices. Accordingly analyses of individual project grade and test score information derived from school records are presented elsewhere.

Improve transition to work and post-secondary education. Our uniform measure of this goal is students' educational expectations. Extensive research shows this to be a useful predictor of subsequent career and educational attainment. Educational expectations are therefore an excellent proxy for actual follow-ups of career and educational behavior. Those data, which would be costly to collect and which would require waits of several years are not available now.

Measures of Program Objectives

Fair and consistent school discipline. Two scales measure this objective: (a) Rule Clarity, and (b) Fairness of Rules.

Youth, parent and community participation in school decision making and reduced student alienation. This objective is multi-faceted, and is measured by the following: (a) student reports of Student Influence, (b) teacher reports of Parent and Community Influence, (c) teacher reports of Student Influence, (d) a student Alienation Scale.

Preclude labeling effects. Labeling theory hypothesizes that when people are treated as delinquent, stupid, or bad that they come to see themselves as delinquent, stupid or bad. That is they develop negative self-concepts which contribute to future delinquent, stupid, or bad behavior (called "secondary deviance"). Consequently this objective is measured by the Positive Self-Concept Scale (students) and the Low Expectations Scale (teachers).

Provide a learning structure realistically tailored to promote educational and social development. This multi-faceted objective includes objectives related to psychosocial development, educational development, and educational structural arrangements. Educational development is redundant with one of the Program's goals. The following list are the measures of the psychosocial and structural objectives: (a) student Rebellious Autonomy, (b) student Practical Knowledge, (c) student Interpersonal Competency, (d) Parental Emphasis on Education, (e) student reports of School Punishment, (f) student reports of School Rewards, (g) teacher reports of Individualized Instruction, (h) teacher reports of the Use of Grades as a Sanction, (i) student reports of Individualized Instruction, (j) teacher reports of the use of Type A Sanctions, (k) teacher reports of the use of Type B Sanctions, (l) teacher Non-Authoritarian Attitudes, and (m) teacher reports of Interaction with Students.

Theoretically Important Outcomes

In addition to the objectives explicitly mentioned in the OJJDP Program Announcement, theory and research in delinquency prevention and organizational change and the theories of action underlying one or more of the 17 prevention projects suggest several other important outcomes. It is important that an evaluation of a delinquency prevention program attend to these important intermediary outcomes because they should help explain the success or failure of a project. These additional outcomes fall into two groups: outcomes related to organizational health that may be related to the ability of the organization to implement strong interventions, and outcomes known or believed to be important risk factors for delinquent behavior.

Organizational health. We report on the following five measures of organizational health: (a) Student reports of school Planning and Action, (b) teacher reports of school Planning and Action, (c) teacher reports of Smooth School Administration, (d) Teaching Staff Commitment, (e) Teaching Staff Morale, (f) teacher Job Satisfaction, and (g) teacher Professional Development.

Delinquency risk factors. The following five additional measures of risk factors for delinquent behavior are important: (a) Attachment to Parents, (b) Attachment to School, (c) Belief in Rules, (d) Negative Peer Influence, (e) Disrespect for Students.

Methods

Results presented in this chapter are based on surveys of students and teachers conducted in the Spring of 1981 and 1982. We requested all participating schools to survey all full-time teachers who teach at least one student in grades six through twelve in both years, and we requested all participating schools to cooperate with the assessment of a probability sample of students selected to make possible estimates for the school's population of schools. This request was met in most cases.[1]

In assessing changes in measures of Program goals, objectives, and additional outcomes over time, three different methods were used. These methods are described in the following paragraphs.

Simple Box Scores

First, simple "box scores" are used to obtain an overall picture of the pattern of progress towards goals and objectives for the Program as a whole. In tallying these scores, we compared the school compositional and psychosocial climate

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1. The New Jersey and Jazzmobile projects did not survey teachers in 1981 and there were irregularities in the administration of the student surveys in those projects. The Miami project was not yet running its alternative school in 1981. The Milwaukee project was not operating in schools at the time of either survey. The Plymouth project did not use a probability student sampling procedure in 1982. Short forms of the student questionnaire were made available to the Compton and Virgin Islands projects in 1981 where difficulties with reading levels were anticipated. Items were censored from the 1981 questionnaire by the St. Paul, Plymouth, Chicago Board of Education (and therefore PCD), Pasadena, Harlem, New Jersey, and Charleston projects (listed in decreasing order of number of items censored). Items were censored from

measures for each school according to assessments made in the Spring of 1981 and again in the Spring of 1982. Any given school could improve on a measure, regress or get worse on the measure, or stay the same. In making these tallies we excluded schools which did not administer the relevant portions of the School Action Effectiveness Survey for either year, schools for which the sampling strategy changed in major ways from one year to the next, and schools in which the survey response rates for the two years differed by more than 25%. Several school systems or project directors censored items from the survey in 1981, and two projects censored items from the survey in 1982. For a variety of reasons, we were unable to prevent the sampling strategy from differing in some schools in New Jersey, the Bronx, Plymouth, and PCD from one year to the next (see footnote 1). Finally, poor survey administration in one or another year made measures non-comparable for the two years in some schools in CBE and the Bronx, as well as in the LCO and Houston projects.

The sign test (Siegel, 1956) was used to estimate the probability that the number of positive or negative changes observed would arise by chance were there no true difference from year to year.

School-by-School Examination

The detailed results of the climate assessments for each school involved in the Program were also examined.

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the 1982 questionnaire by the Miami and St. Paul projects. No items are being censored from the 1983 questionnaire!

School composition. For measures of school compositional climate based on student reports, t-statistics for the difference between 1981 and 1982 means on measures of student characteristics were computed based on the observed means and standard deviations for each school for each year. For these school composition measures, differences may be regarded as dependable if the t-statistic exceeds 1.96.

School psychosocial climate. For comparisons of 1981 and 1982 psychosocial climate measures, a different kind of "t-statistic" was computed. This statistic uses information about the psychometric properties of the measures to compare each difference in scores to an index of the margin of error for that difference. Specifically, the "t-statistic" reported is the ratio of the difference between 1982 and 1981 scores to the standard error of measurement of the 1982 scores. (In calculating the standard error of measurement, the St. Paul schools' data were not included, because these data became available much later than all the rest of the data.) As a rule of thumb, differences that exceed twice the standard error of measurement may be regarded as dependable. That is, differences for which the "t-statistic shown in the tables is equal to or greater than 2.0 may be regarded as dependable.

Results

Program Box Scores

Goals. An overview of the number of schools that improved or regressed on each Program goal is provided by Table 1. The first column in the table shows the number of schools that improved on each measure, the second column shows the number of schools that regressed (got worse), and the third column

Table 1

Number of Alternative Education Program Schools that Improved and Regressed from 1981 to 1982 on Results Sought: Goals

Measure	Number of Alternative Education Sites		
	Improved	Regressed	No Data
Decrease Delinquent Behavior In and Around School			
Students' Total Delinquency	11	8	19
Students' Drug Use	11	8	19
Students' Serious Delinquency	11	5	22
Students' Victimization	17	16	5
Students' Gangs in School	14	10	14
Students' Safety	18*	4	16
Students' Reports of Community Crime	10	15	13
Teachers' Safety	21*	4	13
Teachers' Victimization	22*	5	11
Classroom Disruption[a]	14	13	10
Decrease Suspensions			
Students' Suspensions	15	16	7
Increase Attendance			
Students' School Attendance	20	13	5
Increase Academic Success			
Students' Grades	14	19	5
Improve Transition to Work and Post-secondary Education			
Students' Educational Expectations	21	12	5

Note. Twenty-seven Alternative Education program schools are excluded from this table because of significant differences in the sampling from 1981 to 1982.

* $p<.01$

[a]One school had no change.

Table 2

Number of Alternative Education Program Schools that Improved and Regressed from 1981 to 1982 on Results Sought: Objectives

Measure	Number of Alternative Education Sites		
	Improved	Regressed	No Data
Making School Discipline Fair and Consistent While Providing for Due Process			
Students' Reports of Clarity of Rules	16	17	5
Students' Reports of Fairness of Rules	12	21	5
Increasing Youth, Parent and Community Agency Participation in School Decision Making to Reduce Student Alienation			
Students' Reports of Student Influence	9	18	11
Teachers' Reports of Parent and Community Influence	17	11	10
Teachers' Reports of Student Influence	15	13	10
Students' Alienation	23*	10	5
Preclude Labeling Effects			
Students' Positive Self-Concept	28**	5	5
Teachers' Low Expectations	17	11	10
Provide a Learning Structure Tailored to Realistic Levels to Promote Educational and Social Development			
Students' Rebellious Autonomy	23**	4	11
Students' Practical Knowledge	11	22	5
Students' Interpersonal Competency	16	11	11
Students' Reports of Parental Emphasis on Education	2	12**	24
Students' Self-reported School Punishments	17	16	5
Students' Self-reported School Rewards	19	14	5
Teachers' Reports of Individualized Instruction	10	18	10
Teachers' Reported Use of Grades as Sanction[a]	12	15	10
Students' Reports of Individualized Instruction	10	23*	5

Note. Twenty-seven Alternative Education program schools are excluded from this table because of significant differences in the sampling from 1981 to 1982.

[a]One school had no change. * $p<.05$ ** $p<.01$

shows the number ...ols excluded from the tally d... ...unavailablity of inform... ...r one year or the other. Th... ...le/shows that for nine of the ten measures of delinquency in and around schools the measures show less delinquency in 1982 than in 1981. The differences for measures of school Safety and Teacher Victimization reach statistical significance. The number of schools increasing in safety is statistically significant according to both the student and teacher measures.

Evidence in Table 1 about the other goals sought is not clearcut, although the number of schools with higher Attendance and students with high Educational Expectations is nonsignificantly greater than the number of schools which declined on these measures.

Objectives. Box scores for Program objectives that parallel the results for goals are shown in Table 2. The evidence from this table suggests that the objective of increased fairness and consistency of the school rules is not generally being met. Although not significant, the pattern of results is that more schools decreased on Fairness of Rules than increased. The number of schools that increased on the two measures of Student Influence and the measure of Community Influence is not significantly different from the number that regressed. Student Alienation, however, decreased in significantly more schools than it increased.

Nearly six times as many schools improved as regressed on the measure of students' Positive Self-Concept. This pattern is signifi ant. Teachers' expectations for students increased in more schools than it decreased, but this pattern is not statistically significant.

Changes in student psychosocial development as measured by Rebellious Autonomy and Interpersonal Competency are favorable: Higher for Interpresonal Competency and lower for Rebellious Autonomy in more schools in 1982 than in 1981. The number of improved schools is significant for Rebellious Autonomy. By and large, the schools in the Program regressed on measures of the presence of learning structures presumed to promote social development. In particular, students' reports of Individualized Instruction was lower in more schools in 1982 than it was in 1981 for more schools than would be expected by chance.

Additional outcomes. Teacher Commitment and Morale increased in more schools than it decreased, as shown in Table 3. For Morale this pattern is significant. No distinct pattern of change was observed for any other measure of organizational health.

Table 3 also shows that more schools improved than regressed on each of the five theoretical risk factors for delinquent behavior, although none of the patterns observed for these changes were statistically significant.

School-by-School Summary

The foregoing overall tallies ignore changes from one year to the next for specific projects and schools. In the paragraphs that follow, a detailed summary of these y... -to-year changes is provided. In this section, only changes that are nominally statistically significant ... described. A complete accounting of every school's results for all measures is provided in Appendix D. In preparing the tables presented in this section, a great many significance tests were performed. When many such tests are

Table 3

Number of Alternative Education Program Schools that Improved and Regressed from 1981 to 1982 on Results Sought: Learning Structures and Additional Outcomes

Measure	Number of Alternative Education Sites		
	Improved	Regressed	No Data
1981 to 1982 Change on Measures of Learning Structures			
Teachers' use of Type A Sanctions	16	13	9
Teachers' use of Type B Sanctions	13	15	10
Teachers' Non-Authoritarian Attitudes	16	12	10
Teachers' Interaction with Students	13	16	9
1981 to 1982 Change on Measures of Organizational Health			
Students' Reports of Planning and Action	12	15	11
Teachers' Reports of Planning and Action	13	15	10
Teachers' Reports of Smooth School Administration	15	13	10
Teachers' Commitment	17	11	10
Teachers' Morale	22*	6	10
Teachers' Job Satisfaction	16	13	9
Teachers' Professional Development	12	17	9
1981 to 1982 School Changes on Additional Theoretical Predictors of Delinquency			
Students' Attachment to Parents	14	13	11
Students' Attachment to School	17	16	5
Students' Belief in Rules	21	12	5
Students' Negative Peer Influence	16	13	9
Students' Reports of Disrespect for Students	16	12	10

Note. Twenty-seven Alternative Education program schools are excluded from this table because of significant differences in the sampling from 1981 to 1982.

* $p<.01$

performed, some of them are almost surely "significant" by chance alone. For this reason, significance tests should be regarded as nominal, and interpreted with caution.[2]

In summarizing the school-by-school results, we will not belabor the reader with a line-by-line account of the tables. The motivated reader can sift through the details without our guidance. Instead, we shall highlight selected results that appear to us to suggest meaningful patterns.

Delinquent behavior. At least one school in Charleston, Virgin Islands, and Compton projects showed a significant decrease on one or more measures of self-reported delinquency. These results are presented in Table 4. Specifically, St. Johns High School in Charleston and Elena Christian Junior High School in the Virgin Islands had significantly lower mean scores on the Self-Reported Delinquency Scale (and on the Drug Involvement subscale) in 1982 than in 1981. Brown High School in Charleston and the Alternative School in Compton had significantly lower scores on the Serious Delinquent Behavior subscale. Plymouth Central Middle School and the control school for the Kalamazoo project (South Junior High School) both increased significantly in Self-Reported Delinquency (and the Drug Involvement subscale). Finally, one of the Bronx Elementary Schools (No. 63) increased significantly in Self-Reported Drug Involvement.

Other measures of delinquency in and around schools. On other measures of delinquency in and around schools, Charleston, Puerto Rico, Pasadena, and Plymouth stand out as projects with most significant changes from 1981 to 1982 with some Charleston, Pasadena, and Puerto Rico schools showing decreases in the other measures of delinquent behavior in and around schools, or increases in school safety, and a Plymouth school showing the opposite pattern (see Table 4). Table 4 also shows that of the schools showing significant changes in the various measures of delinquency, there were more than twice as many instances of significant improvement as decline (27 instances of improvement, and 12 of decline).

Suspensions. Results for suspensions are shown in Table 5. The table shows that in seven schools the number of suspensions reported by students decreased significantly and in two schools the number of suspensions increased significantly. Suspensions decreased in at least one school in the Charleston, Puerto Rico, Chicago Board of Education, and Plymouth projects; suspensions increased significantly in one Compton and St. Paul school.

Academic and career outcomes. Table 6 shows significant decreases in self-reported grades in seven schools. Table 7 shows that only two schools changed significantly in the level of educational expectations--both increased.

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2. In all, 1,377 tests were performed. If each of these tests were independent, 69 "significant" differences at the .05 level would be expected by chance alone, and 14 would be expected by chance alone at the .01 level. Differences attributable to chance should be roughly equally divided between positive and negative outcomes. We observed 179 differences that reached "significance" at the .05 level, 102 positive and 77 negative.

Table 4

1981 to 1982 School Change on Alternative Education Goal:
Decrease Delinquent Behavior In and Around School

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Students' Self-reported Delinquency--Total				
Kalamazoo South JHS (327)(control)	.14	.20	3.11	423
Charleston St. John's HS (951)	.12	.10	-2.05	549
Virgin Islands Elena Christian JHS	.09	.06	-2.92	440
Plymouth Central MS (41)	.14	.22	2.66	212
Measure: Students' Self-reported Drug Use				
Kalamazoo South JHS (327)(control)	.17	.27	3.96	428
Bronx 63	.05	.16	3.78	193
Charleston St. John's HS (951)	.24	.19	-2.27	557
Virgin Islands Elena Christian JHS	.11	.07	-2.81	445
Plymouth Central MS (41)	.17	.32	3.48	216
Measure: Students' Self-reported Serious Delinquency				
Compton Action Center CACYD	.26	.15	-2.32	78
Charleston Brown HS (754)	.10	.07	-2.01	573

Table 4 (continued)

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Students' Self-reported Victimization				
Constitutional Rights Foundation				
Elliot JHS(70)	.20	.16	-1.99	573
Kalamazoo				
South JHS (327)(control)	.13	.21	3.79	420
Chicago Board of Education				
Bowen HS (1240)	.09	.05	-2.68	284
LeMoyne El (4440)	.28	.17	-3.65	185
Bontemps El (5750)	.15	.11	-2.27	307
Puerto Rico				
Santiago Gonzales (1)	.14	.07	-5.31	745
Charleston				
Burke HS (755)	.15	.9	-4.01	666
Plymouth				
Central MS (41)	.12	.19	2.22	217
St. Paul				
Johnson(230)	.04	.07	2.32	418
Washington(352)	.10	.15	2.80	311
Measure: Students' Self-reported Gangs in School				
Charleston				
Brown HS (754)	.49	.74	2.07	--
Measure: Students' Self-reported Community Crime				
Virgin Islands				
Elena Christian JHS	.40	.22	-2.06	--

Table 4 (continued)

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Teachers' Victimization				
Puerto Rico Santiago Gonzales JHS	.14	.08	-1.97	34
Constitutional Rights Fndn. Muir HS '82)	.16	.10	-2.28	153
Chicago Board of Education Bowen HS (1240)	.23	.16	-1.96	84
Measure: Classroom Disruption				
Constitutional Rights Fndn. Elliot JHS (70)	2.66	2.38	-2.14	79
Peer Culture Development Lake View HS (1430)	2.10	1.82	-2.26	65
Puerto Rico Dr. Aguayo HS	2.31	1.65	-3.25	57

Table 4 (continued)

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Students' Self-reported Safety				
Bronx 53	.57	.72	5.65	--
Jazzmobile 88	.73	.79	2.45	--
Charleston Burke HS (755)	.75	.82	2.21	--
Measure: Teachers' Safety				
Constitutional Rights Foundation Elliot JHS (70)	3.19	3.60	2.77	--
Kalamazoo Milwood JHS (318)	3.46	3.75	2.01	--
Puerto Rico Santiago Gonzales JHS (1)	3.52	3.17	-2.35	--
Dr. Aguayo HS (3)	2.81	3.97	7.81	--
Charleston Courtenay MS (741)	3.90	4.24	2.28	--
A.B. Rhett MS (742)	3.35	3.67	2.17	--
Plymouth Central MS (41)	3.78	3.38	-2.72	--

Note. Only those schools where the change from 1981 to 1982 is regarded as dependable are included on this table. Reports of change on teacher survey measures are excluded from this table when the number of teacher surveys on which the 1982 mean is based, is fewer than 11. t-statistics for compositional measures are based on the means and standard deviations for each school. For psychosocial climate measures, the "t-statistic" is the ratio of the difference between 1982 and 1981 scores to the standard error of measurement of the 1982 scores. As a rule of thumb, psychosocial climate measure differences that are twice the standard error of measurement may be regarded as dependable. Dashes in the column for degrees of freedom indicate that the measure is a psychosocial climate measure.

Table 5

1981 to 1982 School Change on Alternative Education Goal:
Decrease Suspensions

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Students' Self-reported Suspensions				
Compton Action Center				
CACYD	.15	.34	-2.02	92
Chicago Board of Education				
LeMoyne El (4440)	.32	.18	-2.27	185
Puerto Rico				
Santiago Gonzales JHS (1)	.22	.13	-3.23	743
Charleston				
A.B. Rhett MS (742)	.21	.13	-2.62	541
Brown HS (754)	.49	.28	-5.06	575
Burke HS (755)	.26	.17	-3.08	655
Plymouth				
Growth Works (1)	.74	.20	-4.45	50
East MS (31)	.22	.11	-2.13	231
St. Paul				
Washington MS (352)	.13	.22	2.08	301

Note. Only those schools where the change from 1981 to 1982 is regarded as dependable are included on this table. Reports of change on teacher survey measures are excluded from this table when the number of teacher surveys on which the 1982 mean is based, is fewer than 11. t-statistics for compositional measures are based on the means and standard deviations for each school. For psychosocial climate measures, the "t-statistic" is the ratio of the difference between 1982 and 1981 scores to the standard error of measurement of the 1982 scores. As a rule of thumb, psychosocial climate measure differences that are twice the standard error of measurement may be regarded as dependable. Dashes in the column for degrees of freedom indicate that the measure is a psychosocial climate measure.

Table 6

1981 to 1982 School Change on Alternative Education Goal: Increase Academic Success

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Student Self-reported Grades				
Constitutional Rights Foundation				
Muir HS (82)	[illegible]	[illegible]	-2.89	529
Puerto Rico				
Ruis Belvis El (2)	2.40	2.18	-2.31	38
Charleston				
Rivers MS (743)	2.89	2.65	-3.61	583
Brown HS (754)	2.45	2.32	-2.76	619
Virgin Islands				
Elena Christian JHS	2.36	2.16	-2.52	496
St. Paul				
Johnson HS (230)	2.83	2.67	-2.02	422
Washington MS (352)	2.68	2.46	-2.02	322

Note: Only those schools where the change from 1981 to 1982 is regarded as dependable are included on this table. Reports of change on teacher survey measures are excluded from this table when the number of teacher surveys on which the 1982 mean is based, is fewer than 11. t-statistics for compositional measures are based on the means and standard deviations for each school. For psychosocial climate measures, the "t-statistic" is the ratio of the difference between 1982 and 1981 scores to the standard error of measurement of the 1982 scores. As a rule of thumb, psychosocial climate measure differences that are twice the standard error of measurement may be regarded as dependable. Dashes in the column for degrees of freedom indicate that the measure is a psychosocial climate measure.

Table 7

1981 to 1982 School Change on Alternative Education Goal:
Improve Transition to Work and Post-secondary Education

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of Freedom
Measure: Students' Educational Expectations				
Chicago Board of Education Bontemps El (5750)	3.44	4.06	3.5[illegible]	331
Bronx 63	3.01	3.53	2.01	220

Note. Only those schools where the change from 1981 to 1982 is regarded as dependable are included on this table. Reports of change on teacher survey measures are excluded from this table when the number of teacher surveys on which the 1982 mean is based, is fewer than 11. t-statistics for compositional measures are based on the means and standard deviations for each school. For psychosocial climate measures, the "t-statistic" is the ratio of the difference between 1982 and 1981 scores to the standard error of measurement of the 1982 scores. As a rule of thumb, psychosocial climate measure differences that are twice the standard error of measurement may be regarded as dependable. Dashes in the column for degrees of freedom indicate that the measure is a psychosocial climate measure.

Truancy. Table 8 shows that [illegible] in three projects had significantly less self-reported School Nonattendance; one control school had significantly more School Nonattendance.

School discipline. Results for measures of the fairness and clarity of school rules are presented in Table 9. The results in this table mirror the results shown earlier for the Program box score on these measures. As many schools significantly increased in the Clarity of Rules as decreased (two each), and the only two schools that changed significantly on the measure of Fairness of Rules decreased.

Parent, community, and student participation. Table 10 shows that Plymouth Central Middle School significantly declined on both measures of Student Influence, while one school each in Charleston and PCD showed significant increases in Parent-Community Involvement, and Puerto Rico showed an increase in Student Influence according to teacher reports.

Alienation. Table 10 also shows that 10 schools significantly changed in the measure of student Alienation (down in five and up in five). In the five schools with significant increases in Alienation, two are control schools. Project schools in Plymouth (2) and St. Paul (1) also showed significant increases in Alienation. Two schools in Charleston and one school each in Pasadena, PCD, and Harlem[3] had lower Alienation scores in 1982 than in 1981.

Self-concept. Significant increases for five schools in the measure of Positive Self-Concept are shown in Table 11. These five included two project and one control school in Charleston, Milwood Junior High School in Kalamazoo, and the Harlem project school (see footnote 3).

Teacher expectations. Only one school changed significantly on the measure of teacher expectations. Expectations of students were more positive in a middle school in Plymouth in 1982 than they were in 1981. (This outcome is counter to most results for this school.)

Other measures of psychosocial development. Six schools changed significantly on measures of rebellious autonomy. Table 12 shows that of these six, five program schools had lower scores in 1982 and one control school had higher scores in 1981. The same table shows that only two program schools showed increases on the measure of students' Practical Knowledge (one each in Harlem and Plymouth). Five program schools and one control school had significantly lower scores on this measure. These five include one control school in Kalamazoo, an elementary school in CBE, and three program schools in St. Paul. Two program schools increased in Interpersonal Competency scores, one in CBE and one in Charleston. Considering these psychosocial development indices overall, more than twice as many program schools improved as declined.

Educational structures. There are 27 significant differences on measures of educational structures shown in Table 12. Of these 27, 9 were in a favorable direction, and 1[illegible] were in the direction opposite that sought. No clear or systematic pattern across schools or projects

3. Although the Harlem school's response rate in 1982 was within 25% of its 1981 response rate, it was very low both years.

Table 9

1981 to 1982 School Change on Alternative Education Goal:
Increase Attendance

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Students' Self-reported School Non-attendance				
Peer Culture Development				
Harrison HS (1370)	.62	.53	-2.02	628
Kalamazoo				
South JHS (327)(control)	.19	.28	2.04	450
Jazzmobile				
88	.31	.18	-2.73	381
Plymouth				
Growth Works (1)	.89	.65	-2.12	57

Note: Only those schools where the change from 1981 to 1982 is regarded as dependable are included on this table. Reports of change on teacher survey measures are excluded from this table when the number of teacher surveys on which the 1982 mean is based, is fewer than 11. t-statistics for compositional measures are based on the means and standard deviations for each school. For psychosocial climate measures, the "t-statistic" is the ratio of the difference between 1982 and 1981 scores to the standard error of measurement of the 1982 scores. As a rule of thumb, psychosocial climate measure differences that are twice the standard error of measurement may be regarded as dependable. Dashes in the column for degrees of freedom indicate that the measure is a psychosocial climate measure.

Table 9

1981 to 1982 School Change on Alternative Education Objective:
Making School Discipline Fair and
Consistent While Providing for Due Process

District and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Students' Reports of Clarity of Rules				
Chicago Board of Education				
Bontemps El (5750)	.77	.67	-2.12	--
Inner Culture Development				
Harrison HS (1370)	.62	.73	2.24	--
Plymouth				
Growth Works (1)	.62	.73	2.20	--
Central MS (41)	.72	.60	-2.51	--
Measure: Students' Reports of Fairness of Rules				
Kalamazoo				
South JHS (327)(control)	.67	.54	-2.35	--
Plymouth				
Central MS (41)	.56	.39	-3.34	--

Note Only those schools where the change from 1981 to 1982 is regarded as dependable are included on this table. Reports of change on teacher survey measures are excluded from this table when the number of teacher surveys on which the 1982 mean is based, is fewer than 11. t-statistics for compositional measures are based on the means and standard deviations for each school. For psychosocial climate measures, the "t-statistic" is the ratio of the difference between 1982 and 1981 scores to the standard error of measurement of the 1982 scores. As a rule of thumb, psychosocial climate measure differences that are twice the standard error of measurement may be regarded as dependable. Dashes in the column for degrees of freedom indicate that the measure is a psychosocial climate measure.

Table 10

1981 to 1982 School Change on Alternative Education Objective: Increasing Youth, Parent, and Community Agency Participation in School Decision Making to Reduce Student Alienation

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Students' Reported Student Influence				
Plymouth Central MS (41)	.46	.35	-2.17	--
Measure: Teachers' Reports of Parent and Community Involvement				
Peer Culture Development Harrison HS (1370)	1.09	1.30	2.99	--
Charleston Courtenay MS (741)	1.31	1.45	2.16	--
Measure: Teachers' Reports of Student Influence in School				
Puerto Rico Dr. Aguayo HS (3)	1.52	1.71	2.17	--
Plymouth Central MS (41)	1.54	1.35	-2.13	--

(cont.)

Table 10 (continued)

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Students' Alienation				
Constitutional Rights Foundation				
Elliot JHS (70)	.42	.35	-2.99	522
Peer Culture Development				
Harrison HS (1370)	.39	.32	-3.04	542
Kalamazoo				
South JHS (327)(control)	.37	.43	2.25	384
Jazzmobile				
88	.31	.20	-2.04	135
Charleston				
Laing MS (242)(control)	.38	.44	2.98	573
A.B. Rhett MS (742)	.33	.25	-2.97	511
Burke HS (755)	.27	.22	-2.51	608
Plymouth				
East MS (31)	.33	.42	2.04	224
Central MS (41)	.35	.44	2.03	220
St. Paul				
Murray MS (342)	.27	.36	3.04	383

Note. Only those schools where the change from 1981 to 1982 is regarded as dependable are included on this table. Reports of change on teacher survey measures are excluded from this table when the number of teacher surveys on which the 1982 mean is based, is fewer than 11. t-statistics for compositional measures are based on the means and standard deviations for each school. For psychosocial climate measures, the "t-statistic" is the ratio of the difference between 1982 and 1981 scores to the standard error of measurement of the 1982 scores. As a rule of thumb, psychosocial climate measure differences that are twice the standard error of measurement may be regarded as dependable. Dashes in the column for degrees of freedom indicate that the measure is a psychosocial climate measure.

Table 11

1981 to 1982 School Change on Alternative Education Objective: Preclude Labeling Effects

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Students' Positive Self-Concept				
Kalamazoo				
Milwood JHS (318)	.69	.74	2.69	576
Jazzmobile				
88	.71	.80	3.17	133
Charleston				
Charleston HS (751)(control)	.77	.80	2.08	421
Burke HS (755)	.79	.82	2.97	550
Haut Gap MS (944)	.73	.77	2.18	444
Measure: Teachers' Low Expectations				
Plymouth				
Central MS (41)	35.36	23.29	-2.10	51

Note. Only those schools where the change from 1981 to 1982 is regarded as dependable are included on this table. Reports of change on teacher survey measures are excluded from this table when the number of teacher surveys on which the 1982 mean is based, is fewer than 11. t-statistics for compositional measures are based on the means and standard deviations for each school. For psychosocial climate measures, the "t-statistic" is the ratio of the difference between 1982 and 1981 scores to the standard error of measurement of the 1982 scores. As a rule of thumb, psychosocial climate measure differences that are twice the standard error of measurement may be regarded as dependable. Dashes in the column for degrees of freedom indicate that the measure is a psychosocial climate measure.

Table 12

1981 to 1982 School Change on Alternative Education Objective:
Promote Educational and Social Development
by Providing Appropriate Learning Structures

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Students' Rebellious Autonomy				
Chicago Board of Education				
Bowen HS (1240)	.62	.53	-1.98	264
Luella El (4550)(control)	.55	.68	2.09	144
Kalamazoo				
Milwood JHS (318)	.73	.63	-3.14	493
Jazzmobile				
88	.74	.56	-2.78	116
Puerto Rico				
Santiago Gonzalés JHS (1)	.47	.39	-3.13	688
Plymouth				
East MS (31)	.79	.69	-2.28	215
Measure: Students' Practical Knowledge				
Chicago Board of Education				
Blaine El (2300)	1.37	1.26	-2.00	315
Kalamazoo				
South JHS (327)(control)	1.39	1.25	-2.92	375
Jazzmobile				
88	.97	1.35	4.33	126
Plymouth				
Central MS (41)	1.30	1.44	2.10	221
St. Paul				
Central HS (210)	1.57	1.36	-4.03	258
Murray MS (342)	1.40	1.15	-4.82	366
Washington MS (352)	1.19	1.03	-2.58	261

Table 12 (continued)

Project and School	Scale Score 1981	1982	t statistic	Degrees of freedom
Measure: Students' Interpersonal Competency				
Chicago Board of Education				
Bontemps El (5750)	.80	.86	2.50	277
Charleston				
A.B. Rhett MS (742)	.75	.80	2.68	503
Measure: Students-Reported Parental Emphasis on Education				
Peer Culture Development				
Lake View HS (1430)	.49	.43	-2.25	480
Chicago Board of Education				
LeMoyne El (4440)	.68	.60	-2.03	188
Kalamazoo				
Milwood JHS (318)	.68	.62	-2.56	623
South JHS (327)(control)	.68	.61	-2.45	425
Bronx				
22	.66	.56	-3.47	416
63	.75	.61	-3.57	169
Puerto Rico				
Ruis Belvis El (2)	.71	.64	-2.35	336
Dr. Aguayo HS (3)	.63	.58	-2.18	805
Measure: Students' Reports of School Punishments				
Bronx				
22	.27	.21	-2.30	437
63	.31	.22	-2.66	187
Charleston				
Laing MS (242)(control)	.16	.22	2.45	613
Brown HS (754)	.24	.19	-2.40	580
Plymouth				
Central MS (41)	.16	.27	2.69	221

Table 12 (continued)

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Students' Self-reported School Rewards				
Chicago Board of Education				
Blaine El (2300)	.23	.33	3.03	319
Bronx				
22	.33	.24	-3.16	438
63	.52	.32	-3.91	187
Puerto Rico				
Santiago Gonzales JHS (1)	.43	.28	-6.52	742
Ruis Belvis El (2)	.47	.35	-3.55	336
Virgin Islands				
Elena Christian JHS	.28	.33	2.00	473
Plymouth				
Central MS (41)	.26	.16	-2.68	223
St. Paul				
Murray MS (342)	.29	.19	-3.32	402
Washington MS (352)	.15	.22	2.37	309
Measure: Teachers' Reports of Individualized Instruction				
Charleston				
Charleston HS (751)(control)	1.82	1.09	-2.08	--
Bronx				
63	1.94	1.18	-2.80	--

Table 12 (Continued)

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Teachers' Use of Type B Sanctions				
Charleston				
Charleston HS (751)(control)	2.47	1.98	-2.37	27
Measure: Teachers' Non-Authoritarian Attitudes				
Virgin Islands				
Elena Christian JHS (0)	2.31	2.61	2.29	118

Note. Only those schools where the change from 1981 to 1982 is regarded as dependable are included on this table. Reports of change on teacher survey measures are excluded from this table when the number of teacher surveys on which the 1982 mean is based is fewer than 11. t-statistics for compositional measures are based on the means and standard deviations for each school. For psychosocial climate measures, the "t-statistic" is the ratio of the difference between 1982 and 1981 scores to the standard error of measurement of the 1982 scores. As a rule of thumb, psychosocial climate measure differences that are twice the standard error of measurement may be regarded as dependable. Dashes in the column for degrees of freedom indicate that the measure is a psychosocial climate measure.

appears in the results, although it is striking that no school increased on Parental Emphasis on Education or Individualized Instruction, and eight decreased on Parental Emphasis and two decreased in the measure of Individualized Instruction.

Organizational health. Outcomes for the measures presumed to be related to prospects for organizational development are shown in Table 13. In all, 25 significant changes occurred, of which 17 are in the positive direction. Of the eight negative changes, three were for control schools. The measures showing most positive changes were Teacher Commitment and Teacher Morale. Three Charleston schools, a high school in Puerto Rico, and East Middle School in Plymouth significantly improved on Commitment or Morale. Two schools in Puerto Rico, one in Charleston, and the program school in Kalamazoo showed significant increases in teachers' reports of Smooth Administration.

Other delinquency risk factors. A summary of significant differences between 1981 and 1982 for other theoretical risk factors for delinquet behavior is presented in Table 14. Four program schools showed decreases in Attachment to Parents, and a control school showed an increase. Attachment to School increased in two program schools and one control school and decreased in four program schools and two control schools. Four schools increased in student Belief in Rules and one school decreased (all are program schools). The program schools showing increases were in St. Paul, Charleston, Harlem (see footnote 3), and CBE.

Negative Peer Influence decreased in four program schools in Charleston (2), Harlem, and Pasadena; and it increased in one program and one control school in Charleston.

Discussion

Limitations

Co-occurring events. The major limitation of the results presented here is that they all describe changes in the population levels of delinquent behavior, other behavior, other psychosocial characteristics, and school environment between 1981 and 1982 without reference to the source of the change. Any major event that occurred in the environment, structure, staffing, leadership, or financial resources available to a school--or even economic conditions and school system policies--are potential explanations of such changes from year to year. The Alternative Education projects operating in these schools are generally one such major occurrance.

Sometimes it is difficult to have much confidence in an interpretation that a project operating in a school caused the changes observed. For example, a junior high school in Plymouth showed significant increases in Delinquent Behavior, student Alienation, School Punishments student Victimization; it showed significant decreases in teacher Safety, Fairness of Rules, Clarity of Rules, Student Influence as reported by teachers and students, School Rewards, Attachment to Parents, and student reports of school Planning and Action. But these outcomes are hard to interpret as effects of the alternative education project operating in the school. The project primarily provides direct services to a selected group of students, had no major project component directed at school organizational change, and therefore is not a plausible explanation of this substantial deterioration in school climate. A more plausible explanation of the results is the change in grade-level organization

Table 13

1981 to 1982 School Change on Measures of Organizational Health

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Students' Reports of School Planning and Action				
Peer Culture Development				
Harrison HS (1370)	.46	.56	2.05	--
Chicago Board of Education				
LeMoyne El (4440)	.39	.49	2.08	--
Charleston				
Burke HS (755)	.66	.55	-2.19	--
Plymouth				
Central MS (41)	.47	.37	-2.04	--
Measure: Teachers' Reports of Planning and Action				
Puerto Rico				
Dr. Aguayo HS (3)	1.68	1.83	2.26	--
Measure: Teachers' Reports of Smooth Administration				
Peer Culture Development				
Curie HS (1870)	1.63	1.50	-2.17	--
Kalamazoo				
Milwood JHS (318)	1.58	1.80	3.60	--
Puerto Rico				
Santiago Gonzales JHS (1)	1.63	1.75	2.09	--
Dr. Aguayo HS (3)	1.69	1.83	2.41	--
Charleston				
Charleston HS (751)(control)	1.70	1.53	-2.88	--
Haut Gap MS (944)	1.66	1.80	2.46	--

Table 13 (continued)

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Teachers' Commitment				
Constitutional Rights Foundation				
Muir HS (82)	1.68	1.50	-2.12	--
Puerto Rico				
Dr. Aguayo HS (3)	1.63	1.87	2.85	--
Charleston				
A.B. Rhett MS (742)	1.41	1.62	2.49	--
Haut Gap MS (944)	1.66	1.91	2.91	--
St. John's HS (951)	1.49	1.67	2.18	--
Plymouth				
East MS (31)	1.40	1.70	3.54	--
Measure: Teacher Morale				
Kalamazoo				
South JHS (327)(control)	1.62	1.49	-2.40	--
Puerto Rico				
Dr. Aguayo HS (3)	1.57	1.76	3.60	--
Charleston				
Haut Gap MS (944)	1.61	1.76	2.78	--
St. John's HS (951)	1.50	1.62	2.12	--

Table 13 (continued)

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Teachers' Job Satisfaction				
Puerto Rico Otro Camino	3.30	2.94	-2.13	18
Virgin Islands Elena Christian JHS	2.52	2.72	1.97	128
Measure: Teachers' Professional Development				
Chicago Board of Education Bowen HS (1240)	1.33	1.44	2.01	88
Kalamazoo South JHS (327)(control)	1.54	1.36	-2.45	30

Note: Only those schools where the change from 1981 to 1982 is regarded as dependable are included on this table. Reports of change on teacher survey measures are excluded from this table when the number of teacher surveys on which the 1982 mean is based, is fewer than 11. t-statistics for compositional measures are based on the means and standard deviations for each school. For psychosocial climate measures, the "t-statistic" is the ratio of the difference between 1982 and 1981 scores to the standard error of measurement of the 1982 scores. As a rule of thumb, psychosocial climate measure differences that are twice the standard error of measurement may be regarded as dependable. Dashes in the column for degrees of freedom indicate that the measure is a psychosocial climate measure.

Table 14

1981 to 1982 School Change on
Additional Theoretical Predictors of Delinquency

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Students' Attachment to Parents				
Constitutional Rights Foundation				
Elliot JHS (70)	.64	.58	-2.39	601
Muir HS (82)	.63	.56	-2.66	508
Chicago Board of Education				
Luella El (4550)(control)	.57	.65	2.11	217
Bronx				
63	.71	.62	-2.48	211
Plymouth				
Central MS (41)	.72	.56	-4.04	225
Measure: Students' Attachment to School				
Peer Culture Development				
Harrison HS (1370)	.71	.75	2.01	590
Chicago Board of Education				
Luella El (4550)(control)	.57	.65	2.13	176
Bontemps El (5750)	.71	.64	-2.78	308
Kalamazoo				
South JHS (327)(control)	.65	.57	-3.08	418

Table 14 (continued)

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Students' Attachment to School (continued)				
Jazzmobile 88	.68	.78	2.78	183
Charleston Laing MS (242)(control)	.69	.63	-2.65	611
St. Paul Murray MS (342)	.71	.59	-4.09	402
Measure: Students' Belief in Validity of Rules				
Chicago Board of Education				
Bowen HS (1240)	.71	.77	2.16	270
Bontemps El (5750)	.66	.60	-2.17	282
Jazzmobile 88	.62	.73	3.01	128
Charleston Haut Gap MS (944)	.64	.69	2.32	506
St. Paul Central HS (210)	.67	.74	2.33	257

Table 14 (continued)

Project and School	Scale Score 1981	Scale Score 1982	t statistic	Degrees of freedom
Measure: Students' Reports of Negative Peer Influence				
Constitutional Rights Foundation				
Muir HS (82)	.19	.15	-2.26	499
Jazzmobile				
88	.21	.16	-2.13	312
Charleston				
A.B. Rhett MS (742)	.17	.14	-2.34	585
Rivers MS (743)	.18	.22	2.31	535
Charleston HS (751)(control)	.13	.16	2.08	489
Burke HS (755)	.22	.18	-2.95	699
Measure: Disrespect for Students				
Kalamazoo				
South JHS (327)(control)	.91	1.08	2.20	--

Note. Only those schools where the change from 1981 to 1982 is regarded as dependable are included on this table. Reports of change on teacher survey measures are excluded from this table when the number of teacher surveys on which the 1982 mean is based, is fewer than 11. t-statistics for compositional measures are based on the means and standard deviations for each school. For psychosocial climate measures, the "t-statistic" is the ratio of the difference between 1982 and 1981 scores to the standard error of measurement of the 1982 scores. As a rule of thumb, psychosocial climate measure differences that are twice the standard error of measurement may be regarded as dependable. Dashes in the column for degrees of freedom indicate that the measure is a psychosocial climate measure.

that occurred in the Plymouth schools during the 1981-82 school year. Both middle schools were converted to junior high schools, thus returning more troublesome 9th grade students to the school rather than moving them onto the high school campus.

A similar grade reorganization occurred in the Puerto Rico schools. Structural changes in the Puerto Rico schools between 1981 and 1982 involved decreases in the school population and a move from split to single sessions. Results for both the Plymouth and Puerto Rico projects should be regarded as tricky to interpret.

A similarly difficult to understand set of results occured for a PCD high school where School Nonattendance, Alienation, and student reports of school Planning and Action decreased significantly and where Clarity of Rules, Parent and Community Involvement, Attachment to School increased significantly. This project operated a closely similar intervention in two other high schools in the same city, and the results do not resemble the highly positive change in school climate registered for the school just described. In this case it is possible that the PCD project contributed to the positive changes, but neither the experimental comparison of the project's intervention within this school (St. John, 1983) nor convergent evidence from other schools supports this interpretation. Other co-occurring events are explanations that rival the interpretation that this felicitous outcome was due to the project's intervention.

A third example involves results for the LCO reservation school for which results were not tabled in the this chapter (they are shown in Appendix D) because the student-survey response rate differed markedly for the 1981 and 1982 administrations. Political changes on the reservation that resulted in the firing of a large proportion of the teachers in the school are probably major contributors to the drastic negative changes reflected in the teacher survey results. In this school, teachers reported significantly lower Safety, less Student Influence, less Parent and Community Involvement, and very much lower Morale in the second year. This outcome lends support to the validity of the teacher-survey measures, but it would be absurd to attribute the results to the operation of a relatively-low-key project (Cook, 1983b).

Readers can gain greater insight into the nature, amplitude, and direction of other influences on each project by consulting the first and second interim evaluation reports specific to each.

Changes in sampling. The results summarized in this chapter exclude results where we knew of changes in the ways students were sampled. These changes, which we have taken great pains to avoid, nevertheless occurred on occasion. For example, the results do not include reports for the Plymouth high schools where we were unable to obtain a suitable random sample of the studentry in 1981, and where English classes were sampled in 1982 as an expedient approach to the assessment of school climate.

Despite our efforts to exclude obviously less meaningful comparisons, there may remain some comparisons where the quality of survey administration differed to a problematic degree for the two years. For example, one school in St. Paul administered surveys to 56% of the

sample in 1981; the report of survey administration for this school indicated that surveys had been administered to 78% of the sample in 1982. Many of the St. Paul surveys were sent to us with the identification numbers removed, however, and the number of booklets identifiable as being from this school resulted in an effective response rate of 59%. Neither the effective 1982 response rate (59%) nor the reported response rate (78%) were sufficiently different from the 1981 response rate (56%) to warrant excluding the school by the criterion we used. Tables 4 through 14 show several puzzling significantly negative changes between 1981 to 1982 for this schor The hypothesis that sample dii. nces explain the results is at least as plausible as the hypothesis that Project Together brought about negative changes in the school. There is no way of knowing how much the group for whom questionnaires were available in 1981 resemble the group for whom questionnaires were available in 1982, or how much either group really represents the school's studentry.

An example where the response rate decreased from 1981 to 1982 may illustrate the obverse of the problem just described. One Pasadena school surveyed 79% of the sample of students in 1981 but only 63% of the sample the following year. This school's results show lower Student Victimization, Classroom Disruption, and student Alienation. Response rate differences are explanations of these results that are at least as plausible as the interpretation that Project STATUS induced these changes.

These response rate problems do not, of course, affect the interpretation of results for schools with high response rates for both years. Response rates for the 1981 survey are presented by Gottfredson, 1982, and a detailed listing of 1982 response rates is presented in Appendix E.

Chance. Some nominally significant results may be attributable to chance. See the method section for a description of this issue.

Secular trends. Scientists refer to shifts in the general culture over time as secular trends. Currently, there appears to be a decreasing interest among educators in individualized instruction. This secular trend appears to be a plausible interpretation of the statistically significant tendency toward decline in individualized education for schools studied here. The puzzling tendency for school averages on Parental Emphasis on Education may also reflect a secular change due to the recession or other unknown influences, especially because so few of the prevention projects systematically engaged in activities likely to influence this outcome.

Changes do not reflect absolute levels. The results reported here are for changes in the level of the variables examined rather than the levels of the school characteristics or student outcomes themselves. A school that is already extremely high in Attachment to School, for example, may remain high from year to year but show no change in this measure. Perhaps no improvement is needed. Readers interested in this issue should consult the normative information provided in an appendix, and see the second interim report for the Charleston project (Gottfredson, 1983) where this issue is examined systematically.

Some Interpretations

Despite the foregoing worries, the results presented in this chapter are based on reasonably sound data and represent an unusually thoroughgoing scrutiny of the changes over time in the school climates, and in the behavior, and psychosocial status of the student populations involved in the Program. The information presented here is limited to population outcomes. Perspectives on the effects of project components targeted at defined subpopulations are provided in the individual interim evaluations of each of the prevention projects. A subsequent chapter provides a terse summary of highlights from those individual interim evaluations.

The most important observations appear to be the following:

1. Schools involved in the Program are safer in 1982 than they were in 1981. Both teachers and students report more safety in the second year of the Program than they did in the first, and the improvement is statistically significant.

2. Teachers in Program schools were victimized less in the second year of the Program than they were in the first, and the improvement is statistically significant. Teacher Victimization was down in 22 Program schools, and was nonsignificantly higher in only 5 Program schools. There is a tendency for measures of delinquency in and around schools to reflect less delinquency in program schools in 1982 than in 1981. For nine of ten measures of delinquency, the measures show less delinquency in 1982 than in 1981, although only the difference for the Safety and Teacher Victimization measures reach statistical significance. A school-by-school analysis of changes show that when all measures of delinquency are taken together, more than twice as many schools showed evidence of significnatly less delinquency in 1982 than showed evidence of significantly more delinquency.

3. The number of schools with improved attendance is greater than the number with worse attendance, but this difference is not statistically significant. Schools in three projects had significantly better attendance in 1982 than in 1981; no program school had significantly worse attendance in the second year.

4. Student Alienation decreased in significantly more schools than it increased. Schools in four of the delinquency prevention projects significantly improved on the measure of student Alienation.

5. Nearly six times as many schools improved as regressed in measures of student Self-Concept, and this pattern is statistically significant. Schools in four of the delinquency prevention projects significantly improved on the measure of student Self-Concept.

6. Students in significantly more schools reported less Rebellious Autonomy in 1982 than in 1981. Five program schools decreased significantly on the measure of Rebellious Autonomy, and no program school increased significantly on this measure.

7. On the various measures of psychosocial development, more than twice as many program schools improved as showed a decline. The pattern of results suggests that modest positive results were achieved in desired areas, but this pattern does not provide much support for a conclusion that these results were brought about through the specific structural alternatives sought in the OJJDP Program design.

For example, the Program Announcement called for "providing learning structures tailored to realistic levels to promote educational and social development." For the program overall, measures of individualized instruction went significantly down between 1981 and 1982, and most of the other measures of alternative educational structures showed a tendency to decline, but most measures of social development went up. As a second example, the Program Announcement called for "increasing youth, parent and community agency participation in school decision making to reduce student alienation." Although alienation was reduced, students report (non-significantly) less influence in more schools than they report more, and there is only slight suggestion of increases in parent or community influence. Furthermore, an examination of the school-by-school results does not reveal many instances of co-occurance of desired changes in the measures of educational structures and the measures of alienation or psychosocial development.[4]

8. Teacher Commitment and teacher Morale increased in more schools than it decreased, and for Morale this pattern is statistically significant. This appears to be an important outcome because of evidence from other research that teacher morale and staff commitment are important correlates of program development.

9. More schools improved than regressed on each of five theoretical risk factors for delinquent behavior, although none of the patterns were statistically significant.

10. Positive changes do not occur with equal frequency across all prevention projects. The most consistent evidence of positive changes in school-level outcomes occurs for the Charleston, Puerto Rico, and Kalamazoo projects. All three of these projects are primary prevention projects that focus on changes in the environment, that is they are Quadrant 1 projects in terms of the classification presented in Chapter 4. They would therefore be expected to have larger effects on school climates than would projects focused primarily on a subgroup of the population. In our judgment, the Charleston project is untertaking thorough efforts to systematically implement well-defined interventions aimed at altering the broad school environment, and the Kalamazoo project is also clearly focused on broad-ranging school climate improvement. The grade structures of the schools in which the Puerto Rico project operates were changed between 1981 and 1982. This reorganization resulted in the elimination of split sessions and a decrease in school populations. These structural changes, are the most plausible explanation for the significant positive findings for the Puerto Rico schools. The school that experienced the most improvement is the school that converted from a 9-12 to a 10-12 grade structure. Also, most of the significant improvements are on teacher measures. The focus of the project is on students, not teachers.

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4. We explored this issue further by examining the school-level correlations between measures of the educational structures and student psychosocial development. In general, these correlations provide little support for an interpretation that individualized instruction is related in the way anticipated with favorable psychosocial outcomes. In contrast, the correlations do support an interpretation that student influence is negatively related to alienation.

Creating changes in the climate of schools of sufficient magnitude to have substantial effects on the incidence of delinquent behavior is bound to be difficult. We interpret the evidence presented in this chapter as implying that postive changes in school climates, including changes for known risk factors for delinquent behavior and known correlates of program development, have occurred. Significant increases in school safety are already apparent. Provided that the implementation of prevention projects continues to improve over time, these encouraging results suggest that future results may be more impressive.

11. The overall results mask impressive instances of progress within some projects. The evidence reported in this chapter, taken together with evidence presented in more detail elsewhere (Cook, 1983a; D. Gottfredson, 1983) strongly suggests the interpretation that the Charleston and Kalamazoo projects are developing as promising delinquency prevention interventions that take a primary prevention, environmental change approach. Plans to continue to develop, evaluate, disseminate information about, and replicate those projects should be made.

Epidemiological Indicators vs. Between Group Differences

All of the results presented in this chapter are for school populations. Some projects have no substantial interventions intended to influence the environment of the school as a whole. Specifically, some of the projects direct their activities to preventive or remedial interventions with selected groups of students. For such projects, effects are most likely to be evident in comparisons of youths who receive direct services with control groups. This chapter does not bear directly on the efficacy of interventions targeted at selected groups of students. Evaluations of such interventions are discussed in detail in the reports of the evaluations of those individual projects. Highlights from those interim evaluations are described in Chapter 6.

The Effects of Interventions Targeted at Identifiable Groups of Youths: Some Highlights

All of the delinquency prevention projects in the Alternative Education Program had at least one project component directed at an identifiable target group of individuals. These interventions were diverse. Some were directed at a highly selected group of high risk individuals, some were directed at youths more representative of the general population. Some involved altering the environment to which the target group was exposed, others involved efforts to enhance the coping skills or ability of the individuals to adapt to the environment.

We took great pains to work with prevention project implementers to develop evaluation designs that would enable us to gage the efficacy of the interventions targeted at identifiable groups. Our aim was to create circumstances that would make possible confident conclusions about the effects of specified interventions, while bearing in mind that in the preliminary stages of a project's development rigorous outcome evaluation may be an egregious exercise. Put another way, there must exist a reasonably well developed and specifiable intervention to evaluate. Furthermore, implementing careful experimental evaluations of field trials is a very difficult undertaking. Some of the difficulties encountered in convincing project implementers of the importance of bearing the burden of rigorous outcome evaluation are described in our first interim report (Gottfredson, 1982c, Chap. 3).

It is evident that a good many of the interventions being implemented in the Alternative Education Program remain incompletely developed form. We perceive steady progress in many projects in refining their programs over time as they gain experience benefit from evaluative information and from technical assistance, and put rudimentary ideas to test. It is also evident that a good many of the attempts to implement interventions in this Program have been thwarted by exigencies beyond the control of the implementers or not foreseen by anyone. In other cases, the project implementers do not appear to aim systematically to develop specific interventions but rather to take advantage of opportunities that exist in the project's environment to achieve the adoption of <u>any</u> innovation that appears to hold promise for moving the school in a desired direction. And in some cases, the resources--time, talent, money, technologies--required to implement what was intended are not available in a project.

In short, the prevention projects are not only variable in terms of the locus of the interventions targeted at identifiable groups, but they are also variable in terms of the integrity and developmental stage of those interventions, and in terms of how stable or well defined the interventions are.

Commentators (Farrar & House, 1983) on the evaluation of Push/Excell, Jesse Jackson's highly publicized effort to inspire youths to stay in school and perform well there, have made an interesting suggestion. Push/Excell may have been a <u>movement</u> rather than a <u>program</u>. According to Farrar and House, the movement aspect of Push/Excell was expressed by a compelling message:

"That hard work, self-discipline, delayed gratification, and persistence were qualities that youth needed in order to succeed" (p. 37). The movement had a catalyst--Jessie Jackson. The program aspect of Push/Excell was expressed in a set of 10 guiding principles, in some suggestions for implementing the program, and a skeleton staff that provided some (but probably not enough) assistance to the implementing sites. An implication we draw from this commentary on Push/Excell and its evaluation is that program evaluations may be best suited to the evaluation of programs, and not all activities are really programs.

None of the Alternative Education Program's projects are movements, but some of them do not resemble programs very much, and they are difficult to evaluate as programs. Such projects squirm like reluctant cats when attempts are made to cram them into a box. We have judged it futile to attempt to encase certain aspects of some projects--the effort is beyond our resources, and the evaluation would likely miss the point.

Evaluation Designs

For all the foregoing reasons the evaluation designs for the components of the 17 prevention projects differ. We had expected that the evaluation designs implemented in the second year of the Alternative Education Program would be much stronger than they were in the first year. They are much stronger. The timing was better, experience had been gained in the first year, and everyone had a better idea of what was required.

The designs as implemented are briefly described in Table 1. True experiments involving the random assignment of youths to treatment and control groups are generally to be preferred. Seven of these prevention projects implemented randomization for at least one of their interventions. When randomization is impossible or not feasible, the use of a comparison group created in some other way is necessary. The more "equivalent" this comparison group the better. That is, when a comparison is markedly different from the group receiving treatment, a host of potential explanations for differences observed in outcome measures are possible. The availability of pre-intervention information is often useful either to assist in ruling out a hypothesis that outcomes observed are due to pre-existing differences between the treatment and comparison groups, or to increase the efficiency (statistical power) of an evaluation design. Finally, sound and comprehensive outcome measures are required to assess the effects of any intervention.

Taking all of these considerations together, the projects that were most amenable to the interim outcome evaluation of their targeted interventions in the second year of the Program were those in Compton, Chicago (PCD), Charleston, and Milwaukee. Each of these projects involved the random assignment of youths from a pool of eligibles for their major interventions targeted at identifiable groups; each was able to develop comprehensive outcome measures. The projects located in Pasadena, Kalamazoo, Puerto Rico, the Virgin Islands, Miami, and Plymouth either implemented reasonably strong quasi-experiments for their major interventions, or implemented true experiments for some project components. The highlights presented below describe some of the results for these projects which were most amenable to interim assessment of effects.

Table 1

Evaluation Designs for Project Components Targeted at Identified Groups

Project	Control group			Pretreatment measures	Outcome measures
	random	"equivalent"	nonequivalent		
Compton, CACYD	yes	NA	NA	yes	yes
Pasadena, STATUS	no	yes	yes	partial	yes
Chicago, PCD	yes	NA	NA	no	yes
Chicago, CBE	partial	no	no	yes	partial
Kalamazoo, AEP	yes[a]	no	yes	no	yes
Bronx, PREP	yes	NA	NA	partial	partial
Harlem, AAEP	no	no	yes	no	partial
Puerto Rico, OC	no	no	yes	yes	yes
Charleston, PATHE	yes	NA	NA	yes	yes
Houston, CIS	no	no	yes	no	no
Virgin Islands, AEP	no	no	yes	yes	yes
Hayward, LCO	no	no	yes	partial	partial
Miami, ACE	no	yes	NA	yes	yes
Plymouth, AEP	yes[b]	no	yes	yes	yes
New Jersey, EIC	no	no	yes	partial	partial
Milwaukee, MYEC	yes	NA	NA	yes	yes
St. Paul	no	no	yes	no	yes

[a]Students who participated in the student council were randomly assigned to participate within homerooms. The design for other project components is a non-equivalent control group design.

[b]No control group was available for the Learning Options (Growthworks) component. The design for the middle school treatments was a non-equivalent control group design.

Highlights

In the following abstracts we summarize some of the major results of the interim assessments of the effects of project components targeted at specified groups. This account is not comprehensive, and readers are encouraged to consult the more extensive accounts presented in Part II of this report.

Compton

The Compton Action Alternative School (formerly the Compton Action Center for Youth Development, CACYD) has evolved over the course of its first two years in ways that appear to have strengthened it as a delinquency prevention project. Interim results based on student self-report suggest that the project has been remarkably effective in altering a number of student characteristics that delinquency prevention theory implies must be altered to prevent delinquent behavior, and student self-reports of delinquent behavior are significantly lower than the self-reports of a control group. The self-report data must be interpreted with caution, however, because of some evidence of differential validity for treatment and control group members. Problems with the retrieval of some archival data on official delinquency and other outcomes limit the assessment reported here. New data have very recently become available to strengthen the analyses performed to date, and the results currently available should be regarded as tentative.

Pasadena

Project STATUS (Student Training Alternatives Through Urban Strategies) involves 5 interventions: (a) the Options class; (b) the Youth Committee and Leadership Training Class, (c) project training; (d) parent involvement, and (e) the Action/Advisory Committee, are designed to provide students with a meaningful educational program. The evaluation designs for the Options class and a Youth Committee in one of the two schools involved in this project were strong enough to merit description of the interim results here. Results show Eliot's Options class to significantly decrease Alienation, increase students' self-ratings of reading ability, decrease withdrawals from school, increase Interpersonal Competency, and increase student reports of the Fairness and Clarity of school rules. It appears to have the unanticipated consequence of increasing absenteeism for participants in the class. No statistical evidence of effectiveness was found for Muir's Options class nor for the Youth Committees. Numerous problems in implementing the program may partially account for the null results.

PCD

Peer Culture Development (PCD), operating in the Chicago Public Schools, runs a peer counseling intervention as regularly meeting classes. The interim evaluation results suggest that the project has produced positive effects on belief in conventional rules, delinquent behavior, and school grades for some subgroups. At the same time, no dependable evidence was adduced that other important project objectives were achieved, and the effects observed are not observed consistently in each semester and across the several categories of youths involved. Because some interim results suggest that the intervention can be strengthened, the project has actively engaged in clarifying its implementation standards and developing procedures for monitoring these standards. The PCD project illustrates a serious approach to project development over time.

Kalamazoo

The Milwood Alternative Project is primarily a school improvement project operating in Milwood Junior High School in Kalamazoo, Michigan. Accordingly the results described in Chapter 5 for the school-wide outcomes are most relevant to the evaluation of this project. The project did, however, have several components targeted at subgroups of the school's population. These include an attendance monitoring procedure, a Skills Lab class for low-achieving students, a school-within-a-school for eighth grade students (the Milwood Alternative Program), a student council, and a project advisory. One of these components, the student council, was amenable to outcome evaluation through the fortuitous use of a lottery in homerooms to assign students to participate. Results suggest that involvement in the student council may have increased Negative Peer Influence, lowered Self-Concept, lowered Attachment to Parents, reduced students' perceptions of Parental Emphasis on Education, and lowered educational expectations. A number of alternative hypotheses to explain these results also exist.

A second component, attendance monitoring, resulted in a significant reduction in the proportion of students who could be considered "chronic non-attenders" when compared to a similar group of students in the Kalamazoo comparison school.

Puerto Rico

The Puerto Rico project, run by a community organization, functions as an extension of the school day. Project staff work cooperatively with school administrators and faculty to assess student academic needs and schedule project activities. The project includes an academic component and activities aimed at student social development and community participation. The evaluation uses a non-equivalent control group design with good pre-intervention data available for use as statistical controls. Interim evaluation results suggest that the project has modest positive effects on school grades, students' educational expectations, standardized achievement test scores, students' Involvement in extracurricular activities, and Student Influence. Some negative results are suggestive of negative outcomes for students referred to the project for academic difficulties, but these results may most plausibly be regarded as due to weaknesses in the evaluation design for this particular project component.

Charleston

Project PATHE operates in seven Charleston County Public Schools. It aims to alter broad aspects of school climate and to assist in the adaptation of a group of approximately 100 high risk youths in each school. Implementation data show substantial variability in the strength of implementation of the direct service components across the seven schools. Schools that were implementing the school-level interventions in strongest form tended to be weaker in implementing the interventions targeted at high risk youths. The evaluation involves a large sample true experiment. Interim results suggest that the PATHE program increased academic performance for targeted individuals at both the middle and high school levels, and increased school attendance, promoted attachment to school and enhanced self-concepts for targeted middle school students. In one or more of the middle schools significant positive effects were also found for the following outcomes: serious delinquency, rebel-

lious autonomy, individual student perceptions of the fairness and clarity of the school rules, school punishments, and employment. That is, treatment group students reported less serious delinquent behavior and rebellious autonomy than did control group students, reported the rules to be fairer and clearer, received less punishment, and were employed more often. In one of the middle schools treatment students scored significantly lower on the measure of Practical Knowledge than did control group students, and in a high school several negative effects were observed for the target group students: School Attachment, educational expectations, and employment were lower for treatment than for control group students.

Virgin Islands

The Virgin Islands Alternative Education Project is seeking to implement two interventions disseminated by the National Diffusion Network (NDN)--Focus and PATL. Interim evaluation results suggest that Focus is being implemented largely as intended, but with some modifications to the Focus model. PATL was not implemented as intended in the second year of project operation. Despite some weaknesses in the evaluation design and measures, results suggest that the modified Focus intervention resulted in students receiving higher grades than they otherwise may have received. No other consequences of the Focus intervention were detected by the evaluation. Program development is continuing, as are efforts to strengthen the evaluation.

Miami

The Academy for Community Education is a small alternative school that uses a token economy system, academic education, professional/vocational curriculum, and other interventions in providing services to youths at high risk of delinquent behavior drawn from the Dade County (Miami) Public Schools. The limited data currently available suggest that participation in the Academy results in significantly less absenteeism, fewer suspensions, less tardiness to school, and more academic credit earned than participation in the public schools. Academy participants, however, withdrew from school involuntarily more often than similar students remaining in the public schools. Despite some important limitations of the data, these interim results are encouraging.

Plymouth

The Plymouth Alternative Education Project operated Student Service Centers, Student Activities Centers, and an out-of-school Learning Options program primarily for two high schools and two middle schools. These interventions provide educational services, counseling, and recreation for students with disciplinary and attendance difficulties in this predominantly working and middle-class white community. Interim evaluation results raise some questions about the Student Service Center implementation, and suggest that some unexpected negative effects of this counseling intervention may be occurring. Specifically, treatment students as compared to controls reported less Interpersonal Competency, lower Self-esteem, more Rebellious Autonomy, less Involvement in conventional activities, lower Attachment to School, and less Parental Emphasis on Education.

Interim evaluation results imply that the high school Student Activities Center is being implemented with care, and has some promising positive effects on participants. Specifically, the SAC students scored significantly higher than their controls on tests of writing skills and Practical Knowledge, and report higher school grades and less alienation.

The Learning Options program did not participate in an outcome evaluation.

Milwaukee

The Jewish Vocational Services Alternative Education Project developed and implemented three interventions. The Milwaukee Youth Employment Center (MYEC) counseled dropout youth and attempted to place them in employment. The Return Center, operated in cooperation with the Milwaukee Public schools, assessed and referred to alternative educational programming youth who were contemplating dropping out, or who had already dropped out and wished to re-enroll in formal education. The Job Score class was a regular high school course developed by MYEC staff to teach employment skills to youth at risk for dropout.

An experimental evaluation of the MYEC program indicates that it was not successful in increasing the employment opportunities of its clients. No evidence exists that the Psychological Health, Interpersonal Competency, or Rebellious Autonomy of the youths involved were affected by the program. Subsidiary analyses suggest that in general, clients did not receive many services, although the extent to which clients participated in the remedial education provided through the project was associated with positive outcomes. Evaluations of two project components--the Return Center and Job Score classes--were not completed due to the early termination of the project.

A Summary

The foregoing list of highlights may be difficult for the reader to integrate. Accordingly, in Tables 2 and 3 we summarize these highlights in tabular form to provide a sort of "box score" for the program as a whole. This summary, for interventions targeted at specified groups of individuals, parallels the summaries provided in Chapter (Tables 1 through 3) of overall results for interventions aimed at entire populations.

These tables summarize the evidence about the effects of targeted interventions on the characteristics of individuals--their psychosocial characteristics and their behavior. Only the goals and objectives mentioned in the OJJDP program announcement and selected delinquency risk factors are included in this tally. Other project-specific goals and objectives are sometimes omitted. In a few cases, however, where a specific hypothesis that individuals targeted by the project would have different perceptions of their environments, some of the environmental objectives have been addressed by measurement of the perceptions of treatment and comparison groups individual perceptions; some of these comparisons are included in these tables.

A box score for the Alternative Education Program's goals is presented in Table 2. The preponderance of the significant effects of these targeted interventiions is positive. Of 23 significant differences, 20 were in the positive direction. Two of the three negative outcomes were for subcomponents

Table 2

Number of Alternative Education Program Projects Showing Experimental or Quasi-Experimental Evidence of Effects of Interventions Targeted at Specified Groups: Program Goals

Measure	Number of Alternative Education Sites	
	Positive	Negative
Decrease Delinquent Behavior In and Around School		
Serious Delinquency	3	0
Drug Involvement	1	0
Decrease Suspensions	2	0
Increase Attendance	3	0
Increase Academic Success		
Grades	6	0
Standardized test scores	2	0
Improve Transition to Work and Post-secondary Education		
Educational Expectations	1	2
Working for pay	1	1
Having a job	1	0

Note. Only the ten projects having sufficiently rigorous outcome evaluations of targeted interventions to warrant interpretation are included in this table. Measures or goals come primarily from the School Action Effectiveness Surveys, but are also taken from official school or police records when available.

Table 3

Number of Alternative Education Program Projects Showing Experimental or Quasi-Experimental Evidence of Effects of Interventions Targeted at Specified Groups: Program Objectives

Measure	Number of Alternative Education Sites	
	Positive	Negative
Making School Discipline Fair and Consistent While Providing for Due Process		
Students' Reports of Clarity of Rules	2	0
Students' Reports of Fairness of Rules	2	0
Increasing Youth, Parent and Community Agency Participation in School Decision Making to Reduce Student Alienation		
Students' Reports of Student Influence	1	0
Alienation	2	1
Preclude Labeling Effects		
Positive Self-Concept	1	2
Provide a Learning Structure Tailored to Realistic Levels to Promote Educational and Social Development		
Rebellious Autonomy	2	1
Practical Knowledge	2	1
Interpersonal Competency	1	1
Parental Emphasis on Education	0	2
School Punishments	1	2
School Rewards	2	0
Additional delinquency risk risk factors		
Attachment to Parents	1	1
Attachment to School	2	1
Belief in Rules	2	0
Negative Peer Influence	0	1

Note. Only the ten projects having sufficiently rigorous outcome evaluations to warrant interpretation are included in this table. Measures of objectives are taken from the School Action Effectiveness Surveys.

of projects with largely positive effects. Because so many statistical tests were performed, some of these nominally significant differences could occur by chance, but by chance half would be expected to be positive and half negative. That result was not observed.

A box score for significant differences for measures of Alternative Education Program objectives for the targeted interventions is provided in Table 3. Of 34 significant differences, 21 are positive and 13 are negative. Once again, 5 of the 13 negative effects are for subcomponents of projects with largely positive findings. Of the negative findings, six are for a single project, reflecting what appears to be an unexpected negative influence of a counseling intervention run by that project (Cook, 1983).

Progress

The results presented here and in the previous chapter imply that progress has been made not only in implementing the interventions conducted by the projects in the Alternative Education Program, but also in implementing the evaluation of those projects. The experimental and quasi-experimental evaluation of these projects to date provide evidence that we interpret as supportive of this general approach to reducing youth crime. These are interim results for projects that continue to develop, however. Most of these projects are being implemented in improved form in the third year, and evaluation designs and data collection arrangements are improved. As these projects develop, use information about their effects and about the strength and integrity of their interventions, benefit from technical assistance, and gain in experience and expertise they may be expected to produce stronger and more consistent effects.

The evaluation has turned a greater portion of its effort to documenting the implementation of interventions and to working with projects to clarify the standards for the implementation of their projects. This effort, too, may contribute not only to stronger interventions for some projects in the third year, but also to the efforts of others who follow these projects in efforts to implement effective delinquency prevention programs by using the program models being developed.

Educational Interventions and the Prevention of Delinquency: Some Closing Observations

Some observations on the Alternative Education Program at the end of two years of operation are apt. In this final brief chapter we offer some of our less technical observations on the operation of the Program, and some observations on the implications of what we have learned so far for the future of delinquency prevention. A shortage of time, and the pressure to get on with the task of continuing the evaluation in the third year limit our ability to carefully document and justify the opinions expressed here. Instead, we assert our opinions and will leave to a later date a fuller exposition of these opinions and speculations and of the reasons we believe as we do.

Schooling and Delinquency

The Alternative Education Program's inception was based on a background of research and careful thought about the causes of youth crime. The background paper that spelled out the rationale for an Alternative Education Program (OJJDP, 1980) was a careful document that built a good case for educational, and school structural, approaches to reducing the risk of youth crime. A President's Task Force (President's Commission on Law Enforcement and Administration of Justice, 1967) had pointed to causes of delinquency in the organization of schooling in America. A National Academy of Sciences panel (Martin, Sechrest, & Redner, 1981) called for research and development of school-based interventions for both primary prevention and remediation at about the time the Program was initiated. We have elaborated elsewhere a strong case for interventions in schools to prevent delinquency (Gottfredson & Daiger, 1979; Gottfredson, 1981; Gottfredson, 1983b). The evidence of the present evaluation provides no reason to question the scientific, theoretical, and practical premises upon which the Alternative Education Program was based. To the contrary, patterns we see in the data provide every reason to try harder to implement and evaluate preventive interventions based on this approach. Once again, for example, we find the same school-related risk factors associated with delinquent behavior (see Chapter 4). More impressive, the evaluation has produced experimental evidence that interventions in schools can alter some of these risk factors and even evidence suggesting that delinquent behavior has been reduced.

Developing Effective Programs

The most pressing problem in the delinquency prevention field is the problem of developing sound, theory-based interventions that can be implemented in strong enough form that they will make a substantial contribution to the reduction of delinquent behavior. The development and implementation of strong programs is not a need of alternative educational approaches to delinquency prevention alone. Such development and careful implementation is required in <u>every</u> approach to delinquency prevention. It is required in the entire criminal and juvenile justice area. Programs to rehabilitate offenders have been alleged not to work (Martinson, 1974). But the actual evidence suggests that few rehabilitative efforts of sufficient strength and integrity have been implemented and

carefully evaluated, that the task of creating such interventions will be difficult, and that we should try harder (Sechrest, White, & Brown, 1979). The development, implementation, and evaluation of such more effective programs will require the attention of talented people in a concerted effort over a period of years. A more careful, long-term, technologically and scientifically based programmatic effort must be made to realize the potential to reduce youth crime that there is now every scientific reason to believe exists. A two- or three-year program with limited scientific and technical assistance is not enough time to demonstrate that this potential can be realized.

Sound Implementation

Throughout our earlier report, and in the present one, we have emphasized the importance of strength and fidelity in the implementation of prevention projects. Indeed, we attempted to structure the evaluation in ways that would foster the development of strong interventions with high probability of implementation. We are gratified by what we perceive to be great strides in strengthening the interventions implemented by many of these projects. In our judgment, however, every one of these projects can improve greatly in the strength and care of implementation of its interventions. This is not a condemnation, far from it, for we note with favor the progress that has been made.

The point is that a number of available technologies that appear to fit with the goals, objectives, and rationales behind these projects are used far, far less than they could be. Classroom reward structures that have been experimentally demonstrated to alter known delinquency risk factors (attachment to school, performance in school) are being used in only one project, and there not in thorough or strong form. Home-based reinforcers are not being systematically applied, despite their demonstrated efficacy in altering another delinquency risk factor (disciplinary difficulties in school). Technologies that involve behavioral contracting and the careful consequation of behavior are underutilized in all but perhaps one of these projects.

One reason, no doubt, that some of the existing technology goes underutilized are difficulties in creating productive organizational change that will lead to their adoption. Another reason, no doubt, is that insufficient attention has yet been directed to ensuring that these technologies are available to project implementers and that they have the skills to implement them. A third reason, probably, is that we have not taken seriously enough as a nation the development of a cadre of professionals expert in the application of such technologies, and that a human resources development effort will be required to implement educational and delinquency prevention projects in strong form. And a fourth reason, we are certain, is that the jolting way in which programs are begun and ended, to be started and stopped again at some later time, in some other place, with some other personnel, is not conducive to the development of strong programs.

We must pursue our goals systematically if we are to achieve them.

Evaluation and Expertise

We will make more progress towards the development of sound delinquency prevention programs when everyone involved adopts an experimenting approach to the enterprise.

For too many years, and there is only the slightest sign that this attitude is eroding, an attitude of "anything goes" has pervaded the administration of most programs in the crime prevention area. Proponents of correctional reform, of school reform, of reform in the juvenile and criminal justice system more broadly, have always felt free to condemn the existing system and offer their alternatives. Seldom, indeed, do proponents of reform presume that their reforms may also introduce undesirable effects not anticipated in advance, that their reforms may founder on unforeseen obstacles, that they will one day be the target of future reformers who will condemn them.

Virtually every innovation in the criminal and juvenile justice system, and in the educational system, should be approached as an experiment. The reason, simply put, is that the innovations may not help, may not help as well as expected, or may cause harm.

We have encountered resistance to evaluation of interventions in one form or another from many sources in the conduct of our work. A project implementer may be sure his or her intervention works and eschew the burdensome activity of studying the intervention's effects. A project director may wish to avoid rocking the boat in his or her system and avoid steps to make available the necessary information or arrangements to make for a maximally useful evaluation. A project officer may see a need to rapidly meet service quotas and create an environment not conducive to an orderly evaluation. The pages torn from the calendar each day create a pressure to get on with the work now, rather than to plan and systematically carry out the most careful possible implementation and research.

We interpret some of the evidence and experience generated by this evaluation as implying a need for greater expertise and for a thorough-going experimental approach to delinquency prevention. We are disheartened when we see a project rapidly staffed with workers not fully qualified by experience or training to implement their parts of a project. We waste precious time and resources when we must wrangle with recalcitrant implementers over whether or not a project component should be evaluated.

The need for expertise and an experimenting approach to the development of delinquency prevention projects is obvious, and should be insisted upon. For example, the negative or null results for some of the counseling interventions included in the Alternative Education Program strongly imply that no such program should be undertaken without the firm guarantee in advance that the intervention will be undertaken as an experiment and with highly qualified staff.

The Work Ahead

We have only begun to explore the wealth of information about the effectiveness of the Alternative Education Program and its component projects. Nested within each of these projects lie unmined treasures of information about the relative efficacy of each of the interventions implemented. In the third year of the Program projects are implementing interventions of greater strength than those of the second year, and the arrangements to evaluate them are sounder. We will continue our efforts to unearth these treasures as the evaluation continues. This report is an interim evaluation. More powerful and more thoroughgoing analyses remain to be performed; there is

much more to learn about this Program. The final chapter will be written only after much remaining work is completed.

Written Products Resulting from the Evaluation

Here we provide a partial listing of written products produced in the course of this evaluation. The most important previous written product is our first interim report (G. D. Gottfredson (ed.), The School Action Effectiveness Study: First Interim Report. Baltimore: The Johns Hopkins University, CSOS, 1982). That report contained an overview of the Alternative Education Program, the School Action Effectiveness Study, and a description of each of the 17 projects in the Program.

The following table contains a partial listing of other written products produced during the course of the evaluation.

Table 1

Selected Written Products Resulting from the Evaluation

Project	Topic or Title	Date
Compton	Report on attendance and behavior outcomes for Fall Semester, 1981	February, 1982
	School climate assessment	August, 1982
Constitutional Rights Foundation	Report on Fall 1981 pre-test survey	October, 1981
	School climate assessment	August, 1982
	Report on achievement, behavior, and attendance outcomes for 1981-82 school year	October, 1982
	Report on pre-treatment data for 1982-83 experimental groups	March, 1983
Peer Culture Development	Report on types of students in peer groups	May, 1982
	PCD effectiveness assessment for Fall Semester, 1981	May, 1982

Table 1 (continued)

Project	Topic or Title	Date
Peer Culture Development (cont.)	School climate assessment	August, 1982
	Presentation on PCD effectiveness at reception for CBE administrators, Chicago juvenile judges, and school principals	March, 1983
	Peer Culture Development: Second Interim Report	May, 1983
Kalamazoo	School climate assessment	August, 1982
	Report on time expenditure of project manager	December, 1982
Bronx	Report on Parent Questionnaire results	February, 1982
	Report on behavior and attendance outcomes for Fall Semester, 1981	February, 1982
	Report on Fall 1981 pretest survey	February, 1982
	School climate assessment	August, 1982
Puerto Rico	School climate assessment	August, 1982
	Presentation on Otro Camino implementation and effectiveness presented to Puerto Rico Department of Education	November, 1982

Table 1 (continued)

Project	Topic or Title	Date
Charleston	Report on reliability of CTBS subscales	June, 1981
	Reports on attendance, achievement and behavior outcomes for Fall Semester, 1981	March, 1982 May, 1982
	Report on intensity of PATHE interventions	March, 1982 May, 1982
	Bar charts showing school level change and target-control student comparisons for all goals and objectives	October, 1982
	Report on results of Parent Questionnaire	August, 1982
	School climate assessment	August, 1982
	Report on behavior outcomes for first quarter, 1982-83 school year	December, 1982

Table 1 (continued)

Project	Topic or Title	Date
Houston	School climate assessment	August, 1982
	The George I. Sanchez Alternative Education Project: Second Interim Report (Unpublished manuscript. San Raphael: Social Action Research Center)	March, 1983
Lac Courte Oreilles	Report on effect of PLATO on psycho-social attitudes from Fall 1981 survey and data	March, 1982
	School climate assessment	August, 1982
Miami	School climate assessment	August, 1982
	Report on achievement, attendance, and behavior outcomes for Fall Semester, 1982	February, 1983
	Academy for Community Education: Second Interim Report (Unpublished manuscript. San Raphael: Social Action Research Center)	March, 1983

Table 1 (continued)

Project	Topic or Title	Date
Plymouth	Report on attendance, achievement and behavior outcomes for Fall Semester, 1981	January, 1982
	School climate assessment	August, 1982
	Report on utility for diagnosis of student Behavioral Evaluation Scales	April, 1982
New Jersey	Presentation of effectiveness of program to superintendents and principals of South Jersey Schools	October, 1982
	Report on attendance, achievement, and behavior outcomes for Fall Semester, 1981	May, 1982
	School climate assessment	August, 1982
St. Paul	School climate assessment	Fall, 1982
	Project Together: Second Interim Report (Unpublished manuscript. San Raphael: Social Action Research Center)	March, 1983
Milwaukee	Report on effectiveness of Job Score Class	June, 1982

Table 1 (continued)

Project	Topic or Title	Date
Alternative Education Initiative	Standards for program devlopment evaluation plans (Unpublished manuscript. Baltimore: Center for Social Organization of Schools)	1983
	The School Action Effectiveness Study: Overview (Paper presented at the annual meeting of the American Educational Research Association, New York)	1982
	The School Action Effectiveness Study: Preliminary Results (Paper presented at the annual meeting of the American Educational Research Association, New York)	1982
	The School Action Effectiveness Study: Developing and evaluating prevention efforts. (Paper presented at the annual meeting of the American Society of Criminology, Toronto)	1982
	The School Action Effectiveness Study: First Interim Report (Report No. 325). Baltimore: Center for Social Organization of Schools.	1982

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Glossary

Administrative removal	Removal from school for a period of one or more days as a result of an administrative decision, without being dropped from the school rolls. In most cases this is equivalent to the colloquial use of the word suspension.
Adoption	The acceptance and use of a developed program, intervention, or set of interventions.
Alternative education	Educational practices, forms, or structures that differ from traditional practices, forms or structures.
Analysis of variance	A statistical technique used in the analysis of experimental data. It's application in quasi- or non-experimental data is often misleading.
Behavioral contracting	A form of intervention involving an agreement among parties about the aim of the intervention and the consequences of achieving or not achieving the aim.
Comparison group	A group of individuals, schools, etc., with which a group receiving some intervention are compared to help learn about the effects of the intervention. Equivalent comparison groups (i.e., groups where no pre-existing differences are present) are preferred to comparison groups known to be non-equivalent, and equivalence is best achieved through randomization (see randomization).
Control group	A group of individuals, schools, etc., with which a treatment group is compared, and which is known to be equivalent. Control groups should be created through randomization when possible.
Control theory	A theory of delinquency that assumes people will engage in unsocialized behavior unless restrained. It specifies some ways to restrain youths from delinquent behavior.
Core data	Information about the results sought as outlined in the Alternative Education Program Announcement and the interventions specified in the program announcement.
Critical benchmark	A key decision, agreement, action, or arrangement necessary to move forward with a strategy or plan. If a benchmark is not met, progress in executing the strategy is blocked. When a benchmark is met, the forcefield changes. A benchmark statement tells what change in the forcefield must occur by when.
Delinquent	Behavior which is illegal. Includes some behavior

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behavior	(such as alcohol consumption) that is not illegal for adults.
Design decision	The choice of interventions that occurs at or near the end of the initial planning phase of project development. Design decisions should be reconsidered periodically using information about the decision's outcomes.
Deterrence theory	A theory that assumes crime can be reduced by the threat of punishment.
Differential association	A theory of delinquency that assumes people engage in delinquent behavior because they learn definitions favorable to law violation from those with whom they associate.
Diffusion	The spread of knowledge or information.
Dissemination	A set of activities consciously designed to encourage the utilization of knowledge or techniques in the development or redesign of programs.
Evaluation	Activity to determine what happened, why, and with what effect. Evaluation determines whether project activities produced any outcomes of importance; whether unintended as well as intended outcomes were produced. Evaluation subsumes both formative and summative evaluation.
Experiment	An experiment is activity undertaken deliberately to examine the consequences of the activity. The term experiment is often used to refer to true experiments, involving randomization (see randomization, true experiment).
Goal(s)	What an organization is trying to achieve. A goal generally the obverse of a problem; it specifies how the goal (or the level of the problem) may be measured. Goals are not broad or general aims. Such broad or general aims may be called missions.
Forcefield	The social-psychological field that immediately surrounds a decision or action. It includes the forces that compel or restrain against alternative actions as they are perceived by an individual or corporate actor. Organizations are held in place (do not change) because forces are in equilibrium. To create change, the balance of perceived or actual forces must be changed.

Formative evaluation	Activity undertaken during the course of a project to foster project development by determining what is being implemented, by whom, with what effect, and how effectiveness may be enhanced.
Implementation	The execution of an intervention. Interventions vary in the extent to which they are implemented as anticipated or planned.
Implementation manual	A blueprint for the implementation or replication of an intervention or set of interventions (i.e., program model). Such a manual includes a statement of (a) what the intervention is intended to achieve, (b) the theory underlying the intervention, (c) the resources required for implementation, (d) the training and personnel required, (e) detailed specification of the intervention, (f) implementation standards, (g) all forms and record keeping procedures required to operate and evaluate the intervention.
Implementation standards	A clear statement of indicators of faithful implementation (fidelity and completeness) of an intervention. Specifications or blueprints for an intervention define the implementation standards for the intervention.
Incapacitation	A theory that assumes crime can be reduced by locking up people who have engaged in delinquent behavior.
Institutionalization	Institutionalization occurs when an activity becomes routinized and part of the status quo in an organization. When an activity is institutionalized, more effort is required to terminate it or substantially modify it than is required to continue it.
Intervention	Activity undertaken to achieve an objective. Intervention is often synonymous with the word "treatment."
Involuntary withdrawal	Removal from the school rolls as a result of an administrative decision. In most cases this is equivalent to the colloquial use of the word expulsion.
Labelling theory	A theory of delinquency that assumes that treating an individual as though he or she were a delinquent results in the development of a delinquent self-concept and subsequent delinquent behavior.
Management information system	A tool used in formative and summative evaluation to provide information about plans, strategies, resources, obstacles, adoption, implementation, and outcomes.

Glossary

Management plan	A plan for implementing an intervention or set of interventions. A management plan is composed of strategies for adoption of innovations (see strategy) and of standards for the implementation (see implementation standards).
Mean	An arithmetic average.
Needs assessment	Activity intended to specify or clarify goals or objectives.
Post-randomization check	Activity to determine whether randomization achieved the equivalency of a treatment and control group by comparing characteristics of the two groups that existed prior to the initiation of the intervention, or which the intervention could not plausibly influence.
Objective(s)	An outcome that a project's theory of action implies must occur to achieve a goal. Objectives (intermediary outcomes) are stated in measurable terms. Ideally, a statement of an objective will specify when an objective will be achieved and how much improvement should occur as well as specifying how it is to be measured.
Obstacle(s)	Forces which hold the project back, impede the progress of a plan, or move the organization or individual in a direction opposite the intended direction. Obstacles may be perceived when none exist, or obstacles may exist where none are perceived.
Organizational diagnosis	Activity designed to assess the current status of an organization and the relations among its elements. Organizational diagnosis may include any of the following activities: (a) climate assessment, (b) assessment of goal confluence, (c) assessment of authority and decision structures, (d) assessment of communication and interpersonal relations, and (e) assessment of the match between goals and activities. Diagnosis attempts to interpret the interaction among the above elements at a point in time.
Powerful evaluation	An evaluation with sufficiently sensitive measures, adequate sample size, and with a design making the detection of intervention effects likely. Evaluations differ in power, and an evaluation lacking in power has a low probability of demonstrating anything conclusively.

Program Development Evaluation	A theory-ridden method of action research involving goal specification, theory elaboration, objective development, intervention definition, forcefield analysis, the development of management plans, and evaluation research. PDE is intended to result in an upward spiral of activity leading to greater organizational effectiveness in accomplishing its goals.
Resource	Any tool or force that furthers the adoption of an innovation, implementation of an intervention, or the achievement of a goal or objective. A resource may be a person, institution, physical or psychological force, information, money, or expertise. Both perceived and unperceived resources may exist.
Rigorous evaluation	An evaluation in which one may have confidence in the inferences drawn about the consequences of a demonstrably implemented and well-described set of interventions. Rigorous evaluation is a major goal of School Action Effectiveness Study.
Risk factor	A characteristic known to be associated with an outcome (e.g., delinquent behavior). Poor school performance is one of the risk factors for delinquent behavior.
Significance	A technical term meaning that the outcome was unlikely to have arisen by chance.
Site-specific data	Information about goals, objectives, and interventions in each prevention project, whether or not these results or interventions are suggested by the OJJDP program announcement or delinquency theory. It includes information about needs, goals, forcefields, strategies, interventions, and outcomes.
Social learning	A theory that assumes people behave as they do because they have learned about the consequences of behavior through their own experiences and observations of others.
Standard deviation	A measure of the extent to which individuals, schools, or other units are dispersed around the mean. A measure of dispersion useful in statistical analyses.
Strategies	Plans. Strategies are developed from a forcefield analysis. An executable strategy will appear workable to those who must execute it, and will make use of an organization's resources to overcome the obstacles to adoption and implementation. Strategies are composed of two kinds of elements: critical benchmarks and tasks.
Randomization	A procedure employed to ensure that treatment and control groups are equivalent except insofar as differences arise by chance. Randomization serves to rule out rival

	hypotheses about the sources of differences observed between treatment and control groups, and so leads to more rigorous evaluations. Because the technical meaning of randomization is not widely understood, randomization is best accomplished by experienced research personnel.
Regression	(a) A statistical technique useful in the analysis of experimental and quasi-experimental data. (b) Getting worse. (c) Movement from an extreme position in a distribution to a more central position.
Task(s)	The part of a strategy that specifies <u>who</u> will do <u>what</u> by <u>when</u>.
Theory	A statement of why a problem exists or of how an organization may achieve a goal. A project's theory of action serves as a template for choosing and assessing interventions.
True experiment	An experiment involving the random assignment of units (people, schools, classrooms, etc.) to two or more treatments (one of which is often a non-intervention treatment, or control condition).
<u>t</u>-test	A test for the significance of differences in means (see means, significance).
Victimization	Suffering personal harm, threat, or loss as a result of a crime.

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