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REDUCING SCHOOL CRIME A REPORT ON THE SCHOOL TEAM APPROACH

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Social Action Research Center August 1983

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### PREFACE

We count on schools to prepare young people for the responsibilities of adult life. At best, this is a difficult task. It is far more difficult when students cannot learn and teachers cannot teach because there is disorder in the classroom and they are afraid to be in school.

In the 1970s, the problem of school crime was brought to national attention, largely through the efforts of the Bayh Committee hearings (U.S. Congress, 1975, 1976, 1977) and the Safe School Study sponsored by the National Institute of Education (1978). The Office of Juvenile Justice and Delinquency Prevention (OJJDP) was asked to explore ways in which the federal government might help reduce problems of violence and vandalism in the schools. In 1975, OJJDP supported a planning study aimed at designing an appropriate role for the Justice Department in the area of school crime (Research for Better Schools, 1976).

As one outcome of this study, OJJDP made funds available to the Alcohol and Drug Abuse Education Program (ADAEP) in the then Office of Education to develop a program for the reduction of school crime. ADAEP had been working for several years to reduce problems of alcohol and drug abuse in schools. Its program, the School Team Approach, was seen by OJJDP as a promising method of dealing with the broader school crime problem.

Under an inter-agency agreement, OJJDP transferred funds to ADAEP to allow a test of the School Team Approach as a means of reducing crime in public schools. The program plan was worked out jointly by the two agencies. Evaluation of its impact was carried out by OJJDP through its research and evaluation arm, the National Institute for Juvenile Justice and Delinquency Prevention, under a grant to the Social Action Research Center.

The initial agreement called for training teams in 81 schools serving grades 5 through 12, the training to be carried out by three of ADAEP's regional Training Centers. The evaluation was to follow the teams for a year, from training in the spring of 1977 to the spring of 1978.

In the spring of 1977, OJJDP expanded the inter-agency agreement to allow training of an additional 210 teams, the training to be carried out by all five Training Centers. The evaluators worked closely with OJJDP and ADAEP staff over the next few months to design this second (Phase 2) program which was to overlap with the one already underway. The Phase 2 teams were to be trained in two groups, 135 in 1977-78 and 75 in 1978-79. Both groups were to be followed through the 1979-80 school year.

The primary purpose of both evaluations was to assess the effectiveness of the School Team Approach as a means of reducing crime, disruptive behavior, and fear of crime in schools. Beyond this, both evaluators and funders shared a common concern with the process by which change is brought about and the conditions under which it is most likely to occur.

also available:

Reducing school crime: a guide to program interventions. April 1983.

This report presents the findings from Chapter 3 in a format designed to made it useful for both team trainers and school staff. Findings are presented over six problem areas (vandalism, theft, drug and alcohol availability. attacks on students, attacks on teachers, and school climate) for high, middle, and elementary schools.

Supplemental description of data collection and measure development: team continuation in the schools. December 1982. This report provides background data for Chapter 4.

Evaluation of the Phase 2 program is the subject of the present report. (Findings from the Phase 1 evaluation have been described earlier: Social Action Research Center, 1979, 1980). The following Phase 2 reports are

Supplemental description of initial school violence levels and of technical methodology. February 1983. This report provides background data for Chapter 2.

Supplemental description of data collection and measure development: team projects. January 1983. This report provides background data for Chapter 3.

Teams and clusters: implementation of the School Team Approach. July 1980.

This report provides additional background for Chapter 4. It describes team and cluster operation and functioning based on data collected during site visits to the schools in 1979.

Inquiries should be addressed to the National Institute for Juvenile Justice and Delinquency Prevention.

A team is a work group, drawn from the staff of an organization, whose purpose is to improve organizational effectiveness. Over the last decade, the use of teams in private industry has grown rapidly. There have been fewer efforts to use teams to improve the effectiveness of public services.

For the past ten years, the Alcohol and Drug Abuse Education Program (ADAEP) in the Department of Education has been training school teams to work on drug and alcohol problems among students. ADAEP teams are small groups whose members are drawn from both the school and community. A team typically includes six to eight people--school administrators, teachers, counselors, students, parents, and members of community youth agencies.

The team spends two weeks in intensive training at one of ADAEP's five Regional Training Centers. Team members have two goals in training: to learn to work together as a problem-solving group and to develop a plan of action to meet the specific problems of their school. The Training Center provides a limited amount of technical assistance to help the team carry out the activities outlined in its action plan.

This is a low-cost program that relies on volunteer participation by school staff and community members. ADAEP funds cover training costs and technical assistance. The teams are expected to become self-sustaining groups that will continue to work on school problems after the withdrawl of federal support.

### The study

As a result of the interagency agreement between the Office of Juvenile Justice and Delinquency Prevention and the Department of Education, the School Team Approach was adapted to the problems of school crime, fear of crime, and disruptive behavior. Schools with documented crime problems

### EXECUTIVE SUMMARY

### What is the School Team Approach?

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applied to the ADAEP Training Centers for participation in the program. The schools selected included over 200 high, middle, and elementary schools located in 47 cities throughout the country.

Each group of schools showed a wide range of problem behavior--vandalism, theft, extortion, beatings, threats of harm, classroom disruption, drug use, and sexual assaults. Not all school crime is seriously "criminal," but this is also true of juvenile crime on the streets.

In common with the Safe School Study reported to the Congress in 1978, we found that all types of problem behavior, with the exception of alcohol and drug use, are more common in middle and elementary than in high schools, but the same kinds of behavior occur in all three groups. The pattern of crime behavior, however, varies with the age of students as does adult response to student crime. This suggests that school crime represents distinct syndromes, requiring different treatments, at different school levels.

The participating agencies shared a commitment to obtain the most comprehensive information possible on crime in the team schools over the three years of the study. Each year, over 35,000 students and 7,000 teachers reported on the extent of student and teacher victimization, classroom disruption, school safety, and student and teacher fear. These reports and information on team activities were used to address three questions:

- Does the School Team Approach reduce crime in schools?
- What kinds of team activities are most likely to lead to crime reduction?
- Do school teams become self-sustaining problem-solving groups?

### Does the School Team Approach reduce crime in schools?

Reduction in crime was measured by differences between initial student and teacher reports and those of the subsequent two years. This is what we found:

1. Effective teams can reduce the extent of crime in their schools. The longer the time teams work effectively, the greater the reduction in crime.

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- team activities.

Each team develops its own mix of crime reduction activities. These activities, or projects, are based on the team's appraisal of the needs of its own school and its judgment of what will improve the school environment and reduce crime.

Teams typically try three or four different projects as part of their action plan. These cover a wide range of activities. Here are some examples:

- vandalism

• small group meetings in which students and teachers talk about their feelings about each other • a student advisory council to work with school administrators

2. Not all kinds of crime change at the same rate. It is harder to reduce theft and drug use in schools than to reduce personal victimization, classroom disruption, and fear of crime.

3. Crime decreases most rapidly in the early months of team activity, then continues to decrease at a slower rate. This suggests a honeymoon effect after teams return from training when the expectation of change occurring 'in the school may be high. The visibility of the team and its activities may be a factor in initial change. It may also account for the more favorable responses of teachers than students as reporters of crime reduction, since teachers are more likely than students to be aware of

4. Reduction in disruptive behavior, attacks on students and teachers, and tension in the school is greater in middle than in either high or elementary schools. This suggests that a team's initial effect in the more turbulent schools is to cool out disorderly behavior.

### What kinds of team activities are most likely to lead to crime reduction?

• a time-out room for disruptive students in lieu of suspension • using students as monitors to keep order in the halls • recreational activities that involve both students and teachers • teacher visits to the homes of problem students rewards for students that behave well • a student/teacher/parent task force to work on the problem of

What kinds of projects work best? This depends on the grade level of the school. The high school teams that are most effective in reducing crime try to increase communication within the school and between the school and the community. They focus on active, responsible participation and the involvement of both students and adults in solving school problems. They promote the development of knowledge and competencies that will aid students in dealing with the world beyond the school.

The middle and elementary school teams that are most effective in reducing crime try to improve the school's handling of disipline and security and the overall safety of the school. Effective middle school teams also work on improving teacher/parent relationships. Effective elementary school teams work on improving relationships between students and teachers.

What works best in reducing crime depends on the age of the students, how they seem themselves in relation to adults, and how their behavior is viewed by the adults around them.

There are three broad themes that hold across schools generally.

- 1. It is necessary to have a minimum of order before student behavior will change. Students and teachers need to feel that the school is safe and that someone is in control. Once reasonable order is established, further efforts to control behavior are counterproductive. In middle and elementary schools, attention to security and improving the school's disciplinary system helps to reduce classroom disruption and attacks on students and teachers. In elementary schools, theft is reduced as well. In high schools, where disruption is less of a problem, such efforts are not effective in reducing crime.
- 2. Efforts to involve students and teachers in solving immediate school problems and to open up communication between adversary groups--students and teachers, teachers and parents--are more effective in reducing crime than efforts to improve student and teacher morale, their ability to get along with others, or their understanding of their own behavior. It appears easier to change people through their participation in work on problems of importance to them than through efforts to bring about personal change.

of school crime.

### Do school teams become self-sustaining problem-solving groups?

Teams obtain outside support from their school district and from the Training Centers. Schools in our study were selected in clusters of four from the same district and funds were provided for part of the salary of a district-level cluster coordinator for a few months after training. Teams fared better when the district continued to support the coordinator after the withdrawl of federal funds, and they fared better when there were other teams still active in the same district.

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3. It helps to involve parents. The optimal form of this involvement varies from one school level to another, but the presence of parents in some kind of active problem-solving role is related to the reduction

1. Teams can survive well beyond the termination of federal funding. Over a third of the teams (37 percent) were active in their schools in the year following the end of federal support (they were then in their third or fourth year of operation). A fifth of the teams (20 percent) were active in the following year.

2. There are many forms of team continuance and these figures underestimate the extent of team influence. Team activities may be taken over by other groups within the school. A team's projects may become part of the school's regular activities, thus making a permanent difference in how the school operates. Individual team members may initiate new projects on their own. They may change their behavior in the classroom and the way they relate to their colleagues and thus have an impact on both their students and fellow teachers.

3. The support provided to the team is a crucial factor in team functioning and continuance. The greatest enemies to the continuance of teams are the withdrawl of support from the principal and the loss of team members through staff turnover, layoffs, or school reorganization. What keeps teams going is the energy and dedication of team members, the support of the principal, and outside support for team activities.

The continuing support of the Training Centers is important to the continuance of many teams. Training Centers provide assistance with the development of team projects and with internal team problems. They also work as mediators with and trainers of both administrators and teaching staff and thus help create more hospitable settings for team activity.

### Conclusions and recommendations

1. The School Team Approach, when implemented well, is an effective and relatively low cost way to deal with the problems of school crime, disruption, and fear of crime.

The School Team Approach is not a fixed intervention developed for a single set of problems. It is a way to mobilize local school and community people to solve a variety of school-related problems and to equip them with the skills to do so effectively. It is an open and growing system and allows room for adaptation to changes in school and community needs.

2. There is a role for both local problem-solving and for a specific, though limited, federal role at the local level.

The School Team Approach lies midway between two opposing positions on the use of federal funds: designing a program at the federal level for local implementation vs. turning money over to local agencies to use as they see fit. The School Team Approach recognizes both the value of building on local knowledge and experience and the importance of providing the expertise necessary to put local experience to effective use. It allows recognition of the great differences among schools that require programs tailored to fit individual needs, resources, obstacles, levels of sophistication, and political realities.

Its aim is to institutionalize the federally-funded program after the withdrawl of federal support. What it proposes to institutionalize is not a specific program or set of programs but rather the presence in the school of a trained change entity that can be continually responsive to the course of local history.

choices in change efforts.

Teams do not always choose those strategies for change that are most likely to reduce problems in their schools. Team effectiveness could be improved by giving teams, during training, available knowledge on what works best in each type of school and by building into the training system provision for the ongoing collection and feedback of information on team project outcomes.

systems.

period of time.

The active support of the principal is crucial to team performance and to team continuance in the school. More lead time should be given to developing a strong base of principal (and, if possible, staff) support. Since committed principals may leave schools and be replaced by less committed ones, resources should be provided to maintain this support after teams have been trained.

The training of teams in clusters of schools from the same district and the provision of a cluster coordinator contributes to team continuance, Time and resources should be devoted to the development and maintenance of district-level support for team activity.

of new teams.

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3. Local wisdom is not necessarily sufficient to guarantee wise and effective

4. Teams do better the greater the diversity and extent of their support

Three kinds of action can improve the longevity of teams: strengthening in-school support, building a supportive network within the school district, and continuing technical assistance support over a longer

Team longevity is increased when contact with the Training Center is maintained over a longer period of time. This contact--phone calls, occasional site visits, and the inclusion of team members in regional training workshops--is considerably less expensive than the training

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5. It is important to measure both the quality of a new program and its impact over time.

The strength of a program intervention may wax and wane over time. We found substantial numbers of teams that improved their performance after a shaky beginning and others that fell apart after initial good performance. This process may continue over time, with team performance varying as the team's membership and its base of support change. In general, assessing intervention effects after longer time intervals than are usually allowed for in program evaluations should give a better indication of an intervention's power to bring about change.

6. The School Team Approach offers a way to create promising sites for research and development on delinquency and its prevention.

It takes time to build a new program and to create the conditions under which it can be carried out effectively. Many new programs make minimal contributions to knowledge--and are of limited value to their federal sponsors--because they are weak and poorly implemented and because they receive little or no support from the setting in which they are carried out.

It would be less costly to try out new ideas in settings that have proved hospitable to change efforts and in which skill in developing new programs has already been demonstrated. The School Team Approach has created a number of settings of this kind: schools in which teams have functioned effectively over a period of several years. This program is a way to develop research and development capability within schools. It is also a way to develop promising leads for new approaches to delinguency reduction.

This study has also pointed to some valuable areas for future research. The most important of these concerns differences in the way crime problems are reported within the same school. How much crime there is and how much of a threat to safety it represents is not seen in the same way by all of a school's students, nor by all of its teachers. Younger students, for example, tend to be more concerned about crime than older students. Girls tend to

view crime problems more seriously than do boys. The relative minority/ majority status of the student or teacher is also important (e.g., being a black student in a school that is predominantly white vs. a school that is predominantly black).

Differences in views of crime may also be related to whether or not the student or teacher has been a crime victim, to whether the student holds pro-school or anti-school attitudes, to the student's perception of the attitudes of other students, to the way the teacher views students, and to the teacher's educational priorities.

most at risk.

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If we could learn what combinations of background, experiences, and attitudes contribute to different perceptions of the same school environment, we would be in a better position to develop crime reduction programs targeted to those groups within a school that are most threatened, most fearful, and

### ACKNOLWEDGEMENTS

This study took the combined efforts of many people, both our program staff in San Rafael and our data analysis staff in Berkeley.

Our program staff was our link with the schools. Their good humor, persistence, and dedication in forging and maintaining this link made this study possible. Christine Cruikshank, Lin Chandler, Deborah Daniels, Gerardo Hernandez, Virginia Neto, and Carol Yamasaki maintained ongoing contact with team leaders, principals, and cluster coordinators as well as with the staff of the Training Centers. They participated actively in planning data collection, developing questionnaires and interviews, interviewing, and coding data on team activities. Rose Beckowitz and Laurie Cruikshank took on the enormous task of tracking survey administration, including the development of procedures manuals for the schools, the retrieval of survey data, and its preparation for optical scanning. Sharon McErlane, Mimi Riley, and Lloyd Westbrook conducted some of our follow-up interviews and coded vast quantities of data on team projects, maintaining both their sanity and a high level of reliability. Jean Laflin and Jane St. John produced some consistency in the technical assistance information provided by schools and clusters.

We acknowledge our special debt to Elaine Murray who supervised data collection on team projects and operation and the code development and coding of information on team projects which forms the basis for the analysis presented in Chapter 3. She also planned the analysis on team continuance and wrote the initial draft of Chapter 4.

Our data analysis staff worked with patience and equal good humor to balance research vigor with rigor. We are indebted to Tom Schnetlage who, in addition to other duties, took on the difficult task of creating usable incident data, and to Doug Downing, both of whom were with the study from the beginning; to Tom Prohaska, who undertook the analysis of the first year's outcome data; to Ron Starr, who developed our initial measures of team and cluster functioning; and to other members of the data analysis staff: Coronet Galloway, Richard Glass, Russell Miller, Susan Mueller, and Jane St. John.

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We are particularly grateful to our project monitors. Phyllis Modley worked with tact and understanding to balance the needs of ADAEP staff and Training Centers, OJJDP staff, and evaluators in developing and carrying out the evaluation design. Peter Freivalds provided patient support through the long and often frustrating years of data analysis.

Finally, we wish to express our appreciation to the students and staff in the participating schools who shared their views of the school and its problems; to the team leaders, members, and cluster coordinators who answered our innumerable phone calls, filled out repeated forms, and shared their progress and their setbacks; to the Training Center staff who put up with our interference with their work and tried to smooth our contacts with the schools; and to the staff of ADAEP and their National Data Base for their efforts to narrow the gap between the world of evaluation and the real world.

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A team is a work group, drawn from the staff of an organization, whose purpose is to improve the organization's operation and ability to meet its goals. Over the last decade, the use of teams in private industry has grown rapidly. There have been fewer efforts to use teams to improve the effectiveness of public service organizations, though teams have been used within school systems.

Research on team development (Woodman and Sherwood, 1980) suggests that teams lead to improved work climate and to positive changes in worker attitudes and job satisfaction. Evidence is less clear on the association between the use of teams and improved organizational performance, largely because of the difficulty of obtaining adequate performance measures in field settings.

For the past ten years, ADAEP has been training school/community teams to fight drug and alcohol problems among students. To our knowledge, their School Team Approach represents the most extensive effort to date at widespread team development in either public or private sector organizations (they have trained some 3,000 teams in schools throughout the country). The present evaluation represents the largest and best documented study of the impact of teams on a specific aspect of organizational performance (the reduction of crime and fear of crime).

The School Team Approach is an effort to mobilize the resources of the

### Chapter 1

### BACKGROUND OF THE EVALUATION

### The School Team Approach

local school and its surrounding community to deal with school problems. The vehicle for change is a team composed of both school and community members who are given training and technical assistance support to develop and carry out projects selected by team members as ways to reduce the problems they see in their school. Project selection depends on the team's assessment of local needs and resources. The federal agency (ADAEP) provides support for a few months after training, but the team is expected to continue as an ongoing change entity in the school after federal support is withdrawn.

The School Team Approach is based on these assumptions:

- school problems are embedded in a community context;
- effective problem-solving can be done best by the people who have faced the problems;
- the role of experts is to assist local people to become problem-solvers, not to impose solutions from the outside;
- change is an ongoing, not a static process.

The team intervention, which relies on local initiative, thus offers wide latitude for variation in its implementation.

Teams are recruited, trained, and given follow-up technical assistance through a group of five Regional Training Centers, each of which employs a small group of trainers and consultants. Over the course of their development, the Centers have developed ongoing relationships with school districts and state educational agencies in their regions. The basic outline of the training system is established by ADAEP central office staff. but the Centers have a good deal of autonomy in carrying out the training mandate. Continuity and comparability across Centers are maintained through on-site visits by central office staff, quarterly meetings of the

### How teams are developed

- training teams

Recruiting schools. The Centers publicize the availability of federal training funds, contacting schools, school districts, and state educational agencies. One or more pre-training site visits are made to interested schools by Training Center staff. The purpose of the site visit is to acquaint school personnel with the nature of the team intervention and their expected commitment to it. Schools selected for participation then choose a group of school and community members who will form the team. The group-typically seven in number--includes teachers, counselors, the principal or another administrator, a student or other young person, and a parent or other community representative.

Training teams. The team attends two weeks of residential training, along with teams from other schools. Training is intensive, generally covering both day and evening hours. It is devoted to building a team identity (the team selects one of its members to serve as team leader), helping the team develop an action plan, and offering a variety of content inputs about the causes of school problems and possible interventions to deal with them. Training emphasizes the prevention of problems before they become serious, the creation of a more humane school environment for both students and

Center directors, and yearly meetings of the training staffs.

The School Team Approach involves three steps: recruiting schools

• providing post-training technical assistance to teams

teachers, and the development of problem-solving skills that will enable the team to deal with both the presenting problems of drug and alcohol abuse and with other school problems as they arise.

Providing post-training technical assistance to teams. The team is offered continued contact with the Training Center after its members return to the school. The amount of time available for each team is limited by ADAEP funds (these cover training costs and an average of two to four days of technical assistance per team during the school year following training). The Centers are generally very creative in finding ways to spread these funds as far as possible--for example, by bringing several teams together within a single day where appropriate--and they also maintain telephone contact with team leaders. Technical assistance may be requested by the team or initiated by the Training Center. The amount received by any one team varies, depending on both team and Center assessment of need.

Training and technical assistance support have not remained static over the years, changes in their delivery reflecting both learning from experience and shifts in the nature of the schools and their students. In recent years, for example, ADAEP has placed increased emphasis on the need for structural change in the schools.

### Clustering

At the time we began the present study, ADAEP had moved from recruiting single teams to recruiting teams from clusters of schools within the same district. Typically, a cluster consists of a high school and three feeder elementary or junior high schools. The activities of the schools are

coordinated by a district-level staff person who serves as cluster coordinator. Clustering is intended to facilitate the work of teams in individual schools by promoting the exchange of ideas and support and by directly involving staff at the district level who are in a position to facilitate and support change efforts in the schools. It is also intended to consolidate changes occurring among students in the feeder schools through the development of similar programming in the high schools.

### Background

The interagency agreement called for training teams in 81 schools serving grades 5 through 12, the training to be carried out by three of ADAEP's five Regional Training Centers. Funds covered expenses of team members for two weeks of off-site training, four days of post-training technical assistance per team, and part of the salary of the team leader for a period of up to 12 months.

The evaluation was to follow the teams for a year, from training in the spring of 1977 to the spring of 1978. The major evaluation guestion was the impact of team activity on the level of crime and fear of crime in the participating schools. Attention was also to be given to the process by which change is brought about.

Current evaluation

In the late spring of 1977, OJJDP expanded the interagency agreement to allow the training of 210 additional teams. We worked closely with OJJDP and ADAEP

The Evaluation Plan

staff over the next few months to design this second program which was to overlap with the one already underway. Evaluation of the "Phase 2" program is the subject of the present report. Findings from the Phase 1 evaluation (the initial 81 teams) are described elsewhere (Social Action Research Center, 1979).

The Phase 2 agreement called for training 55 clusters, 35 in the first year and 20 in the second year of the program. A cluster was defined as four "organizationally related" schools (a few three-school clusters were allowed) and recruitment was done at a district level. For purposes of the evaluation, the following eligibility requirements were imposed:

- schools must be located in a city of over 100,000 population, the largest city in the state or territory, or a Standard Metropolitan Statistical Area that included a city with a population over 100,000;
- schools must serve students in grades 6 through 12;
- schools must document at least 25 crimes against persons per 1,000 students during the 1976-77 school year;
- teams must include a school security director or equivalent and a representative of the local juvenile justice system;
- schools must make a commitment to cooperation with the evaluation.

OJJDP monies were made available to pay district staff persons to work up to 50 percent time as coordinators of the clusters, to support the training of team members and cluster coordinators, and to provide an average of four days of post-training technical assistance per team. The cost of the total program averaged approximately \$13,500 per team, of which two-thirds went directly to the schools and their district offices. Our concern about lack of a baseline against which to measure change in the Phase I teams led to recommending an experimental/control design for Phase 2. This fit with ADAEP's need to spread training of the 210 new teams over a two-year period. The evaluation plan called for selection of all teams in the fall of 1977, with random assignment into two training periods: the winter of the 1977-78 school year (A teams) and the winter of 1978-79 (B teams). All of the participating schools would collect data on the level of crime and fear of crime at three points: prior to first-year training, a year later (prior to second-year training), and two years later.



By measuring change in crime between points X and Y, we can compare schools with a team (experimental or A team schools) with schools that do not have <u>a</u> team (control or B team schools). By measuring change in crime between points X and Z for the A teams and points Y and Z for the B teams, we can address the concern of ADAEP staff that change in the school may not be apparent before two years of team activity.

Evaluators and funders shared a common concern with the process by which

| IS | 1 <u>XT</u> | l    | Υ       | _1_ <u>Z</u> |         | _1 |
|----|-------------|------|---------|--------------|---------|----|
|    |             |      |         |              |         |    |
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|    |             |      |         |              |         |    |
| S  | I <u>X</u>  | l_   | YT      | IZ           |         | 1  |
|    | 197         | 7-78 | 1978-79 |              | 1979-80 |    |
|    |             |      |         |              |         |    |

XYZ = collection of crime data T = team training

change in schools is brought about and the conditions under which it is most likely to occur. The evaluation plan thus called for the collection of longitudinal data on team and cluster activitiy and on the projects carried out by the teams as well as data on school crime levels.

Implementation of the Evaluation Plan

### Selection of A and B teams

Assignment to the two training cycles was done by evaluation staff. It was necessary to assign within regions, since each Training Center was required to train seven clusters in the first year and five in the second. Random assignment was modified by prior matching on city size before selection. When two applicant clusters came from the same city, one was assigned to each training cycle.

### Training

Training of the first year teams was expected to be completed by the end of January 1978. Because of the short lead time for the program, recruitment of schools and scheduling their training was difficult. Only half of the first year clusters (51 percent) were trained by this date (see Table 1-1). In contrast, most of the second year clusters (80 percent) were trained before the Christmas break in the following school year.

Spreading training over a 7-month period in the first year and a 5-month period in the second introduced unwanted variation in the planned one year interval between A and B team training (see diagram on preceding page). There was similar variation around the times of crime data collection

October November December January February March April

(points XYZ in the diagram). The consequences of both sets of variation for the analysis of change in crime are discussed in Chapter 2.

Technical assistance

Total

Post-training technical assistance was to be completed by the end of September 1978 for the A (first year) teams and a year later for the B teams. An extension allowed the Training Centers to spread technical assistance visits over an additional year. The program was thus not officially terminated until the end of September 1980.

The schools selected for the program included high, middle or junior high, and elementary schools in a ratio of 2:2:1. The ratio held for both training cycles. The elementary schools were about equally divided between K-6 and

### Table 1-1

| Number | of | Clusters | Trained | by | Training | Month |
|--------|----|----------|---------|----|----------|-------|
|        |    |          |         |    |          |       |

| 1977-78 | 1978-79     |
|---------|-------------|
| 2       | 6           |
| 4       | 8           |
| 4       | 2           |
| 8       |             |
| 16      | 4           |
|         |             |
| 1       |             |
|         | <del></del> |
| 35      | 20          |

### Final sample: school level distribution

K-8 schools. Since the study was limited to grades 6 and above, we sampled only a portion of the school population in collecting elementary school crime data, though team interventions in these schools were generally directed to the school as a whole. Our findings for elementary schools thus represent an averaging of effects across two subgroups of schools differing both in the age range of their students and in social setting characteristics associated with age.

### Final sample: variation in sample size

The final sample consisted of 54 rather than the expected 55 clusters of teams. One of the original clusters failed to get school and district approval and was dropped prior to training. The remaining clusters contained 223 teams, not all of which were considered part of this study. We excluded 9 teams that had been trained in Phase 1, then retrained as part of Phase 2 clusters. This left 214 teams in the final sample.

The number of teams represented in the findings reported in the next three chapters varies from one set of analyses to another. Not all schools provided longitudinal information on crime levels and not all teams provided information on team operation and project interventions. Data on crime was obtained from around 190 schools, information on team functioning and project interventions from a somewhat smaller number.

This was the primary question presented for evaluation. The evaluation plan called for comparing change in the amount of crime, disruptive behavior, and fear of crime in two groups of schools: those trained in 1977-78 (the A teams) and those trained in 1978-79 (the B teams). The prediction was that the A teams, which were trained a year earlier and therefore had a longer time to intervene in the schools, would show more crime reduction than the B teams.

Problems in the implementation of the evaluation plan reduced the differences in available intervention time between the A and B teams and led to a search for alternative ways of answering the evaluation question. We finally did two parallel analyses, one using the A/B comparison originally planned, the other combining A and B groups and looking at the effect of available intervention time. In both sets of analyses we took account of the quality of the team intervention. We also looked at the effect of external events in the school that might be expected to interfere with team efforts at school change. These analyses are reported in Chapter 2.

What is the best way to reduce school crime? While not intended as a test of specific approaches to fighting crime, the evaluation offered

### **Evaluation** Ouestions

The evaluation addressed three major questions:

### 1. Does the School Team Approach reduce crime in schools?

### 2. What kinds of team activities are most likely to lead to crime reduction?

an opportunity to look at the relationships between a variety of team interventions and reductions in several areas of school crime.

Teams typically try several interventions or projects as part of their action plan for reducing crime. We defined, for each team, the general strategy they adopted in working for change, the specific kinds of change they hoped to bring about, and the kinds of crime problems they were concerned with changing. We looked at the relationship of each of these three ways of describing team interventions to the reduction of crime in the school and drew some conclusions about promising approaches to crime reduction. These analyses were done separately for high, middle, and elementary schools. They are reported in Chapter 3.

# 3. Do school teams become self-sustaining problem-solving groups?

At its best, the School Team Approach is expected to result in the institutionalization of the team as a part of the school's regular operation. Does this occur, and how often? What kinds of team performance can be expected, and over what period of time? What can be done to improve on these expecteds?

To answer these questions, we gave questionnaires and interviews to team leaders and cluster coordinators in the spring of 1979 and 1980 and conducted follow-up telephone interviews in the spring of 1981 and 1982. These provided information on team functioning and on the factors team leaders believe contribute to team longevity or lead to the demise of the team. Data on team functioning and longevity are reported in Chapter 4.

change.

As the description of the School Team Approach in the previous chapter indicates, the "it" in any did-it-work question is, by design, actually a diverse collection of distinctive projects stimulated by a shared training initiative and, at a very general level, shared objectives for change. Beyond these inchoate and abstract similarities lies much uniqueness in individual team strategies and objectives, deriving from team concern for the specific problem situation in their school. To do justice to this diffuseness, here and in later chapters, we will need to ask many did-it-work questions: why did it work? where did it work? for which kind of problems did it work? And for each of these, which of the many "its" we have studied yield positive answers to our evaluation questions?

Our experience in the earlier phase of the evaluation, along with other research on the problem (National Institute of Education, 1978), provided some rough guidelines for how a good study of the crime and violence problem

### Chapter 2

### SCHOOL TEAM IMPACT ON CRIME AND DISRUPTION

The first--and all to often only--question asked at the completion of an innovative social program is: "Did it work?" In keeping with this tradition, we give our answers to the questions of this kind that can be asked of the School Team Approach before examining, in later chapters, the additional and more incisive questions of the role of program processes in bringing about

### Measuring Crime in Schools

in schools should be designed. We attempted to address the following issues:

- There is great variety in the extent and nature of problems schools face, just as there is in their surrounding communities.
- To obtain dependable information on school crime, extensive effort must be expended in the technical aspects of research data collection: questionnaire design, sampling procedures, instrument administration, data coding and analysis.
- It makes a difference when in the school year one assesses crime and violence levels. Conclusions based on comparisons between schools observed at different points may be spurious.

Our research strategy called for three periods of data collection on school crime, each one year apart (see diagram, p. 1-7). The instruments used were questionnaires, one designed for students and one for teachers. The student questionnaire was to be administered to a large random sample of students (we requested 224) and the teacher questionnaire to the entire teaching staff in the participating schools.

We defined crime broadly, including questions on personal and property victimization, drug availability and other illegal behaviors, disruption, danger, and fear of crime. From these we formed more global measures that allowed us to form problem profiles of schools from both student and teacher perspectives.

Our unit of analysis was schools, not individual students or teachers. As we built school-level measures of crime, we found that it makes a tremendous difference who within the school is asked to describe its plight. Some

segments of the school population are affected more directly by violence or are more sensitive to violence, and this has a complex effect on how their experiences and perceptions are organized. For example, female teachers reports higher levels of fear than male teachers. A slightly more complicated aspect of this concern is reflected in the finding that, within a school. the relationship (correlation) between victimization and fear is of greater magnitude in younger than in older students. These crucial results fly in the face of coventional measurement theory, at least when the intent is to develop measures descriptive of the school as a whole.

The key consequence of this problem for the assessment of program impact is that schools might appear to improve--or become more violent and disruptive-simply because the mix of different types of respondents changed from one. measurement occasion to the next. Without some form of statistical control, it would not be possible to distinguish real change from the vagaries of sampling. We directed considerable resources toward the problem of adjustments and weightings of samples (similar to those done in epidemiological studies) to obtain measures of crime that could be interpreted from one year to the next without ambiguity.

Is school crime "real" crime? Should it be taken seriously by an agency devoted to the more general problem of juvenile crime? Here are some examples of incidents occurring in schools in our study:

Elementary schools

Student uncooperative, refused to follow directions; threw her desk around; misused her books; challenged teacher to a fight.

2-2

### The Initial Problems School Teams Faced

Four boys jumped one boy with forks, a butcher knife, and razor blades. Student hit teacher while being constrained from hitting two other

children.

### Middle schools

A group of 8th grade boys were shaking out other students for money and food over a period of a couple of months.

Two boys were playing the dozens in the stairs. Fight broke out. Hip injury to attacker.

8th grade student was brought into the office for smoking. Became very abusive and verbally assaulted the assistant principal.

### High schools

Two students were yelling at each other, one saying other was spreading rumors, other yelling back. Girl was crying. Two staff members split them up.

Student had switchblade knife on person during school hours--disruptive behavior when told to go home--shouted obscenities.

Offenders were asked to leave school grounds because they were not participating in activity which was going on. One offender struck a victim and a fight started between all involved, Teachers were stabbed with a knife.

At the least, each of these incidents is disruptive to the work of the school. Not all may live up to the reader's expectation of a real crime problem.

Zimring (1979), discussing trends in youth violence, states: "Public and legislative concern about violent crime committed by young people tends to crystallize around well-publicized and unrepresentative episodes of violent crime committed by young offenders" (p. 73). He goes on to note that most arrests for adolescent crimes of violence are in categories in which the police label says little about the degree of seriousness of the offense: robbery (ranging from "unarmed schoolvard extortions through armed, lifethreatening, predatory confrontations") and aggravated assault (ranging from "fistfights through shootings"). Youth violence in the community covers a wide range of seriousness of offenses, just as does youth violence in

schools. In both areas, the bulk of offenses fall at the less serious end of the scale. There is no compelling reason to believe that school crime is significantly different from crime in the streets.

With this digression, we turn now to a description of the crime problems in the schools at the outset of the team intervention. We look first at the incidence of specific kinds of crime behavior, as reported in the student and teacher questionnaires, and then at the summary problem indices that form the basis of the outcome change analyses presented later in the chapter. Taken together, these two will provide the reader with a good indication of the seriousness and diversity of the crime problems school teams faced as they began their work.

### Kinds of crime behavior

Three groups of questionnaire items indicate the seriousness of the crime problem: personal victimization, property victimization, and the availability of drugs and alcohol. Within each category, responses are available from both students and teachers (although not always on strictly parallel sets of questions) and are reported as average school-level percentages of respondents endorsing the item (the actual school-level index is slightly more complicated than this). Since crime levels vary with grade level of the school, data are presented separately for high, middle, and elementary schools.

Personal victimization. Table 2-1 presents baseline data on the incidence of personal victimization for student and teacher samples. We considered three types of personal victimization: actual injury, the threat of harm, and the

taking of possessions by force or threat of injury. Percentages in the table

# Table 2-1

First Year Incidence of Personal Victimization (Average Percent of Respondents across Schools)

|  | Students |      |      |        |       | Teachers |      |                  |       |  |
|--|----------|------|------|--------|-------|----------|------|------------------|-------|--|
| •  | Total    | •    | High | Middle | Elem. | Total    | High | Middle           | Elem. |  |
| Fighting in self-defense                       | 20.2     | ***  | 11.0 | 22.9   | 33.0  | na       | na   | na               | na    |  |
| Threatened with beating                        | 9.1      | ***  | 7.1  | 10.9   | 9.7   | 8.9      | 8.5  | 10.4             | 6.8   |  |
| Threatened w/knife, gun                        | 3.2      |      | 3.0  | 3.5    | 3.0   | 1.2      | 1.3  | 1.4              | 0.5   |  |
| Threatened w/sexual<br>attack                  | 5.4      | *    | 4.6  | 5.9    | 6.3   | 0.7      | 0.7  | 0.9              | 0.3   |  |
| Robbery w/force/threat:<br>food                | 5.5      | ***  | 3.2  | 7.1    | 6.9   | na       | na   | na               | na    |  |
| Robbery w/force/threat:                        | 8.5      | ***  | 5.6  | 11.1   | 9.4   | 1.1      | 1.3  | 1.0              | 1.1   |  |
| Robbery w/force/threat:<br>clothes/possessions | 5.8      | ***  | 3.8  | 7.1    | 7.0   | 2.4      | 1.4  | 2.0              | 5.1   |  |
| Hurt in personal attack:<br>no M.D.            | 8.7      | ***  | 4.5  | 11.3   | 11.7  | 2.0      | 1.4  | 2.6              | 2.1   |  |
| Hurt in personal attack:<br>saw M.D.           | 2.2      | ***  | 1.5  | 2.6    | 3.1   | 0.5      | 0.5  | 0.7              | 0.1   |  |
| Sexually attacked                              | 2.4      | .*** | 1.7  | 2.8    | 2.8   | 0.2      | 0.0  | 0.2 <sup>°</sup> | 0.2   |  |

189 schools

Probability of observed differences across school levels: \* p < .05\*\*\* p <.001

na = question not asked

2-6

190 schools

reflect the average proportion of respondents in a school who reported each type of incident. For example, across all schools, the average fraction of students who reported fighting in self-defense was one-fifth (20 percent), with 11 percent of high school students reporting such an incident, twice that fraction (23 percent) of middle school students, and three times that fraction (33 percent) of elementary school students. (The asterisks indicate that in a one-way analysis of variance the differences in fighting in selfdefense among school levels were significant at the .001 level.)

For student-as-victim, high schools are, in almost every category, safer places to be, with middle and elementary schools usually showing somewhat higher incidence of personal victimization. The most frequent types of personal offenses against students are "threatened with a beating," "robbery with force or threat: money," and "hurt in personal attack: no M.D.," with better than one in twelve students reporting such incidents. In terms of incidents that in the adult or outside-school world would be more clearly criminal ("threatened with knife or gun," "hurt in personal attack: saw M.D.," and "sexually attacked"), incidence ranges from 1.5 percent for personal attacks with injury in high schools to 3.5 percent for threats at knife- or gun-point in middle schools. In a school of 800 students, this represents from 12 to 28 such incidents from the beginning of the 1977-78 school year to the time of survey administration (December/January), or from 2,268 to 5,292 total incidents in the sample of 189 schools.

Turning to personal victimization among teachers, two things can be seen immediately. First, teachers are less frequently victims than are their students. Second, rates of teacher victimization are statistically

indistinguishable from one school level to the next. The most frequent category of teacher victimization, as for students, is "threatened with beating," with the overall average of 8.9 percent nearly equalling the rate for students. One in 200 teachers requires medical attention following a student attack, while one in 500 is sexually assaulted (three times as many are sexually threatened). As with the student statistics, these figures seem small. When we compute the number of actual incidents represented, it cannot be denied that teachers, as well as students, work in these schools at considerable risk of personal harm.

Property victimization. Property victimization incidents reported by students and teachers at the beginning of the study are summarized in Table 2-2. Of the four items in the student questionnaire, having property damaged or destroyed at school is the most frequent experience reported, occurring to nearly a quarter of all students. Theft of money, clothes, and other possessions occurs nearly as often, while having food stolen is reported much less frequently (whether or not it actually happens less often). The patterns of school-level differences in student property victimization experience is substantially the same as for personal victimization, with high schools showing considerably lower incidence than either middle or elementary schools.

Teacher property is a more likely target of victimization than their persons-As with personal victimization, school level makes practically no difference in the incidence of property victimization, except for theft of money which is statistically less frequent in elementary schools.

2-7

Drugs and alcohol. Table 2-3 presents percentages for student and teacher

# Table 2-2

First Year Incidence of Property Victimization (Average Percent of Respondents across Schools)

| •   |       | Studen   | its    | Teachers |       |         |        |      |
|---|-------|----------|--------|----------|-------|---------|--------|------|
|   | Total | High     | Middle | Elem.    | Total | High    | Middle | Elem |
| Theft of food   | 6.6   | *** 4.2  | 8.0    | 8.5      | na    | na      | na     | na   |
| Theft of money '  | 18.3  | *** 15.1 | 21.2   | 19.0     | 8.2   | ** 9.0  | 9.0    | 5.1  |
| Theft of clothes/other  | 23.6  | ** 21.3  | 25.9   | 23.9     | 14.9  | 14.6    | 14.4   | 16.4 |
| Damage/destruction of possessions                                   | 24.5  | *** 17.8 | 29.0   | 31.3     | 14.7  | 13.1    | 15.6   | 16.4 |
| Car damage  | na    | na       | na     | na       | 14.1  | 13.7    | 14.2   | 14.9 |
| Car break-in  | na    | na       | na     | na       | 2.5   | 2.6     | 2.1    | 2.9  |
| Car theft   | na    | na       | na     | na       | 0.6   | 0.5     | 0.5    | 0.7  |
| ungan in nga sana an anang sana an |       | 189 sch  | ools   |          |       | 190 sch | lools  |      |

.

Probability of observed differences across school levels: \*\* p <.01 \*\*\* p <.001

0

na = question not asked

2-9

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# Table 2-3

# First Year Reported Ease of Obtaining Illegal Substances at School (Average Percent of Respondents across Schools)

|                         |       | Studen   | ts     |       | Teachers |          |        |       |
|-------------------------|-------|----------|--------|-------|----------|----------|--------|-------|
|                         | Total | High     | Middle | Elem. | Total    | High     | Middle | Elem. |
| Alcohol                 | 54.8  | *** 69.1 | 50.2   | 35.7  | 62.0     | *** 82.2 | 53.8   | 36.8  |
| Marijuana               | 67.5  | *** 84.3 | 65.0   | 39.0  | 76.3     | *** 93.6 | 73.0   | 46.7  |
| Heroin/other hard drugs | 33.4  | *** 40.0 | 32.7   | 21.4  | 34.3     | *** 48.1 | 27.9   | 17.6  |

189 schools

2-10

•;

Probability of observed differences across school levels: \*\*\* p <.001

190 schools

•

questionnaire items relevant to substance abuse. Because of anticipated school and parental opposition, we chose not to ask students about their own use of alcohol and drugs. Following the Safe School Study (National Institute of Education, 1978), we inquired instead about the availability of illegal substances.

Clearly, students and teachers agree that it is easy to get high in school. Better than 9 out of 10 high school teachers report it is very or fairly easy to obtain marijuana at school, and better than 8 out of 10 high school students report the same. In general, high school teachers estimate availability higher than do their students, with the largest discrepancy (approximately 13 percent) concerning the availability of alcohol. Teachers in high schools may be more aware of the problem or may define availability differently than their students.

Marijuana is roughly twice as easy to get as are hard drugs such as heroin, with alcohol falling inbetween. For both groups of respondents there is a strong progression of increasing availability as we move from elementary to middle to high schools. Age trends for victimization and substance abuse are in reverse directions: as students become less disruptive, they seem at the same time to turn increasingly to the use of alcohol and drugs.

### Global problem indices

The items described above constitute only a fraction of the questionnaires administered to students and teachers in each year of the study. Two other main categories of questions were included, those dealing with respondent perceptions of conditions in the school (dimensions of school safety) and those dealing with respondent attitudes and emotions (for example, fear of crime). Taking all of these items together makes for a very large set of indicators of school conditions--too large to conduct a careful analysis of change for each item.

To make the task of examining school team impact on crime and disruption more manageable, we constructed a somewhat smaller number of global problem indices, each summarizing the information contained in several of the original questionnaire items. This data reduction process, which involve intercorrelating and factor analyzing the questionnaire items, yielded the scales described in Table 2-4. All analyses of the impact of school teams on crime levels were carried out on this set of scales.

It can be seen in Table 2-4 that the items discussed in the previous section are represented in the final scales. In addition, because of our multiple measures approach to assessing outcomes in schools, we have for student and teacher personal victimization and for student property victimization "double coverage" in the set of final problem indices (that is, both students and teachers were asked about the personal victimization of students, and so on). Parallel student and teacher judgments of student safety from personal attack are also available. The remaining scales describe the school through the eyes of the particular respondent group and include school safety from vandalism and theft, illegal behaviors, disruption, tension, and fear.

Figures 2-1A through 2-1L display initial school conditions in terms of the final set of problem indices. Each frame in the figure shows school means by level (elementary/middle/high) and two measures of dispersion (the standard

2-11

| Table | 2-4 |
|-------|-----|
|-------|-----|

| Global Problem Measures <sup>1</sup>         | Student | Teacher |  |  |  |  |
|--|---------|---------|--|--|--|--|
| Personal victimization: students<br>teachers | x<br>x  | x<br>x  |  |  |  |  |
| Property victimization: students<br>teachers | X       | x<br>xx |  |  |  |  |
| Alcohol/drug availability                    | x       |         |  |  |  |  |
| Illegal behaviors in school                  | x       | x       |  |  |  |  |
| Disruption                                   | x       | x       |  |  |  |  |
| Student safety from personal attack          | x       | x       |  |  |  |  |
| School safety from vandalism and theft       |         | x       |  |  |  |  |
| Tension in the school                        | x       | ×       |  |  |  |  |
| Fear of being attacked                       | x       | X       |  |  |  |  |

Student and Teacher Global Problem Measures

<sup>1</sup>Personal victimization includes both actual harm and threats of harm. For teachers it also includes verbal abuse--a violation of the social contract implied in the student/teacher relationship.

Property victimization includes loss through theft of or damage to one's possessions. For teachers there is an additional measure of theft or damage to the teacher's car.

Illegal behaviors includes stealing, selling stolen goods, bringing weapons to school, breaking school rules, and reports that teachers are afraid of students (the latter is not an illegal behavior, but the item scaled with the other items).

Disruption includes classroom behavior that keeps students from learning and teachers from teaching.

Tension includes frequent fighting and perception of the school as tense, unfriendly, and a place where others take advantage of you.

Fear includes, for students, reports of being afraid in school, worry about being hurt, and avoidance of certain areas within the school. For teachers, it includes reluctance to confront misbehaving students and consideration of the need for self-protective devices.

Measures were derived from student and teacher questionnaires. Both students and teachers were asked about the victimization of themselves and of the other group. Data were available for a teacher measure of alcohol/drug availability, but the measure was not computed for this study.



within 1 standard deviation of mean. x indicates minimum/maximum scores. 





2-17

...



2-19

deviation and the range) for each group of schools.

Some of the issues that surface when we attempt to ask both students and teachers about the same aspects of the school environment can be illustrated using the variable "illegal behaviors in school." This measure, which is identical in content for students and teachers, measures the extent to which

 students steal from one another • it is easy to get stolen things for sale at school many students bring weapons to school students break school rules any time they think they can • teachers are afraid of students

While the label "illegal behaviors" does not apply equally well to all items in this group, they cluster tightly enough together empirically to form a useful dimension along which schools differ from one another. Student and teacher reports of illegal behaviors are depicted in Figure 2-1G.

The lefthand panel of the figure indicates that there is little difference among the three levels of schools in the percent of students endorsing these statements--on the average, just over 40 percent. (In other words, despite differences in self-reports of victimization, students see little difference in this kind of problem behavior among the three school levels.) Turning to the righthand panel, however, it can be seen that there are large school-level differences in the reports of teachers concerning these same behaviors: the older the students, the larger the number of teachers that report such behaviors occurring in their schools. Elementary school teachers are less likely to mention these behaviors than are their students; high school teachers

Whose perception is correct? It is in the nature of perception that the probable answer is both. This being the case, we suspect it is more fruitful to concentrate attention on the possible effects these different perceptions have on students and teachers. From these differences in the perception of illegal behaviors, we would expect a greater proportion of elementary students than teachers to be fearful and the reverse to be true in high schools. This is exactly what we find (Figure 2-1L).

To digress slightly, we can add context to these differential relations among school problem indices by considering information from concurrent questionnaires completed by the school principals. The treatment of problem incidents by the schools suggests that their nature is either less serious in elementary schools or that they are viewed as less serious acts when carried out by younger children. Disciplinary actions that involve removal of the child from the school occur less frequently in elementary than in middle or high schools. Elementary principals have fewer meetings with parents around disciplinary problems. They use fewer security personnel, and those they do use less often wear uniforms or carry guns. The severity with which various kinds of misbehavior are punished increases from elementary to middle to high schools. High school principals are most likely of the three to endorse the need to keep order as a primary function of teachers (though disruption is more often seen as a problem by teachers in elementary and middle schools) and to see isolation of troublemakers and stronger discipline as the solution to problems of disruptive behavior.

Although there are no school level differences in student reports of illegal behaviors, students are at less risk of either personal or property victimization

once they have made the transition from middle to high school (Figures 2-1A and 2-1B) and are judged by their fellow students as at less risk of attack by others (Figure 2-1I). Older students are also less likely than younger ones to see their schools as tense and unfriendly (Figure 2-1K) and are less often afraid while in school (Figure 2-1L).

This pattern does not hold for teachers. Though teachers report knowledge of more instances of student personal victimization in elementary and middle than in high schools (Figure 2-1A), elementary school teachers judge students to be safer from attack than do their middle and high school counterparts (Figure 2-1I). Their judgments of student safety are at wide variance with those of their students who, compared with teachers in the same schools, more often report danger of personal attack, tension in the school, and fear of being hurt.

Thus there are not only diverse kinds of crime but diverse views of the crime that occurs. There are two points to be made from this review. First, school crime should not be considered solely in terms of how many illegal acts occur on school grounds. There is a sizeable core of both students and teachers who admit to being afraid in school. This number is larger than those who actually experience personal victimization, but smaller than the number who believe their schools are unsafe for students and the number who report the occurrence of illegal acts. To the extent that it interferes with learning and with the quality of school life, the perception of the school as dangerous is as legitimate an object for intervention as actual crime incidence.

Second, we should be prepared to think of school crime in terms of differences in the developmental and socialization needs of students and to take account

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of the meaning that specific kinds of behavior have at different developmental stages. Elementary schools are more troubling to their students than to their teachers. The reverse may be true in high schools. The crime problem is different for younger and older students. We will find in Chapter 3 that what works with youngers may not be what works with olders, and that what makes students feel better may not do the same for their teachers.

### Outcome of the Evaluation

### Problems in implementation

The design of the school team program and its evaluation were intended to maximize the clarity with which program impacts, if any, would be demonstrated. This meant controlling which schools participated in the program, how they were assigned to immediate and delayed start-up conditions, and when the extensive outcome assessments were conducted. Had all gone as planned, the data would fit neatly into a predetermined statistical analysis model, and statements of conclusions would have been as scientifically sound as any ever made in the field of social program evaluation. This commitment to the value of unambiguous evaluation findings is rare in the planning stages of an undertaking. The concern for clarity was coupled with equal emphasis on comprehensiveness: the survey instruments used were thorough; the samples to which they were administered were the largest ever in a study of this kind; local processes of program implementation were extensively documented.

Standards for success in the execution of a study of this scope are nonexistent. How much slippage, foot-dragging, and the like is unacceptable? More importantly, how much is unavoidable? There are no firm answers to these questions but, by many standards, the study was extremely successful and carefully executed. A massive store of information has been accumulated, the first efforts to make sense of which are reported here. More are needed.

In carrying out the first major analyses of the school team database, we found ourselves struggling with the effects of a myriad of small discrepancies between the study's planned and actual form, which we have gone to great lengths to monitor. This weakening of a grand plan may have blunted our vision. Our cautiousness is the product of lengthy immersion in the details of survey research problems.

The study was a poor fit to the mold envisioned in the planning stage. The simplicity and straightforwardness of the original analysis plan would conceal more than it revealed if we implemented it as planned. But by the same token, the investment in the experimental model was huge and could not be ignored. The question we struggled with was: insofar as the essence of the study, as implemented, was arguably a poor approximation to controlled experimentation, was there another model or framework within which critical weaknesses could be turned into strengths? In other words, we sought a complementary analysis approach that would capitalize on the very features of the data that undermined the statistical validity of the original planned experimental contrasts. At the same time we explored ways to modify the original analysis plan to accomodate the realities of the data being analyzed.

The specific featu reviewing here:

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The specific features of the data that we found problematic are worth

<u>Confounding of training and pretesting</u>. The comparison group model required that the delayed start-up group (the B teams) not begin program implementation until after a second wave of baseline problem level data were gathered (see diagram on p. 1-7). This rarely happened. It was more typical for B school teams to have been trained and begun work in the schools several weeks (in some cases, over 100 school days) before the second testing. Thus the crucial "no treatment" condition between points X and Y for the B teams was essentially absent in the study.

Departures from the testing schedule. Schools were asked to administer the student and teacher questionnaires at the same time each school year (ideally in late November or early December). This was intended to provide equal intervals (approximately one year) betweeen testing periods and to avoid the problem of variation in reported crime with time of year. As these schedules slipped, the targeted one-year intervals got longer in some schools and shorter in others, completely blurring the distinctions among groups of schools ostensibly in different treatment conditions.

The joint impact of these two features of the study's implementation are seen clearly in Figures 2-2 and 2-3 which show the distribution of duration of team activity (time elapsed since training) at the time of the second (Figure 2-2) and third (Figure 2-3) testing occasions. What we have is a single continuum of differing lengths of intervention time in which A and B teams, though they do not overlap, are contiguous.

### Alternative models for measuring change

The two sets of analyses described in this chapter are the product of these







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Figure 2-3

Number of School Days from End of Training to Second Post-Test



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methodological considerations. We reasoned that a dual-pronged analysis approach was required to fully address the situation depicted in the foregoing figures.

ANOVA model. Since the distributions of "amounts of treatment" did not overlap for A and B teams, there was good reason to expect the original analysis model to show some sensitivity to team program effects, if they were present. We used a repeated measures analysis of variance, or ANOVA model. The prototypical pattern of results to be expected with this approach is shown in Figure 2-4A. The B teams schools were expected to show no change in crime levels during the first (control) year, the A team schools to show a decrease in crime levels. During the second year, the B team schools were expected to show a decrease in crime (comparable to that shown by the A team. schools in the first year), while crime levels in the A team schools continued to decrease.

We made no specific predictions about the rate of change over the two years. Some program staff had stated that it takes two years for a team to make a real difference in a school. This would suggest a faster rate of change in the A team schools in the second year compared to the first. It could equally. well be argued that rapid change would occur during the first year (because of expectations of improvement generated when a school begins to take active steps to deal with its problems), with continued improvement, at a slower rate, in the second year.

Regression model. The alternative approach to analysis of program outcomes exploits the unwanted differences in intervention time among teams. Each . assessment of the level of crime in a school can be linked with a specific

Figure 2-4 Predicted Change in Level of Crime Figure 2-4A: ANOVA Model Problem high Crime of Level low 78-79 79-80 77-78 Year of Testing Figure 2-4B: Regression Model Level of Crime Problem high low 6 12 18 24 0 Months of Intervention Time





amount of team intervention: no intervention at the pre-test and varying amounts of intervention (O to 24 school months) at the two post-tests. We would expect problem levels in the schools to decrease as intervention times become longer. This prediction is graphed in Figure 2-4B. Again, we made no specific predictions as to rates of change.

The second approach (a regression model) makes no distinction between A and B teams. Each of the three testing periods for a team is treated as a separate point in the diagram above. This is not a strictly longitudinal model, since each team does not contribute data at each time point. All teams are sampled at 0 intervention time. Different sets of teams are sampled at the remaining intervention times (this can be understood by reference to Figures 2-2 and 2-3). This approach assumes that teams at different intervention points are equivalent except in their amount of intervention in the school, an assumption for which we have no compelling contradictions.

Intervention quality. Some teams get little accomplished, and take a relatively long time to do it. Others work swiftly and efficiently. It seems obvious that in near 200 separate team interventions, some will be done more effectively than others. Quality of intervention is not generally considered as a factor in the analyses underlying social program evaluations, though it is beginning to receive some attention in the literature (Cook and Poole, 1982). We wanted to incorporate information about team effectiveness into each of our analysis models.

For the ANOVA model we formed subgroups of schools based on ratings of team effectiveness. For the regression model, we conceived of the notion of

"effective intervention time." The intervention time paired with each outcome score was adjusted on the basis of how effective the team was judged to be during the associated period of its activity. Though both were somewhat crude procedures, they seem to come close to the real question of interest concerning the effects of school team activities.

Neither the analysis of variance nor regression models are ideal. They are alternative ways of describing the evaluation data. Between them, we will make a case for assessing the impact of the team intervention.

### Testing for expected differences between immediate and delayed start-up conditions: ANOVA results

The analyses of variance test for patterns of change in school problem levels from the first to the second to the third years of the evaluation. Referring back to Figure 2-4A, the clearest and simplest positive result would be for schools in the A group to show steady decreases in levels of crime and for B schools to begin to show decreases only after beginning program implementation (after the second measurement of problem levels). This is the situation depicted in the figure.

A slightly less precise, but essentially equivalent analysis result would be for the overall amount of improvement (crime reduction) to be greater in A than in B schools: i.e., the longer a team works in the school (one vs. two years), the more positive the outcome.

Either of these patterns can be superimposed on school conditions that amount to progressive deterioration: stemming a negative trend is every bit as positive an outcome as improving a negative status quo. We shall

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group these two patterns under the heading of cycle effects, indicating that schools going through the earlier training cycle (A teams) did better than those going through the later cycle (B teams).

No amount of time may be long enough for an ineffective team to produce positive results. We built in a test for this possibility by forming four groups of schools within each training cycle on the basis of how effective their teams were judged to be in each of the last two years of the study. We used judgments of team functioning made by cluster coordinators, trainers, and evaluation staff. These were used to form two team effectiveness scales, one pertaining to activities in 1979 and the other to activities in 1980. By dichotomizing each of these scales, schools could be divided into four groups:

- teams judged high (above average) in effectiveness in both years (56 teams)
- teams judged low (below average) in effectiveness in both years (56 teams)
- teams judged high in effectiveness in 1979 but low in 1980 (34 teams)
- teams judged low in effectiveness in 1979 but high in 1980 (31 teams)

If team effectiveness makes a difference, the predictions made above should be more clearly borne out for the groups high in rated team effectiveness.

Before reporting our findings, we should note one other pattern of results which we may be justified in interpreting positively. If the analysis indicates that all schools, without regard to cycle or team effectiveness group membership, have improved, it is possible that participation in the school team program may have helped. It is also possible, of course, that such a pattern reflects effects having nothing to do with the program, and so we make no inferences as to their source. Positive (or negative) trends in levels of school crime in a national sample of schools are worth describing, however, whether or not we are in a position to attach causal interpretations to them.

In all, changes in 20 distinct measures of school conditions (see Table 2-4) were analyzed via the ANOVA procedure. Table 2-5 summarizes the results of these analyses. Looking first at the columns headed "overall trends," it appears that, very generally, conditions improved in the schools participating in the program, especially in the eyes of teachers. The changes seem to be concentrated in the subset of school problem indicators best described as "soft" outcomes: safety, tension, fear, etc. While less disruption is reported by the respondents in our study, experiences of personal victimization show no improvement. In fact, the only consistent change in our "hard data" indicators of crime (increases in student and teacher property victimization) suggests that theft may be on the upswing in these schools.

How do we interpret these at best inconsistent and at worst disconcerting results? First, we must emphasize that these are historical trends and may have nothing to do with the work of school teams. Hence, any interpretation we give is more by way of reasoned speculation than causal inference. Assuming team activity has influenced these crime trends, it is possible that either (a) the teams are able to affect only attitudes, not actual behaviors (a frequent criticism of team-building approaches), or (b) hard data indicators change more slowly, so that more time is needed to observe team effects. We will address these further below.

There is a third possibility. From our experience with these schools, a

### Table 2-5

### Summary of Changes in School Problem Levels: ANOVA Estimates

| Global problem measure                      | Student Reports   |                      | Teacher Reports        |                   |                      |                       |
|---|-------------------|----------------------|------------------------|-------------------|----------------------|-----------------------|
|   | Overall<br>trends | Cycle<br>differences | Team effec.<br>x cycle | Overall<br>trends | Cycle<br>differences | Team effec<br>x cycle |
| Personal victimization                      |                   |                      |                        | હ                 |                      |                       |
| Student-as-victim                           | *1                | ns                   | ns                     | ns                | * '                  | *                     |
| Teacher-as-victim                           | ns                | ns                   | ns                     | ris               | ns                   | *                     |
| Student safety                              | ns                | ns                   | ns                     | ****2             | ns                   | ns                    |
| Property victimization<br>Student-as-victim | ****3             | *                    | ns                     | ns                | *                    | ns                    |
| Teacher-as-victim                           | ns                | ns                   | ns                     | ****3             | ns                   | *                     |
| Vandalism                                   | ns                | ns                   | ns                     | ****              | ns                   | *                     |
| Alcohol/drug avail'ty                       | ns                | ns                   | ns                     | na                | na                   | na                    |
| Illegal behaviors                           | ns                | ns                   | ns                     | ns                | ns                   | ns                    |
| Disruption                                  | **2               | ns                   | ns                     | **2               | ns                   | **                    |
| Tension                                     | ns                | ns                   | ns                     | ***2              | ns                   | ns                    |
| Fear  | ***2              | **                   | *                      | *2                | ns                   | **                    |

<sup>1</sup>Mixed trend over three-year period in all schools.

 $^2 {\mbox{Essentially steady improvement over three-year period in all schools.}$ 

 $^{3}$ Essentially steady worsening over three-year period in all schools.

\* p<.10; \*\* p<.05; \*\*\* p<.01; \*\*\*\* p<.001.

ns = not significant

na = measure not available

Repeated measures ANOVA includes covariate adjustments for unequal time intervals between testings and for effects of disruptive events in the school (e.g., teacher strikes, desegregation).
picture of "the crime-ridden school" has emerged in which a syndrome of problems reinforce one another. Victimization is rampant, leading to student and teacher fear and a climate of tension in the school. These "soft" problems interfere with teaching and learning every bit as much as does victimization. An important outcome of the school team intervention would be the severing of linkages in this syndrome of mutually reinforcing problems. For example, if the social processes of communication and miscommunication that breed fear from victimization were redirected toward a shared belief in the power of change, the business of education could be conducted more effectively even before the incidence of violence comes under control. More sensitive and complex analyses than we have been able to undertake would be needed to test for this kind of change in the structure of the crime syndrome in schools.

We turn now to a discussion of results that can be clearly described as team program effects. Cycle differences are reported for student personal and property victimization (the latter as seen by both students and teachers) and for student fear of crime while at school. These differences mean that students in schools whose teams were trained early in the program (A teams) experience greater reductions in victimization and fear than their counterparts in schools whose teams were trained later in the program (B teams) and in which team activity necessarily ran a shorter course.

These effects are graphed in Figure 2-5. In each frame of the figure, the solid line (representing the A teams) depicts a more favorable pattern of change over the three-year period of the study than the broken line (representing the B teams). Student theft, the only self-report victimization measure of the



four, does not begin to respond to team efforts in Cycle A schools until sometime during the second year of team intervention. This may support the suggestion made above that "hard data" indicators require either a more sustained effort or simply a longer lag-time before responding to treatment intervention. The patterns of change shown by the Cycle B teams on these measures, especially the changes from the first to the second observation, provide evidence that the methodological assumptions underlying the evaluation design (e.g., that shcool conditions would remain stable in the absence of team activity) may have been violated.

To follow up on the hypothesis that the "hard data" victimization measures may be slower to change than other indices of crime, we examined plots of findings like those shown in Figure 2-5 (and below in Figure 2-6) for additional supporting evidence, even on measures in which change was not statistically significant. In several cases we found patterns consistent with this interpretation. This argues against the criticism that change strategies like team-building are able to change only attitudes and not objective conditions. It suggests instead that change may be of a sequential nature, manifesting itself first in attitudes toward and perception of the problem and only somewhat later in reports of reduction in specific incidents of crime. Whether this sequence is causal, with attitudinal changes necessarily preceding changes in objective conditions, or simply temporal is a question for further, more refined analyses.

Returning to Table 2-5, we now consider the remaining type of program outcome, that associated with differences in how effectively teams carried out their program activities. The heading, "effectiveness x cycle," indicates that team effectiveness is linked to program outcomes but that the linkages are different for the two training cycles. Except for student reports of fear in school, these linkages appear only in the reports of teachers. The relationships among team effectiveness, training cycle, and outcome show a number of distinct patterns, but each reflects some combination of positive results consistent with predictions made on the basis of differences in the effectiveness of teams.

A graphic illustration will help communicate how team effectiveness differences operate in the data. Figure 2-6 displays the pattern for the measure of vandalism derived from teacher questionnaire responses. It presents dramatically the problem posed by the data when we look at A/B differences over effectiveness groups.

If we select only teams rated high in effectiveness both years (those designated by squares in the graphs), the findings are gratifyingly like our predictions: in the A group, a downward trend in the percent of teachers who see their schools having problems of vandalism and theft, somewhat sharper in the first year; and in the B group, no change during the first year followed by a sharp decline in the second (the slope of change for the B teams in the second year is almost identical with that of the A teams in the first year).

Findings for the three remaining groups of A teams appear to be explicable in terms of their relative effectiveness, provided that we argue that a first-year momentum for the High/Low effectiveness group (designated by circles in the graph) spilled over into the second year, even though the teams were functioning more poorly at this time. It is less easy to

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28 SCHOOLS, 4 EFFECTMENESS GROUPS 2A SCHOOLS, 4 EFFECTIVENESS GROUPS 0.80-0.80 0.75-0.75 SCALE SCALE SCALE 0.70-I 14 0.65 1 Legend ALOW RE-LOW DO 0.60 0.60 -OUNTS-HO -1173-104 84 -1175-1138 9.55 0.55 1977-78 1978-79 1979-80 1977-78 1978-79 1979-80 n=19 Low-Low n≃29 Low-Low Low-High n= 5 Low-High n=20 n=14 lligh-Low n=14 High-Low High-High n=18 High-High n=30

Figure 2-6

Teacher Reports of Danger from Vandalism and Theft

Scores are corrected for disruptive events and for unequal time intervals between testing.

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explain what happens in the schools of those B teams initially rated low in effectiveness during the year before which they were to be trained. Their schools (designated by triangles and diamonds in the graph) show sharp declines in the percent of teachers reporting problems during this year. This phenomenon occurs with a number of other teacher (and student) measures.

What was happening with the ineffective B teams? It will be remembered that most B teams had had some post-training time in the schools prior to the second administration of the outcome questionnaires. One possibility is that these teams had had more intervention time prior to the first post-test than their more effective counterparts. We found the reverse to be true, suggesting that less is more as far as change is concerned--an implication of the data we were not yet prepared to accept. Another possibility is that the ineffective teams had had greater visibility in their schools during the first year and were thus more likely to create an expectation that things were about to improve. We found that the low effective teams did come from smaller schools than the high effective teams and were more often led by either school administrators or counselors. This provides some support for the latter argument, though it does not provide a definitive answer to the problem.

These findings raise a number of questions about the appropriateness of a group comparison model as a way of describing change in our data. The model does not take account of the variation within each group in the amount of time between training and the collection of post-test data. It is also unable to deal with the question of whether or not the teams had actually been working in the schools throughout the followup period. For example,

a team that ceased to operate as a team after three months was classified as low effective; so was a team that labored, inadequately, throughout the entire followup period.

# team activity: regression results

These considerations led to our second analysis model. We developed, for each team, a measure of intervention time that took account of the number of days a team was actually operative in the school: from the time it returned from training to the time at which it ceased to function, if it failed to continue throughout the followup period. Intervention time, computed for the periods preceding each of the three administrations of the questionnaires, was weighted by the judged effectiveness of the team during the followup period. For example, if two teams had been working in their respective schools for one year when the second testing took place, but were not rated as equally effective, the less effective team would be assigned a smaller effective intervention time.

Our measure of intervention time thus equates a given period of effective time with a longer period of less effective time. The measure is crude, but at least a beginning attempt to assess intervention quality. It can be considered as a more refined application of the experimental (treatment)/ control (no treatment) comparison.

We combined the data from A and B teams and used their scores on effective intervention time at each of the three survey administrations as predictors of crime problem level in the school. It should be remembered that we are not talking about the same teams at each point on the regression (predicted

# Testing for the length and quality of

outcome) line. Though each team contributed three measurements, different groupings of teams appear at different intervention times, the groupings depending on time of training, time of administering the surverys, and time of dropping out of the program if the team did not continue through the entire two-year followup period.

Results from the regression analyses relating outcome crime levels to amount and quality of team interventions are summarized below. We found the length of effective intervention time is associated with:

- lower levels of fear, tension, and illegal behaviors as reported by students; there are also lower levels of disruption and danger of attack by others, though not at a level of statistical significance;
- higher levels of student theft victimization, though there is a decline in these levels with long intervention times;
- lower levels on all teacher measures of crime problems except victimization by theft (this decreases, but not at a level of statistical significance); the strongest relationships are with teacher perceptions of student safety from attack by others, school safety from vandalism and theft, student reports to teachers that they have been theft victims, and the presence of illegal behaviors.

Intervention time/problem level relationships in the teacher data are strongest in the middle schools, at least for measures of disruption, tension, personal victimization, and student reports to teachers that they have been personally victimized. This suggests that team interventions in middle schools may be initially most successful in dealing with acting out rather than strictly delinquent behavior.

For all measures except student theft victimization, the regression line shows a sharp decrease with short intervention times, followed by a more gradual decrease as intervention time gets longer. This suggests that there may be an initial "honeymoon effect" during the first weeks after teams have returned from training--team enthusiasm is at its height and the reality of implementing change programs has not yet taken its toll--with the <u>rate</u> of change decreasing as time progresses.

As in the ANOVA analyses, we considered the possibility of non-team factors that could obscure intervention/outcome relationships. It was clear from our interviews and phone conversations with team leaders that many schools were in a terrible plight: budget crunches, teacher layoffs, declining enrollments, desegregation leading to mass transfers of students, staff reorganization, and imminent school closings all took their toll in lowered teacher and probably student morale. Team interventions--indeed, any change efforts-could be expected to encounter more difficulties in such schools. We created a measure of the number of such disruptions occurring in each of the followup years. Building a correction for disruptive events into the regression analyses did not materially affect the findings reported above. In most cases it increased the significance of the observed relationships.

The findings from the effective intervention time analyses are congruent with those from the A/B comparisons, but they show stronger relationships between team activity and decreased problem level in the schools. This is reasonable, given the more complete use of data on interventions in the former model. (Results of the ANOVA analyses are given in Appendix A; the regression analyses are given in Appendix B.)

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#### Summary of Findings

We developed two alternative ways of looking at change in the level of . school crime. Neither represents an ideal fit to the data: they are approximations necessary because the original evaluation design was not implemented as planned. Both approaches take account of the quality and duration of the team intervention, and both make some correction for disruptive events occurring in the school, independent of the intervention, that can be expected to make change more difficult to bring about.

The data support these conclusions:

- 1. The amount of effective team intervention is related to the amount of decrease in levels of crime problems in schools.
- 2. Not all aspects of crime change at the same rate. We used a number of different measures of change, including attitudes, perceptions of crime conditions, and self-reports of victimization experiences. It appears easier to change emotional response to crime conditions (fear of being hurt), perceptions of school safety, disruptive behavior, and attacks on teachers than to change theft and attacks on students. Theft is particularly resistant to team change efforts, though there is evidence that it may be affected by long team interventions.
- 3. The rate of improvement is typically greatest in the early months of team intervention, with improvement slowing down as intervention times get longer. This suggests the operation of a honeymooon effect after teams return from training, when the expectation of change occurring in the school may be high. The visibility of the team and its activities

change.

4. Change is greater in middle than in high or elementary schools on measures of disruptive behavior, attacks on students and teachers, and tension in the school. This suggests that a team's initial effect in the more turbulent schools is to cool out disorderly behavior.

Finally, we have argued for these points in addressing crime in the schools. First, the manifestations of crime are various. It is as important to deal with issues of fear and perceived danger as with specific criminal acts. Second, the pattern of crime measures varies with the age of students, as does adult response to student crime behavior. This suggests that school crime represents distinct syndromes, requiring different treatments, at different school levels. Third, though much of what is included as school crime may not seem seriously "criminal," school crime shows as great variability in its seriousness as does crime on the streets, and it exacts hidden costs in the disruption of education of those who are its victims and the much larger numbers whose participation in education is limited by fear and the disorderly behavior of others.

may be a factor in initial change and may also account for the more favorable responses of teachers than students as reporters of positive

### Chapter 3

### TEAM PROJECTS AND THE REDUCTION OF CRIME

During training, teams plan the specific projects they will undertake in the schools in order to reduce crime. Not all projects are actually carried out. Teams may plan beyond their available time and energy. They may underestimate difficulties in getting projects underway. The loss of team members through transfers or layoffs may make it impossible to carry out plans in full. Of those projects planned at training, 60 percent were put into operation in the schools.

The projects carried out by the teams varied widely, both in number and kind. Thus, one team might concentrate its energies on a single activity--e.g., reviving a flagging parent-teacher association. Another might develop a school discipline handbook, an orientation program for incoming students, after-school sports activities, weekly breakfasts for teachers, and a school beautification campaign. A third team might set up a workshop for students in leadership skills, a workshop for teachers in classroom management, and a course in adolescent development for parents. Roughly one-third of the teams carried out one or two projects, another third carried out three or four, and the remaining third carried out five or more (see Figure 3-1). The largest number of projects carried out by a single team was 17.

We had information on team projects from action plans, progress reports, and project forms completed by the team leaders in the spring of 1979 and 1980. Our problem was to find ways to describe a team's program of often very disparate activities.









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We began by classifying each project by the kind of activity it involved. We called these activities project strategies. We then used the team's individual strategy classifications (a team could have 1 to 17, depending on the number of projects it carried out) to classify the team in terms of the general strategy it adopted to reduce crime.

We followed a similar procedure to describe the objectives of the team's projects and the kinds of crime problems they were expected to reduce. In both cases we moved from a classification of individual projects to a classification of teams.

Our findings are presented in three sections: strategies, objectives, and crime problem focus. In each section we describe first the classification of individual projects, then the classification of teams, and finally the relationship between the team classification and reduction of crime in the school.

#### · Strategies

#### Strategies of individual projects

The strategies used by the teams in this study cover a wide range of activities. The information we obtained indicated that the following kinds of activities were undertaken by the teams:

- changes in school policy or procedure
- training and education
- counseling
- communication
- extracurricular activities
- school beautification

#### Security

#### Discipline

These projects change the school's rules for behavior or its sanctions for misbehavior. There are three approaches:

#### Attendance

We describe each activity group below, giving some examples of each.

CHANGES IN SCHOOL POLICY OR PROCEDURE

• These projects change the way the school handles its security. There are three approaches:

• adding new equipment (burglar alarms, two-way radios. fences. doors)

• adding new security personnel (security guards, police patrols, student monitors for hallways or lunchroom, staff monitoring of campus for drug use)

• changing security procedures (visitor sign-ins, marking student bicycles to discourage theft, setting up an interschool communication link to deal with intruders from nearby schools)

• making school rules explicit (revising a disciplinary handbook, publicizing school rules)

• changing the handling of disciplinary infractions (in-school suspension as an alternative to suspension from school, detention or cooling-off rooms, conferences with parents of offenders, counseling students who are rule violators)

• preventing disciplinary infractions (rewarding good behavior by allowing participation in a mini-bike program, student contracts with teachers for behavior expectations, teacher use of positive discipline)

These projects change the way the school handles its attendance problems. There are two approaches:

• working with individual students who fail to attend (a buddy system that pairs an attending with a problem student, student or teacher calls to problem students to determine reasons for nonattendance, visits to homes of nonattending students)

• working with school as a whole (weekly display charts for school attendance, rewards for classes with highest attendance)

#### Curriculum

These projects bring in new courses on a permanent basis (student-initiated mini-courses, information courses on drua use)

#### Problem-solving group

These projects form groups (committees, task forces) to do problem-solving or to create positive change in the school. Problems may be specific (a student/teacher group to handle student grievances, a student group to set up a music program in the cafeteria, a student/teacher/parent task force to work on the problem of vandalism--or attendance, or achievement, or inter-racial problems); or problems may be broad-based (a student advisory council to work with administration, a parent task force to work on school operation as a whole).

#### TRAINING AND EDUCATION

#### Personal growth skills

These projects try to make the person trained (student, teacher, or parent) aware of her or his feelings, behavior, and/or impact on other people. They offer opportunities for selfexploration. The personal growth skills involved are variously named: communication, human relations, goal-setting, personal problem-solving, values clarification, positive decision-making, exploring one's impressions on other people, leadership, assertiveness training, stress reduction, positive attitudes toward learning)

#### Inter-group relations skills

These projects consider the person trained as a member of an identifiable group (students, handicapped, non-minority, teachers, parents, etc.) and focus training on understanding or getting along with members of other identifiable groups. Examples are: students/teachers, staff/administrators, parents/children, minority/non-minority, teachers/special education students. The methods are similar to those used in personal growth training, but there tends to be more use of role-playing and psychodrama and of the presentation of information. The projects may bring members of the two target groups together, or they may work with only one (e.q., by having teachers role-play student/teacher interactions).

#### Behavior management skills

These projects, a variant of the inter-group relations projects, are intended to aid teachers in handling or preventing disruptive behavior by giving them skills in classroom management.

# Academic skills

These projects are intended to improve student academic performance, either directly, through tutoring or other remedial work, or indirectly, by improving teacher skills.

#### COUNSELING

These projects have adults (usually teachers) counsel or advise students, either individually or in groups, on career and/or personal problems.

# Student/student

#### COMMUNICATION

These projects try to improve communication among groups within the school (students, teachers, administrators). There are two approaches:

#### Adult/student

These projects, called peer counseling or peer advising, have students talk with other students on their difficulties with school, peers, or family. The projects include specific training and/or supervision of the student counselors/advisers.

#### School/community

These projects try to improve communication between the school and the community (this usually means parents). There are two approaches:

- individual: direct communication with parents (a telephone network, "happy grams" to parents, home visits, social gatherings, parent meetings around school problems, parent nights at school) or offering information to parents (news bulletins, mini-courses)
- organizational: developing new organizations with parent membership or expanding existing ones (parent/teacher associations, parent/teacher/student councils, parent councils)

#### Within school

• group: projects aimed at making students or, more commonly, teachers, feel better about the school and their peers through social activities (week breakfasts, retreats), improved working conditions (setting up a room where teachers can work outside of the classroom), or providing information (newsletters to highlight the work of individual teachers)

• school as a whole: projects aimed at making the entire school community feel better about the school and its members through morale boosters (school spirit day, smile day, silly day), special activities (sports, talent shows, dance contests), or providing information (films, newsletters)

#### School transitions

These projects try to ease changes, either from one school to another (9th graders put on shows and assemblies or conduct tours for elementary school students) or within the school (helping students and staff plan for anticipated school closing or shifts in inter-racial balance).

#### EXTRACURRICULAR ACTIVITIES

These projects provide activities for teachers, parents, or, more commonly, students outside of normal school hours. Sports programs are the most frequent activities offered.

#### SCHOOL BEAUTIFICATION

These projects try to improve the school grounds (cleanup, adding new equipment) or buildings (painting, decorating) or try to forestall the defacement of buildings by offering students an alternative outlet for self-expression (graffiti board).

The most popular project strategies among our teams are changes in discipline policy or procedures, training in personal growth skills, and within-school communication (see Table 3-1). This holds across all three school levels. School/community communication projects are also popular with the elementary school teams.

There are some differences, however, among the three groups of schools. Compared to high school teams, elementary and middle school teams put greater emphasis on academic programs (curriculum change and/or academic skill training: 6 percent of high school teams, 23 percent of middle school teams, and 26 percent of elementary school teams). They also put greater emphasis on extracurricular activities, but less on attendance projects.

Procedure/policy Security Discipline Attendance Curriculum Problem-solvin

Training/education Personal growth Inter-group rei Behavior manage Academic skills

Counseling:

Adult/student Student/student

Communication: School/communit Within school

School transiti

Extracurricular act

School beautificat

<sup>1</sup>Includes all teams with implemented projects. Subsequent tables include only teams with data on change in levels of crime.

# Table 3-1

# Percent of Teams with One or More Projects of a Given Strategy

|                | All teams<br>(n=189) <sup>1</sup> | High<br>(n=72) | Middle<br>(n=78) | Elem.<br>(n=39) |
|----------------|-----------------------------------|----------------|------------------|-----------------|
| change:        |                                   |                |                  |                 |
| 5              | 9                                 | 10             | 6                | 13              |
|                | 40                                | 40             | 45               | 31              |
|                | 11                                | 17             | 9                | 5               |
|                | 10                                | 3              | 15               | 13              |
| g group        | 17                                | 19             | 17               | 15              |
| n:             |                                   |                |                  |                 |
| h skills       | 42                                | 47             | 41               | . 33            |
| lations skills | 22.                               | 21             | 26               | 15              |
| ement skills   | 20                                | 1.7            | 26               | 15              |
| 5              | 10                                | 4              | 10               | 21              |
|                |                                   |                |                  |                 |
|                | 11                                | 14             | 12               | З               |
| ;              | 15                                | 14             | 17               | 15              |
|                |                                   |                |                  | , -             |
| y              | 15                                | 10             | 13               | 20              |
|                | 29                                | 29             | 29               | 28              |
| ons            | 5                                 | 6              | 6                | 3               |
| tivities       | 12                                | 8              | 14               | 15              |
| ion            | -                                 | -              | 14               | 10              |
| 1011           | /                                 | 7              | 8                | 8               |
|                |                                   |                |                  |                 |

Elementary school teams try more school/community communication but fewer discipline projects than either middle or high school teams. They also try fewer projects in the area of interpersonal or intrapersonal development (personal growth and/or inter-group relations and/or behavior management: 64 percent of high school teams, 62 percent of middle school teams, and 49 percent of elementary school teams).

#### Team strategy thrust

We can look at the effect of a team's project package, but we cannot trace the impact of any one of its projects in isolation from the others. Since most teams carried out more than one project and used more than one strategy, we had to devise a way to describe a team's collection of project strategies in a single measure of strategy direction or thrust. We assumed that teams did not choose strategies at random and that a team's strategy choices would follow a discernable pattern.

We proceeded as follows. We created a number of a priori classifications of the 16 strategies described above, each containing three to six strategies. The classifications were based on our intuitive judgments of what strategies belonged together. For each classification, we counted the number of teams that could be defined in one, but only one, classification group. We used three alternative definitions: any of the teams projects fell within the group, half or more of the team's projects fell within the group, and all of the team's projects fell within the group. We also counted the number of residual teams, those that belonged to more than one group and those that belonged to none.

procedure or policy change in security procedure or policy change in discipline procedure or policy change in attendance

What these three groups of projects have in common is an effort to deal directly with problem behavior. They vary in the kinds of problems addressed (security projects are frequently geared to problems of vandalism, theft, or keeping out intruders, while discipline projects more often address disruption and personal attack or problem behavior in general). They also vary in the extent to which solutions are handed down from on top vs. the extent to which students, teachers, or parents are involved in the problem solution.

What these four groups of projects have in common is an effort to improve communication betweeen groups and thus to reduce fear, distortions, and lack of understanding; and to make individuals and groups feel better about the school. Some are intended to improve morale, some to promote involvement in school activities, some to improve inter-group relations, and some to allow participation in school decision-making. Most of these projects are aimed at reducing disruptive behavior, fighting, and personal attack and at improving school attendance.

training in personal growth skills training in inter-group relations skills training in behavior management skills

What these three groups of projects have in common is an effort to improve the way one gets along with other people. The approaches range from explaining (by experts) to discussing to experiencing (as in psychodrama), with the emphasis on the latter two. Most of these projects are aimed at reducing disruptive behavior, fighting, and personal attack and at improving school attendance.

When scored according to the criterion of "half or more of the team's projects," 60 percent of the teams could be classified in one of these

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Our "best fit" classification produced the following categories:

Discipline thrust (26 of 173 teams)

Communications thrust (46 of 173 teams)

formation of problem-solving group school/community communication within-school communication communication around school transitions

Human relations thrust (48 of 173 teams)



# CONTINUED 10F3

three groups. By stretching the scoring to include the most frequently used strategy thrust (when the criterion of "half or more" could not be met), we increased this figure to 70 percent (see Figure 3-2). The residual group (53 teams) used strategy thrusts that occurred too infrequently to allow us to draw conclusions about their effectiveness in reducing crime.

#### Team strategy thrust and the reduction of crime

Does the team's choice of projects affect the amount of crime reduction in the school? To answer this question, we needed single measures of change in the amount of crime. We based these measures on differences between the first and third administrations of the student and teacher questionnaires. (The change scores are t-statistics: the difference between the first and third year scores divided by the standard error of the difference.) There are 20 measures of change, one for each of the global outcome measures described in Chapter 2 (see Table 2-4).

Before describing the relationships between team strategy thrust and change in crime (and the project/outcome findings described in later sections), one general comment is in order. We are reserving the actual data on which our report of these relationships is based for the Appendix rather than including them in the text--the number of both project and outcome change variables makes narrative presentation unwieldy.

In general, our findings reach what is commonly accepted as "statistical significance" (p < .05). We do not comment, however, on every significant relationship, particularly isolated ones that do not make sense to us in

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#### Figure 3-2

Percent of Teams by Project Strategy Thrust



Project Strategy Thrust .

- H = high schools (n=70)
- M = middle schools (n=71)
- E = elementary schools (n=32)

the general pattern of findings. We consider seriously some statistically non-significant relationships when there are large numbers of these in the same direction and they are supported by other data. We have been rather generous in this way for the smaller sample of elementary schools where significant relationships are matchmatically less probable than in middle and high schools. The serious reader will want to spend some time with the data to judge how far they support the conclusions we have drawn and whether or not they suggest alternative conclusions.

Let us look now at the relationships between change in crime and the general strategy thrust adopted by the team. We considered only those teams that fell in one of the three strategy thrust classifications: discipline, communications, or human relations. Each group was compared with the others on each of the 20 global outcome change measures (see Table C in the Appendix; also Table D). To simplify the presentation, we report on findings over the six major groupings of these measures:

- vandalism
- theft
- drug/alcohol availability
- attacks on students
- attacks on teachers
- fear of crime

Our general findings are as follows:

- a team's general strategy thrust makes a difference in the amount of reduction in crime
- the choice of strategy thrust makes the most difference in reducing vandalism, attacks on teachers, and fear of crime; in high and elementary schools, it also makes a difference in

reducing theft; it makes no measurable difference in reducing attacks on students or the availability of drugs and alcohol

#### HIGH SCHOOLS

#### MIDDLE SCHOOLS

- attacks on teachers

ELEMENTARY SCHOOLS

° the most effective strategy thrust is not the same for high, middle, and elementary schools

• teams do not necessarily favor the strategy thrust most effective in their school level

• teams with a human relations thrust tend to be the least effective of the three groups over all three school levels

Specific findings for the three school levels are summarized below.

• a communications thrust is the most effective in reducing vandalism, theft from teachers, attacks on teachers, and fear of crime • a human relations thrust is the least effective in reducing vandalism • both human relations and discipline thrusts are relatively ineffective in reducing theft from teachers and attacks on teachers • a discipline thrust is the least effective in reducing fear of crime

• a discipline thrust is the most effective in reducing vandalism, attacks on teachers, and fear of crime

• a human relations thrust is the least effective in reducing

• both communications and human relations thrusts are relatively ineffective in reducing vandalism and fear of crime

• a discipline thrust is the most effective in reducing vandalism, attacks on teachers, teacher fear of crime, and (possibly) theft

- a communications thrust is also effective in reducing attacks on teachers, and may also be effective in reducing the availability of drugs and alcohol
- a human relations thrust is the least effective in reducing vandalism, attacks on teachers, teacher fear of crime, and (possibly) theft and the availability of drugs and alcohol

#### Objectives

#### Objectives of individual projects

Project objectives are the changes teams expect their projects to bring about--for example, improved academic performance or increased teacher morale. A team's project objectives tell us something about what the team believes is needed to reduce delinquent behavior,

Consider a team that chooses to concentrate on changing teachers-increasing their morale, their interpersonal skills, their involvement in school activities. This team is suggesting that the way teachers feel about themselves and the way they interact with their students has something to do with student behavior. It is further suggesting that some of the responsibility for continued delinquent behavior--whatever its original causes--rests with the adults in the school.

Consider now two other teams. One chooses to concentrate on the management of behavior--making school rules explicit, increasing the school's security and the effectiveness of its disciplinary system. The other chooses to increase the involvement of students in school activities, their interpersonal skills, and their self-esteem. Both teams focus their change efforts on

students, but one chooses to direct and control in order to modify student behavior while the other tries to change the way students feel about themselves and to provide nondelinquent ways of dealing with peers and adults. The first team places responsibility for changing delinquent behavior in the school environment. The second places responsibility in the student.

of crime.

Our source of information on project objectives is a checklist completed for each project by the team leader. The checklist, developed on the basis of prior experience in Phase 1, included the following:

 increased school safety and security increased effectiveness of discipline increased clarity of school rules improved academic performance increased knowledge for coping with life problems increased student self-esteem increased teacher morale improved student/teacher relationships improved teacher/parent relationships increased human relations skills increased involvement in school activities increased participation in decisions about school operation The last three may be directed to students, to teachers, or to parents.

This evaluation was not intended to test alternative theories of delinquency reduction, but it offers an opportunity to look at some quasi-theories of what it takes to reduce delinquent behavior. In a later section, we will look at the relationships between team project objectives and the reduction

In theory, any one project strategy could be used to reach any of the objectives listed above. For example, a within-school communication project (depending on its specific content and how it is carried out) might be expected to lead to improvement in school safety, or academic performance, or coping skills, or involvement in school activities, and so on. In practice, certain kinds of strategies tend to be associated with certain kinds of objectives. We summarize these relationships here.

#### BRINGING ORDER TO THE SCHOOL

- increased school safety and security
- increased effectiveness of discipline
- increased clarity of school rules

As a group, these objectives are most commonly associated with security and discipline projects. They are also associated with projects in which problem-solving groups work on specific behavior problems and with within-school communication, extracurricular, and school beautification projects.

Increased school safety and security is most commonly an objective of security projects. It is frequently a secondary objective of discipline projects.

Increased effectiveness of discipline is most commonly an objective of discipline projects. It also appears frequently as an objective of training/education projects devoted to personal growth, inter-group relations, and behavior management.

Increased clarity of school rules is most commonly an objective of discipline projects. It is also a frequent objective of security projects.

Teams that choose one of these objectives also tend to choose the others (intercorrelations range from .27 to .44).

#### INCREASING KNOWLEDGE

- improved academic performance
- increased knowledge for coping with life problems

These objectives are not associated with any one project strategy more frequently than another.

Improved academic performance is associated, of course, with academic training and with curriculum and attendance projects, but a variety of other strategies are also expected to improve academic performance (discipline, inter-group relations, within-school communciation).

Increased knowledge for coping with life problems appears usually as one among a number of project objectives, with strategies ranging from discipline (a detention center), curriculum change (a course on drugs), inter-group relations, school/community and within-school communication, and behavior management.

Teams choosing one of these objectives rarely choose the other (correlation between the two is .07).

#### INCREASING MORALE

Increased student self-esteem appears as an objective of projects offering training in personal growth skills in which students are allowed to express their feelings to adults and as an objective of discipline projects that provide rewards for positive behavior. It also appears as an objective in a wide variety of other project strategies.

Increased teacher morale is most often an objective of withinschool communication projects, particularly those aimed at making teachers feel better about the school. It also often appears as an objective in training projects for personal growth and behavior management skills

Teams choosing one of these objectives rarely choose the other (correlation between the two is -.02).

improved student/teacher relationships

improved teacher/parent relationships

Improved student/teacher relationships is most often associated with one of three project strategies: discipline projects that provide rewards for good behavior or some opportunity for student/adult discussion; problem-solving groups that include adults, with or without student membership (these differ from similar projects without this objective in being broad-based

• increased student self-esteem

increased teacher morale

IMPROVING RELATIONSHIPS BETWEEN GROUPS

in their conception of the problems to be addressed by the group); and training projects in personal growth or behavior management skills.

Improved teacher/parent relationships is most often associated with school/community communication projects; problem-solving group projects; and training projects in personal growth skills, usually those directed toward teachers.

Teams choosing one of these objectives sometimes choose the other, most often in projects involving problem-solving groups, personal growth skills training, or school/community communication (correlation between the two is .22).

#### IMPROVING INTERPERSONAL SKILLS

- increased human relations skills of students
- increased human relations skills of teachers
- increased human relations skills of parents

This group of objectives is distinguished from the preceding one by its emphasis on change within one target group rather than change in the relationship between two groups.

For students, this objective appears in a wide variety of projects and is usually secondary to other objectives.

For teachers, this objective is most often associated with training projects in personal growth, inter-group relations, and behavior management and with within-school communication. projects.

For parents, this objective is most often associated with projects in which parents are members of problem-solving groups.

Teams choosing this objective for one target group sometimes choose it for another, but the relationships are not strong (intercorrelations range from .15 to .22).

#### INCREASING INVOLVEMENT

- increased involvement in school activities of students
- increased involvement in school activities of teachers
- increased involvement in school activities of parents

This objective is most commonly associated with communication projects: within-school communication in the case of students

and teachers, and school/community communication in the case of parents. Increased involvement for any of these target groups is also an objective for problem-solving group projects that have membership from the target group. However, increased involvement also appears as an objective with a variety of other project strategies, ranging from security and discipline to school beautification. All offer the potential for getting one or more target groups to become more active in activities within the school.

# INCREASING PARTICIPATION IN SCHOOL DECISION-MAKING

 increased participation of students in school decisions increased participation of teachers in school decisions increased participation of parents in school decisions

This group of objectives is distinguished from the preceding one by its emphasis on shared responsibility for decisions affecting the participant. It represents a specific kind of involvement in the school.

This objective is most often associated with problem-solving group projects. These offer the most direct vehicle for decision inputs.

For students, this objective also appears in a variety of other projects that offer opportunities for student activity: discipline, attendance, personal growth training, school-community communication, and school beautification.

For teachers, this objective also appears in some personal growth training projects.

For parents, this objective also appears in some school/community communication programs.

Teams that promote the participation of teachers in school decisions also tend to promote the participation of parents (correlation = .39). Teams that promote the participation of students are less likely to be concerned with teacher or parent participation (correlations = .23, .20).

Teams that try to involve parents in school activities also try to involve teachers (correlation = .40) but seldom students (correlation = .14). Teams that try to involve students also tend to try to involve teachers (correlation = .26).

Teams commonly expect a project to reach more than one objective. The average percent of a team's projects with each of the objectives described above is given in Table 3-2. Those appearing most frequently in team projects are improving the relationships between groups (especially student/teacher relationships), increasing morale, and bringing order to the school. The promotion of involvement and participation occur with relatively low frequency.

#### Team objectives thrust

Just as we looked for patterns within a team's several project strategies, so we looked for patterns within the team's project objectives. We hoped that even teams with seemingly disparate project strategies would nonetheless be found to focus most of their project efforts on, say, increasing teacher morale or improving teacher/parent relationships.

We began with a procedure similar to that used for project strategies, trying to classify teams according to several alternative a priori classifications of objectives. We were unable to group the teams satisfactorily in this way.

We next tried a factor analysis of objectives at the team level. With four factors extracted, we found that a team's objectives grouped around the targets of change--students, teachers, parents, or the school as a whole--rather than around change content. In other words, teams are more likely to focus their efforts on changing a particular target group, over a variety of change areas, than to focus on a particular area of change. Increased school Increased effect Increased clarit Improved academi Increased knowle Increased studen Increased teache Improved student Improved teacher Increased human Students Teachers Parents Increased involv Students Teachers Parents Increased partic Students Teachers Parents

#### Table 3-2

#### Average Percent of a Team's Projects with a Given Objective

|                                    | All teams<br>(n=170) |
|------------------------------------|----------------------|
| safety and security                | 19                   |
| viveness of discipline             | 34                   |
| y of school rules                  | 30                   |
| c performance                      | 15                   |
| edge for coping with life problems | 30                   |
| it self-esteem                     | 32                   |
| er morale                          | 29                   |
| t/teacher relationships            | 42                   |
| r/parent relationships             | 21                   |
| relations skills:                  |                      |
| ·                                  | 32                   |
|                                    | 27                   |
|                                    | 13                   |
| vement in school activities:       |                      |
|                                    | 18                   |
| •                                  | 14                   |
|                                    | 13                   |
| cipation in school decisions:      |                      |
|                                    | 17                   |
|                                    | 13                   |
|                                    | 10                   |
|                                    |                      |

We could not, however, uniquely define most teams in terms of a single objectives thrust--as we had done with strategies. We gave teams multiple objectives scores, each score representing the percent of the team's projects in which a given objective or objective target group was present.

Figure 3-3 shows the distribution of scores for change target groups. As with strategy thrusts, we found differences by school level. High school teams, compared with middle and elementary school teams, are less often concerned with changing parents but more often concerned with changing teachers. They are also more often concerned with school-wide change which, in our classification, consists of those objectives we have called bringing order to the school.

#### Team objectives thrust and the reduction of crime

The correlations between team objectives scores and measures of change in crime are given in Tables E and F in the Appendix. We discuss here both findings on the targets of change and on individual objectives.

Our general findings are as follows:

- the objectives toward which a team directs its projects makes a difference in the amount of reduction in crime
- the choice of objectives makes a difference over most crime measures; it has relatively little impact on the reported availability of drugs and alcohol
- the most effective objectives thrusts are not the same for high, middle, and elementary schools
- teams do not necessarily favor the objectives most effective in their school level



<sup>1</sup>Scores are logit transformations of proportions (percent of team projects). The extremes of this scale are identified by proportions.

<sup>2</sup>Includes objectives of increased safe/security, discipline effectiveness, and clarity of school rules.



Average Scores for Change Target Groups

Change Target Groups

H = high schools (n=59)M = middle schools (n=62)E = elementary schools (n=31) More specific findings are difficult to summarize. They vary by kinds of crime measures (vandalism, theft, etc.), kinds of objectives, and school level and thus lend themselves to alternative presentations. What we have chosen to do here is to describe relationships between changes in crime over the different kinds of objectives toward which teams direct their projects. Readers concerned with the amount of detail may want to proceed to the summary of findings in the final section of this chapter.

Findings for change target groups are summarized below. Positive change means that the greater the percent of the team's projects directed toward the target group, the greater the reduction in crime. Negative change means that the greater the percent of the team's projects directed toward the target group, the less the reduction in crime.

#### TEAM FOCUS ON CHANGING STUDENTS

A focus on changing students is associated with both positive and negative change, depending on school level.

A focus on changing students is most likely to be helpful in elementary schools, where it is associated with decreased attacks on teachers and teacher fear of crime. In middle schools, it is associated with worsened teacher perceptions of personal and property safety.

#### TEAM FOCUS ON CHANGING TEACHERS

A focus on changing teachers is associated with both positive and negative change, depending on school level.

A focus on changing teachers is most likely to be helpful in high schools, where it is associated with decreased teacher fear of crime. In middle schools, it is associated with worsened student perceptions of theft, attacks on teachers, and tension in the school.

# TEAM FOCUS ON CHANGING PARENTS

all school levels.

A focus on changing parents is most likely to be helpful in high schools, where it is associated with decreased student fear of crime and reports of disruptive behavior and, to a lesser extent, with teacher perceptions of improved personal and property safety. In middle schools, it is associated with some improvement in theft and teacher views of school tension. In elementary schools, it is associated with decreased student fear.

Findings for individual objectives are summarized below. The first group, bringing order to the school, is identical with team focus on changing the school as a whole.

As a group, the objectives of improving security, discipline, and the understanding of rules are associated with positive change in elementary and (to a lesser extent) middle schools. In high schools, they are associated with both positive and negative change.

In elementary schools, these objectives are associated with decreased theft and attacks on teachers. Improving school security is also associated with decreased vandalism and attacks on students, but efforts to improve the disciplinary system have the opposite effect.

In middle schools, efforts to improve security are associated with decreased vandalism, attacks on teachers, and fear of crime. Efforts to improve the disciplinary system have no impact one way or another, but efforts to clarify rules are associated with increased attacks on students.

In high schools, efforts to improve security are associated with decreased attacks on students but increased attacks on teachers. The same is true of efforts to improve the disciplinary system; these are also associated with increased theft. Efforts to clarify rules, however, are associated with decreased attacks on student and decreased teacher (but not student) fear of crime.

A focus on changing parents is associated with positive change at

#### BRINGING ORDER TO THE SCHOOL

#### INCREASING KNOWLEDGE

Efforts to provide academic knowledge have little impact on crime. Efforts to provide knowledge needed for coping with life problems are associated with both positive and negative change, depending on school level.

In high schools, efforts to provide students with knowledge needed for coping with life problems are associated with decreased vandalism, attacks on students, disruptive behavior, and fear of crime. In middle schools, they are associated with worsened conditions over all crime measures. In elementary schools, they are associated with decreased attacks on teachers; efforts to improve academic performance are associated with increases in vandalism and theft.

#### TNCREASING MORALE

Efforts to increase teacher morale or student self-esteem have negative effects on change in crime.

Efforts to improve teacher morale are associated with increased theft in middle and high schools and with increased vandalism, attacks on students, and fear of crime in elementary schools.

Efforts to increase student self-esteem are associated with increased vandalism, attacks on students and teachers, and fear of crime in high schools, and with increased vandalism, theft, and teacher fear of crime in middle schools.

#### IMPROVING RELATIONSHIPS BETWEEN GROUPS

Efforts to improve inter-group relationships are associated with positive change over all school levels. The effectiveness of the groups targeted (student/teacher or teacher/parent) varies with school level.

In high schools, improving student/teacher relationships is associated with decreased vandalism, attacks on students and teachers, and fear of crime. Improving teacher/parent relationships is associated with decreased vandalism. attacks on students. disruptive behavior, and student (but not teacher) fear of crime.

In middle schools, efforts to improve student/teacher relationships has no impact on crime one way or another. Efforts to improve teacher/parent relationships are associated with decreased theft, attacks on teachers, and fear of crime.

of crime.

Efforts to increase skills in relating to other people have both positive and negative effects, depending on both the target group and school level.

Efforts to increase teacher human relations skills are associated with reports of decreased availability of drugs and alcohol in both high and elementary schools. In high schools, they are also associated with decreased teacher fear of crime, but in elementary schools with increased student fear and also with increased theft. In middle schools, they are associated with increased vandalism. attacks on teachers, and fear of crime.

Efforts to increase parent human relations skills are associated with reduction of disruptive behavior in high schools and with decreased student fear in elementary schools. In middle schools, they are associated with increased attacks on students and teachers and with increased availability of drugs and alcohol.

#### INCREASING INVOLVEMENT

Efforts to increase involvement in school activities have both positive and negative effects, depending on school level.

In middle schools, the involvement of parents is associated with increased vandalism, theft, attacks on students, and teacher fear of crime. The involvement of students or teachers is unrelated to change.

In elementary schools, efforts to involve students and teachers are associated with decreased theft. Efforts to involve parents are associated with reductions in student fear. All three are associated with decreased attacks on teachers, but with increases in student reports of illegal behaviors.

In elementary schools, the reverse holds. Working to improve teacher/parent relationships has no impact on crime levels. Working to improve student/teacher relationships is associated with decreased theft, attacks on students and teachers, and fear

#### IMPROVING INTERPERSONAL SKILLS

Efforts to increase student human relations skills are associated with generally worse conditions in middle schools. In elementary schools, they are associated with increased attacks on students and student fear, but with reduction in teacher fear and in teacher reports of car damage or theft.

In high schools, the involvement of teachers is associated with improvement in all crime measures except drug availability, The involvement of parents is associated with decreased vandalism.

#### INCREASING PARTICIPATION IN SCHOOL DECISION-MAKING

Efforts to increase participation in school decision-making have both positive and negative effects, depending on both the target group and school level.

In <u>high schools</u>, efforts to promote student participation are associated with decreased attacks on students and teachers. Erforts to promote teacher participation are associated with reduction in teacher fear of crime.

In middle schools, any efforts to promote participation in decisions are associated with increased attacks on teachers. The participation of students is associated with increased teacher (but not student) fear of crime. The participation of parents, however, is associated with decreased theft, drug availability, attacks on students, and fear of crime.

In <u>elementary schools</u>, efforts to promote student participation are associated with decreased theft and attacks on teachers but with increased attacks on students and drug availability. Efforts to promote teacher participation are associated with increased theft, attacks on teachers, and fear of crime. Efforts to promote parent participation, however, are associated with reductions in vandalism, theft, and attacks on teachers.

#### Crime Problem Focus

#### Crime problem focus of individual projects

Team projects are expected to lead to the reduction of crime, but the nature of crime reduction is not the same from one project to another. Some are aimed at problem behavior in general. Others are focused on particular kinds of crime activity, such as vandalism or drug use. We asked team leaders to indicate, for each of their team's projects, which of the following problems was expected to decrease as a result of the project's activity:

- ° vandalism
- theft
- personal attack and disruptive behavior
- drug and alcohol use

Teams commonly expect a project to reduce more than one kind of crime. Three-quarters of the projects were addressed to the problem of personal attack and disruptive behavior, while approximately 40 percent were addressed to each of the problems of vandalism, theft, and drug and alcohol use.

#### Team crime problem thrust

As was true for objectives, we were unable to group teams in terms of a single crime problem thrust. We gave teams multiple crime focus scores, each score representing the percent of the team's projects directed to each of the four crime reduction goals. The distribution of scores is shown in Figure 3-4.

Decreasing the incidence of personal attack and disruptive behavior is the most common crime reduction goal at all school levels, though it appears somewhat less frequently among high than among elementary and middle school teams. Reducing the use of drugs and alcohol is of most concern to high school teams (focus on this problem increases from elementary to middle to high schools), and the same is true of a focus on problems of vandalism.

#### Team crime problem thrust and the reduction of crime

The correlations between team scores on crime problem thrust and measures of change in crime are given in Table G of the Appendix. Our general findings are as follows:

• team focus on a particular crime problem does not lead to greater improvement in that problem than in other areas of crime



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• the effectiveness of a specific crime problem thrust is not the same for high, middle, and elementary schools • teams do not necessarily favor the crime problem thrust most effective in their school level

Specific findings for the three school levels are summarized below.

# • fear of crime is more likely to decrease when teams do not focus on reducing a single area of crime; the same is true for theft from teachers

• an exception to the above is team focus on the problem of drug and alcohol use; it is associated with some reduction in theft

 team focus on the problem of vandalism is associated with a decrease in vandalism, attacks on teachers, and fear of crime • team focus on the problem of drug and alcohol use is associated with a decrease in attacks on students and teachers and with decreased fear of crime

• fear of crime is more likely to decrease when teams do not focus on reducing a single area of crime

• team focus on the problem of theft is associated with increased attacks on teachers

• team focus on the problem of personal attack and disruption is associated with increased reports of student and teacher theft

# Summary of Findings by School Level

We have looked at three facets of team interventions in the school--the team's strategy thrust, its intermediate project objectives, and the kinds of crime problems with which it is concerned. We have reported a number of separate relationships between measures of team activity and reduction in six dimensions of school crime. We have probably reported too many separate relationships for the reader to have a clear sense of what they may imply for practical crime reduction efforts. In this section, we bring these findings together and try to present a coherent picture of what works in schools. Because what works varies by school level, we consider separately the findings for high, middle, and elementary schools.

#### High schools

High school teams that promote communication within the school or between the school and the community are more effective in reducing both person and property crime as well as fear of crime than teams that focus on discipline and security projects or human relations training.

The key, it appears, is to work on getting people in the school community to talk to and work with one another. This is different than helping students (or teachers, or parents) learn about themselves and how they relate to other people on an individual level. This does not mean that these are unimportant goals. We suspect they are better reached, at least through team projects, by activities that bring people together to work on common tasks. The involvement of both parents and teachers is helpful. It provides visible evidence to students that someone cares and to teachers that there are others who share their concerns. In each case it reduces isolation. Working on teacher/parent relationships has a greater impact on students than on teachers, especially on their reports of fear of crime. Working on student/teacher relationships has a greater impact on teachers than students, probably because team projects with this objectives most often involved teachers.

Students respond well to projects that allow them to develop knowledge and competencies that will aid them in dealing with the world beyond the school. This includes projects that let them participate in decisions about the operation of the school. These bring them into working partnership with adults. It is not helpful to work only on making students feel better about themselves. Nor, for teachers, is it helpful to work on improving morale.

Thus what seems to work in high schools is a thrust toward active, responsible participation and involvement in solving real problems. This is more effective than making students or teachers feel better or better understand themselves (though these may be byproducts of participation and involvement experiences.

It is also more effective than trying to control student behavior. For teachers, however, there may be some advantage in projects aimed at making school rules clear and well understood (for example, by developing and publicizing a discipline handbook. In schools with such projects, teachers

report decreased fear and decreased danger of attack on students. Students do not share these views.

Team projects are less effective in reducing theft and drug use in high schools than in reducing fear of crime and attacks on students and teachers. We have very little to say about effective approaches to high school theft and drug problems save that efforts to involve teachers in school activities may be of some help.

In sum, high school students do not respond well to efforts to control behavior. They do respond to projects that help them cope with the world outside the school and to those that give them a chance to take part in decisions about the school. They also benefit from the increased involvement of teachers and from opening up communications between students and teachers and between teachers and parents.

High school students are approaching independence from adults. What they need is opportunity to learn how to exercise independence effectively and evidence that they matter to the adults around them.

## Middle schools

Middle school teams that change the way the school handles discipline and security are the most effective in reducing attacks on teachers and the school and in reducing fear of crime. Attention to the security of the school and to the problems of vandalism and drug use appear to be the key ingredients in this approach.

Middle schools are more disruptive places to be, for both students and

teachers, than either high or elementary schools. Projects that deal with the visible signs of disorder seem to help. Changing the way students are disciplined does not work as well as making the school more secure, while publicizing school rules is associated with decreased student safety.

Like high schools, middle schools benefit from a parental presence in the life of the school. Not all kinds of parent participation are helpful. Projects aimed at improving teacher/parent relationships are effective in reducing theft and attacks on teachers as well as reducing fear of crime. Improving parent interpersonal skills is not. Involving parents in school decision-making is effective. Involving parents in other kinds of school activities is not. What appears to be needed in middle schools is the active involvement of parents around problems of obvious concern to the school community.

Students and teachers do not respond to parent involvement in the same way. Middle school teachers report disorganization in the school and respond well to attempts to bring order and to work jointly with parents. When parents become part of decision-making groups, however, though students feel safer, teachers feel the reverse. For teachers, this kind of parent involvement may be seen as disruptive to the already fragile order of the school.

Middle school students also report disorganization in the school, and they too respond well to attempts to increase order. They also respond well to projects that bring parents into problem-solving roles. Those projects that are ineffective with students--improving interpersonal skills, providing knowledge about the world beyond the school--may be so because they complicate

an environment that is already difficult to manage.

In sum, what helps in middle schools is an emphasis on school security, the reduction of vandalism and drug use, and an active parental presence in the school--all signs that disorder is being brought under control. Bringing parents into school decision-making and working on better teacher/parent relationships are also effective. Projects that place students in unfamiliar roles are not.

Middle school students are in transition from childhood to adult status. The change is stressful, to both the students and their teachers. A simplification of the school environment may be needed, rather than increased stimulation and complexity.

#### Elementary schools

Elementary school teams that change the way the school handles discipline and security are the most effective in reducing vandalism, theft, and attacks on teachers and in reducing teacher fear of crime. As was true for middle schools, attention to the security of the school is important to the effectiveness of this strategy thrust. Changing the way the school handles discipline helps to reduce theft and attacks on teachers, but has an opposite effect on vandalism and student safety.

Student relationships with adults are important in elementary schools. Teams that try to improve relationships between students and teachers are effective in reducing most crime problems. Involving parents in school decisions and in other school activities is also helpful. It reduces both classroom disruption and student fear. Working on relationships between teachers and parents is less important than it is in either high or middle schools, probably because parents are already more involved with teachers at the elementary level.

Teams that try to change teachers tend not to do well, particularly those concerned with developing teacher human relations skills and those involving teachers in school decisions. Both of these objectives are associated with a human relations strategy thrust which is generally ineffective in elementary schools.

Teams that try to change students have mixed results. Efforts to involve students in school decisions and other school activities, to increase student interpersonal skills, and to increase both academic and nonacademic knowledge are associated with reduced theft and attacks on teachers but with increased attacks on students and fear of crime. The price for widening options for students in elementary schools may be increased perception of vulnerability to attack.

<u>In sum</u>, elementary schools respond well to efforts to improve student/teacher relationships and to bring parents into school decision-making and other school activities. Both theft and attacks on teachers--particularly classroom disruption--yield to concern for security, discipline, and rules and to the involvement of teachers in school activities. The involvement of students is also helpful, as well as a variety of other projects focusing on student change.

Elementary school students are still dependent on adults. A strengthening

of relationships with adults is important. Opening opportunities for new learning and new roles may be of benefit, but may also lead to increased anxiety and problem behavior.

## Summary of Findings across School Levels

In the preceding section we summarized findings by school level. In this final section, we offer some general findings across level.

# 1. It is harder to change theft and drug use in schools than to reduce personal attacks and fear of crime.

It may simply take longer to make a dent in the theft (or drug) problem (our ourcome data suggest that theft may begin to decrease with long team interventions). Or it may require some intermediate attitudinal change (such as that reflected in reports of decreased fear and improved school safety) before theft or drug behavior begins to alter.

# 2. The kinds of projects most effective in reducing crime vary with the age/grade level of students in the school.

This should not be surprising. Students at different ages see themselves differently in relation to adults. There are differences in how adults see them. Crime-related behavior may imply different sets of problems at different ages. In addition, the nature of the school changes from one level to another, both in the complexity of its environment and in the opportunities it offers for interaction with a broad range of students and teachers.

# 3. Teams do not necessarily select those projects most likely to be effective at their school level.

This argues that local wisdom is not sufficient to ensure the most appropriate interventions in an individual school. It suggests that feedback of knowledge on project effectiveness during training might be beneficial to teams in their preparation of action plans. Further, it suggests the value of building into the training system provision for the ongoing collection and feedback of knowledge on project outcomes.

4. <u>Training in persona</u> <u>strategy thrust) is</u> <u>school-level crime</u>. The ineffectiveness suggests several al It may require more take a long time be small in scope to w The typical vehicle a limited number of contrast, changes i a whole, and on an likely to involve 1 of teams with a dis in the school and t

# Training in personal growth or interpersonal skills (human relations strategy thrust) is a relatively ineffective method of reducing school-level crime.

The ineffectiveness--or inefficiency--of this type of intervention suggests several alternative explanations. The approach may not work. It may require more skill than was available to our teams. It may take a long time before its effects are felt. Finally, it may be too small in scope to work at a schoolwide level.

The typical vehicle for human relations training is a workshop involving a limited number of participants over a finite period of time. By contrast, changes in school policy or procedures affect the school as a whole, and on an ongoing basis. Communications projects are also likely to involve large segments of the school population. The work of teams with a discipline or a communications thrust may be more visible in the school and thus more visibly indicate that the school is taking action to solve its crime problems.

# 5. Order is a basic need if schools are to function.

In high problem schools, this need must be met before other changes can be addressed. Except for drug use, crime and disruption are higher in elementary and middle than in high schools. Elementary and middle school teams that work to increase the orderliness of the school-particularly its security--are effective in reducing classroom disruption and attacks on teachers and the school. Elementary school teams reduce theft as well. This approach does not work in high schools where the basic need for order is already better met.

6. It may be easier to change people through their participation in work on problems of importance to them than through efforts to bring about personal change.

It does not help to assist people to understand themselves, feel better about themselves, or acquire the skills needed to get along better with others. What does seem to help is to open up communications between adversary groups: students and teachers, teachers and parents. What makes these projects different from human relations and morale-building projects is their emphasis on interaction and joint problem-solving.

#### 7. It helps to involve parents.

The optimal form of this involvement varies from one school level to another, but the presence of parents in some kind of active problemsolving role is related to the reduction of crime. What we have tried to do in this chapter is to throw light on the question: what interventions are most effective in reducing crime in schools? Answering this question was not the primary purpose of the evaluation. The reader wanting to know whether peer counseling, say, or inschool suspension "works" in reducing crime will not, and should not expect to, find the answer here.

At best, the evaluation allowed us to take advantage of our contacts with teams in a large number of schools to make observations about what teams do to bring about school change and to relate these to other observations about school-level changes in crime, disruption, and fear of crime. The individual team projects were not the well developed and debugged interventions that are required for definitive testing of effectiveness. Moreover, since team interventions were multiple--in keeping with the idea that complex problems must be attacked along a number of fronts--the nature of the total team intervention package is not amenable to simple description. Finally, the number of schools from which we were collecting project data and the extent of our resources limited us to descriptive data on projects and did not allow us to assess the adequacy of project implementation.

Does this mean that we have nothing useful to say about what works in reducing crime in schools? No. We believe what we have observed and reported here will be helpful as a guide both to future school teams in developing action plans and to school administrators, staff, and other persons concerned with the school crime problem as leads to the general kinds of activities that are most--and least--likely to work in reducing school crime.

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Our results are not written in granite. We have not established rigorous causal connections between intervention processes and school outcomes. Nor, in the ever-changing context of American education, should our findings and implied recommendations be seen as in any way permanent or universally applicable. We are not, however, counseling pessimism. Our data are the most extensive available, and the process of deriving valuable insights from them should continue for years to come.

and earlier by Tharp and Gallimore, 1979.)

The total intervention package we are evaluating is thus one in which quality

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#### Chapter 4

#### TEAM CONTINUATION IN THE SCHOOLS

A major problem for most evaluations of human service programs is the weakness of the intervention being studied--a failure to carry it out well or to carry it out as planned. This is not uncommon, nor should it be unexpected when program interventions are being tried for the first time, or for the first time in a new setting. People programs, like computer programs, need time for debugging. This is not the optimal time to test a program's effectiveness. (This point has been well argued for education programs by Scheirer, 1981,

The School Team Approach can be considered a relatively strong intervention. It is based on a well-articulated set of assumptions about school problems and how they may be solved; it has been developed (and modified on the basis of observed successes and failures) over a period of several years; and it has been tried in a very large number of schools.

This is not true at the individual school level. There is wide variation from school to school in both the performance and longevity of teams. There are some startling successes: districts that have embraced the team concept, expanded the use of teams from one to many schools, and developed their own internal training capability. There are manifest failures: schools in which teams have been unable to carry out any of their planned activities, schools in which the team has been abolished by administrative fiat.

variation can be expected from subject (school) to subject. The situation is analagous to that of a doctor who is able to persuade only "X" percent of his patients to follow a strict regimen for control of blood pressure. The regimen may be of value even though it is poorly followed by some and not at all by others. A human service intervention may be of value even if it fails to take equally well in all settings.

The issue addressed in this chapter is the success of the School Team Approach in creating viable teams. For a given number of teams that are trained, how many will be able to work together as cohesive groups? to carry out projects to bring about school change? to operate as ongoing change entitites in their schools after the cessation of federal support?

We consider three sets of questions:

- team continuance: what proportion of the teams that are trained are able to work as teams in the schools? for how long a period of time?
- team performance: how effectively do teams operate in the schools? how does this change over time?
- conditions related to team performance: what have we learned about what makes for a strong team intervention that could contribute to to improving team longevity?

# Team Continuance

Teams may fail to continue in the schools because of weaknesses within the team or because of weaknesses within the team's support system. For a few teams, failure is a result of conditions beyond the control of either the team or its school, and these we have excluded from the data considered here. There were 16 such schools:

In addition, nine other schools were eliminated because, though part of Phase 2 clusters, they had previously participated in Phase 1. Thus out of 223 schools that belonged at one time to the Phase 2 clusters, we deal with the question of team continuance for 198.

The two-cycle design of the evaluation allows us to look at team continuance for two reasonably comparable groups of teams differing chiefly in the time at which they were trained: Group A teams, trained in 1977-78, and Group B teams, trained in 1978-79. We are keeping these groups separate for the data reported in this chapter because their longevity patterns differ, and this difference, we believe, provides some clues for understanding why some teams continue in the schools and others do not.

Figure 4-1 shows the percent of teams operating in the schools over five successive years of possible team activity. The pattern of continuance for the first two years is almost identical for Groups A and B, suggesting that this is what we would be likely to find on other trials of the School Team Approach: all but a handful of the teams (five percent of the total) functioned as teams during at least a part of the year in which they were trained, and

• ten schools were closed (in one of these, the principal decided to form a team in the school to which he was reassigned);

• one school lost its sixth grade through reorganization and thus its eligibility to participate in the program;

• one district summarily pulled all four of its teams out of the program immediately after training;

• one district pulled its one remaining active team out of the program after its other three teams became inactive.



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most of the first year teams (83 percent of the teams trained, 87 percent of those active in the first year) continued working in the second year.

After this point the two groups diverge. Group A attrition continues at approximately the same rate from the second to the third year, then takes a sharp drop from the third to the fourth. For Group B, acceleration of attrition occurs between the second and third years.

The A/B difference is shown in different form in Table 4-1. Here we have taken the number of teams active in any one year and computed the percent that continue active in the following year. For Group A, 79 percent of the second year teams are active in the third year, but only 54 percent of the third year teams are active in the fourth. For Group B, 88 percent of the first year teams are active in the second year, but only 49 percent of the second year teams are active in the third.

This difference should alert us to the possibility that something other than selection or training experience is at work: both drops occur following the end of the 1979-80 school year (see Figure 4-1). The something other, we believe, is likely to be related to the role of technical assistance and Training Center support.

Technical assistance (TA) was intended to be delivered between training and the end of the teams' second year (September 1979 for Group A teams and September 1980 for teams in Group B). Training Centers, however, deliver TA with a view to maximizing scarce resources. Training workshops, for example, may include members of all teams in a city (including teams funded under other federal monies), not only to conserve resources but to promote

Original lst year 2nd year 3rd year 4th year

#### Table 4-1

Active Teams by Training Cycle and Year of Team Operation (Percent of Teams Active in Preceding Year)

| <u> </u>   |        | ,  | - 10            | A teams | B teams |
|--|--------|----|-----------------|---------|---------|
| teams  | active | in | <u>lst</u> year | 94      | 97      |
| teams  | active | in | <u>2nd</u> year | 86      | 88      |
| teams  | active | in | <u>3rd</u> year | 79      | 49      |
| teams  | active | in | <u>4th</u> year | 54      | 48      |
| teams  | active | in | <u>5th</u> year | 56      | na      |
| the second s |        |    |                 |         |         |

local support and networking among teams. Training Center support was continued for both groups through the 1979-80 school year. The total amount given was similar (an average of 9.9 visits for Group A teams, 9.4 for Group B), but was spread for a three-year period for Group A and a two-year period for Group B.

Funding for the OJJDP-sponsored program was over by the end of fiscal 1980. At this time both A and B teams showed a sharp increase in their attrition rate. This suggests that the fairly modest resources made available to the teams were nonetheless important to their continuance in the schools. We will return to this point later.

Before leaving the issue of team continuance, it should be noted that the figures we have reported may underestimate the level of team activity, at least in the later years. Teams that are no longer active as teams may continue to leave their mark on the school. The examples that follow are taken from 1982 telephone interviews with teams that had become inactive in their fourth or fifth year of operation.

• teams may become absorbed into other school or district programs

The district was reorganized so the school is no longer in the cluster region. Team leader said lack of contact with the cluster coordinator is a reason for team inactivity. The two team programs are still in operation and, in fact, fit quite nicely with the mandated action plan of the new superintendent. The school as a whole set three new action plan objectives: two curriculum and one attendance. The school team objectives which were being worked on were absorbed quite naturally into this new district-mandated action plan. Thus the team was absorbed.

• team members may continue to develop new programs in the school

No team activity. There is a new cluster coordinator but team has had no contact with him. Seven team programs continue.

There are only two team members left in the school. Team loss has disrupted team activity but not team programs which continue. The team leader, who is also the principal, stressed that as a result of the training they received he has formed a student advisory committee to involve students in solving school problems. He believes that this school year has been his best yet as principal. He uses much he has learned from training and the team approach.

team members may have an impact in the classroom or in their interactions with others as a result of the skills they acquired

climate.

Team does not meet formally and runs no programs, but team feels strong connection with Training Center and there is a strong bond among team members. Team leader is positive about school district and says, "Things are constantly happening here...more and more programs for kids." She feels that many of them are begun by people who participated in training and are using the skills/ expertise they developed there. She said that when they go to a meeting (or call one), they know that things will happen. She was referring to group skills, planning, etc.

• teams may revive after periods of inactivity

Because of major shifts and transfers in the district, team members got shifted to other schools. There has been no team this school year. However, the Training Center and the cluster teams have been in close contact to revise the teams. There have been three cluster meetings with the team leaders (all principals) of the cluster around three problems: (1) revitalization of cluster teams, (2) the growing gang problem, and (3) the increase in the use of drugs. There will be a three-day training session with 22 people from this school plus staff from other cluster schools by the entire Training Center staff. The principal said he plans that these 22 people will constitute a new team which will work on the problems of gangs, drugs, and school disruption.

Although team is no longer active, the team leader has seen several teachers use techniques they learned at training in working with disruptive students. He feels they are using their skills and that this is contributing to improved school

#### Team Performance

Information on how teams perform in the schools comes from interviews and questionnaires with team leaders, members, and cluster coordinators obtained during a site visit to each school in the spring of 1979 and by mail and telephone in the spring of 1980 (the second and third years for Group A teams, the first and second years for Group B). Brief phone interviews in the subsequent two years provided further information on team performance.

We had no baseline against which to measure performance, nothing that would enable us to say: this is what an "average" team can be expected to do. We could, however, observe differences in the way teams performed. Here are some examples of long-lived Group A teams, all active through at least their fourth year. The information comes from telephone interviews in the spring of 1982, the fifth year of possible team activity.

There are two levels of teams, a parent team of five people, and a total school team of ten which includes the parents and five school staff. The team has continued to operate because there is a great need in the school and the team programs seem to help. Parents are involved in prevention programs which both staff and parents believe in. Vandalism has increased this year (two classrooms were burned). The team is continuing its nine programs and has begun two more this year: an academic improvement program for low achievers, with students from the university volunteering their services; and a school clean-up program planned in conjunction with a local men's service group.

The team of two team members still considers itself a team and continues to run its three programs. The two team members are active in the cluster and attend cluster meetings once a month. "We get a lot of support from our cluster. It's like a shot in the arm. We just won't quit. If it weren't for the cluster, we would have quit long ago." They plan to continue their team because "we've gotten used to being the only ones."

There is no activity this year. The team leader felt that the loss of the cluster coordinator was detrimental to team life. In addition, team members were not given release time to attend team meeting during the school day. Meetings had to be held after school or on Saturdays. Because of this, meetings were not scheduled. In addition, parents and school staff showed little interest.

The team leader joined the team when she came in as principal three years ago. Now there are three levels of teams: a small group of nine team members, a larger staff team, and a parent team. The team members meet once a week, the large staff team meets twice a month, and the parent team meets once a month. Seven team programs are still in operation. The team will most likely not continue next year as the team leader is being transferred as principal to a new school. However, she is taking the entire team structure to her new school as she thinks it's a good one. She is a strong partisan of involving people in solving their common problems. She has also promoted professional development: e.g., the evening custodian and the day-time security officer were "rewarded" for their involvement in solving disruption problems by being sent to a training program in another city. This has had a positive effect on all the staff. The district took note too and is looking to use this school's team model in other schools.

The team continues with seven team members. The team member I spoke with (there is no identifiable team leader) said the team is in a sustaining position, not one of growth. When the original team leader and the principal (also a team member) transferred to another school, the team lost important allies. The new principal is somewhat distrustful of the team. The district likes the team and adopted its Advisor-Advisee program district-wide. Team members trained other school staff in how to implement the program. Thus the new principal feels in the middle between a strong group of people in the school who want to contribute and participate in school programs and a district administration that wants teacher input. Communication between the team and principal is somewhat strained. Two team members are also representatives of the city teachers' association, so their role in contacting the superintendent over the principal's head is mixed with their role as team members. It is a difficult situation, but the team is hanging in here. They remember how good it was and want to get back to that place. They had initiated a "think tank" program in which teachers came up with ideas for new programs. The principal stopped this. He prefers to contact people individually about their ideas and then run the programs through his office. In addition, the district is reorganizing its junior highs and high schools to middle schools and 9-12 high schools, so there will be massive transfers. Team continuance will depend on which team members are left.

The team is inactive although four of the original team members are left in the school. The reason is that the new principal is not supportive of the team. The team is completely demoalized. The staff is also, as are the students whose behavior has worsened.

This is the only school remaining in the cluster. There is a new team leader, one of the original team members. The team has been in very frequent contact with the Training Center which is now conducting a leadership and drug training class. There have been "about 30" TA visits to the school this year, under other funding. In addition, the new superintendent brought in a program whereby a local company sponsors a local public school. The school has two such sponsors. Through the expertise of one of them, the school is thinking about using quality circles. Two teachers have been trained by the company in how to use them. The principal does not mind admitting the school has problems and he is willing to accept help. The staff is also committed to working on problems (drug and gang problems are increasing in this city's schools).

The team has not been active this year. However, the team leader feels that if something came up from the cluster (a new direction/new goals) the team considers itself an identifiable unit that could be mobilized (it is a team in search of a goal). The team felt it accomplished the goals it set out to work on. It was their intent that the school take over the team programs, and in their estimation this occurred. In addition, the state has mandated a program (for planning, evaluating, and recording) which meshed with the team's programs.

The team is active. There are five original team members plus two counselors on the team. The team leader has a full-time position as coordinator of the in-school suspension program which is the sole team program. It has become a model program with many visitors from other schools coming to study it. The team works very closely with the Training Center--the kids know the trainers as well as they know school staff. The suspension program is better known outside of the district than within it because of the exposure given it by the Training Center. Just this year the district became aware of their "showcase" and started actively supporting it. Now the team, in conjunction with the Training Center, is planning to expand the program to more than chronically disruptive youth. They are planning (and hope for district support) to include values clarification, self-esteem, and other human relations programs to include "fringe" youth. There have been about 10 TA visits to the school, one in January which was attended by 28 parents, 26 youth, and 7 team members and which was excellent in the way it involved parents. The team leader attended a national meeting along with Training Center staff and plans to attend a workshop at the Center in May. He credits not only the strong support from the Training Center with the team's continuance, but also the strong connection the five team members have with one another. Among the five, he said there is more than 100 years experience/service to school and community (the youngest team member has been with education for 14 years). They are a highly committed group. The principal supports them also. He is a team member and the five of them (plus the two counselors) meet every day. Our data allow us to look not only at variation in team performance in a given year, but at change in performance from one year to the next. Our report will be limited to the more extensive 1979 and 1980 data, the end of the first and second years of team activity for Group B and the end of the second and third years for Group A. We look here at team size, level of team activity, and overall team functioning.

#### Team size

Teams are not static entities. They lose members through job transfer and school reorganization, and they lose them through loss of interest or through discouragement and demoralization. They gain members through active recruitment and through interest generated in team activity. Teams that grow in size are likely to be functioning well. Teams that lose members may be pruning deadwood but may also be decreasing their ability to function effectively.

Over time, some teams get smaller and some get larger. At training, most teams had six to eight members (see Table 4-2). By 1980, the number of average-size teams was sharply reduced. We find more small teams, but we also also find more large ones. This pattern holds for both Groups A and B.

During their training year, few of the Group B teams lost members; half increased the size of their teams. During the second year, 7 out of 10 Group B teams reported a decrease in team size (col. 1 and 2, Table 4-3). Group A teams reported the same proportion of gains and losses in the first two years of team activity and between years two and three (col. 3 and 4, Table 4-3).
| Table                      | 4-2                      |      |
|----------------------------|--------------------------|------|
| Number of Te<br>(Percent o | eam Members<br>of Teams) |      |
| ·                          | 1979                     | 1980 |
| 5 or less                  | 23                       | 46   |
| 6-8                        | 69                       | 29   |
| 9 or more                  | 8                        | 26   |

| Tat | ble | 4-3 |  |
|-----|-----|-----|--|
|-----|-----|-----|--|

#### Change in Number of Team Members by Training Cycle (Percent of Teams)

|                      | B teams           |                 | A teams               |                 |
|----------------------|-------------------|-----------------|-----------------------|-----------------|
|                      | Training<br>yearl | lst-2nd<br>year | Training-<br>2nd year | 2nd-3rd<br>year |
| Loss of team members | 10                | 71              | 38                    | 42              |
| No change in number  | 41                | 16              | 25                    | 15              |
| Gain of team members | 49                | 13              | 38                    | 43              |

'Training was done early to mid-school year. Data reported is from end of school year.

There is also turnover among team leaders, the major point of team contact with principal, cluster coordinator, and Training Center. Roughly one out of four teams reported a change in the team leader position between training and the spring of 1979; the same number reported a change between 1979 and 1980. This holds for both A and B teams. There is less team leader turnover in subsequent years, possibly because only teams with more stable membership survive this long.

### Level of team activity

Teams are most active immediately after training. In the spring of 1979, 64 percent of the leaders of the B teams (then in their training year) described themselves as "very active" in team work compared to 46 percent of the leaders of the A teams (then in their second year). By the spring of 1980 there was a drastic decrease in reported team leader activity for both A and B teams: 20 percent of the A team leaders now describe themselves as "very active," 17 percent of the B team leaders. Table 4-4 shows team leader ratings of activity for themselves, their team members, their cluster coordinator, and other teams in their cluster.

Group B teams in their second year (1980) report substantially less activity than Group A teams in 1979, the same point in team life (p .01), suggesting that length of time since training may have played less of a role in diminished team activity than other factors--perhaps the pending termination of federal support for technical assistance. Team leader ratings of cluster activity are similar, except that the shift from 1979 to 1980 is less.

| Table | 4-4 |
|-------|-----|
|-------|-----|

## Team Leader Ratings of Activity (Percent of Teams)

|                     | B teams        |                | A t            | eams           |  |
|---------------------|----------------|----------------|----------------|----------------|--|
|                     | 1979<br>1st yr | 1980<br>2nd yr | 1979<br>2nd yr | 1980<br>3rd yr |  |
| Team leader         | 95             | 32             | 87             | 36             |  |
| Other team members  | 83             | 40             | 75             | 43             |  |
| Cluster coordinator | 93             | 66             | 84             | 74             |  |
| Other cluster teams | 80             | 65             | · 80           | 64             |  |

Combined figures for ratings of "very active" + "somewhat active."

In 1979, both A and B team leaders describe four out of five of other cluster teams as active. This is similar to their ratings of their own and their teammates' activity. In 1980, the situation has changed: two out of three team leaders report other teams as active, but well under half report the same level of activity in their own teams. This form of misperception (we are comparing judgments of the total group with the actual self-ratings of the teams that make up the group) is an example of what has been called plural ignorance, a phenomenon we discuss in Chapter 5.

#### Team functioning

Our concept of team functioning includes several measures of how teams work and work together: their planning and program development skills, their ability to work together as a team, their commitment to maintaining the team in the school. On 1979 measures of team functioning, the B teams did consistently better than the A teams. When we first reported this finding (Neto and Daniels, 1980), we explained it by the younger age of the B (first year) teams compared to the A (second year) teams. We anticipated that the teams as a group would show a decrease in functioning over time and expected the 1980 measures to show lower scores for both groups, with the B teams (then in their second year) having scores similar to those of the second year A teams in 1979.

There were no differences in 1980 functioning scores. Both groups showed decreased functioning from the prior year, as expected, but the B teams-which had scored higher in 1979--showed a larger drop in team functioning scores. A similar pattern appeared in team measures of cluster functioning (team ratings of cluster effectiveness and team commitment to maintenance

of the cluster). Second year (1980) scores for B teams were somewhat lower than those for second year (A) teams, though the differences (except for reported cluster effectiveness, p .01) were not statistically significant.

#### Conditions Related to Team Performance

We have described the pattern of team continuance for the teams in our study and changes in team performance over time. Considering both the size of the sample and the length of the follow-up period, it is reasonable to take these findings as a rough guide to what can be expected of other groups of teams with similar training and levels of technical assistance. Can we improve on this record? Possible points of intervention are the recruitment and preparation of schools, team training, and the nature and amount of post-training support.

Our data suggest that the teams most likely to continue operation in the schools have the following characteristics:

• They function well as teams.

They devote time to team activity; they are committed to keeping the team going; they plan well; they are concerned about making a difference in the school and they see themselves as having made a difference; they are seen as effective by outside raters.

- They are oriented toward cluster as well as team activity. They see the cluster as helpful in supporting team efforts; they are committed to keeping the cluster going.
- They have a supportive principal.
- The school is open to inputs from staff and community.
- School problems are seen as under control.

The principal has confidence in the school's efforts to maintain a safe environment; neither students nor teachers are concerned

with increasing security in the school.

The data supporting these conclusions are outlined in Table 4-5. There are two sets of comparisons:

• teams that dropped out during their third year vs. those that continued to operate as teams in the fourth year (for this comparison we use data collected in the teams' third year: 1980 for Group A; third year data was not available for Group B) The data are presented over three areas: characteristics of the team, its support system, and the kind of school in which it is located. The reader will have noted some of these issues in the descriptions of team activity presented earlier.

#### Team characteristics

For both sets of comparisons, the survivors have consistently higher scores on measures of team functioning than do the non-suvivors, but the differences are not always large enough to be reliable. In general, relationships between team functioning and survival are clearer for the longer-term survivors, suggesting that non-team factors may be more important in the early loss of teams.

• The school is not faced with budget cuts while the teams is trying to put its programs into operation.

teams that dropped out during their second year vs. those that continued to operate as teams in the third year (for this comparison we use data collected in the teams' second year: 1979 for Group A and 1980 for Group B)

#### Table 4-5

#### Conditions Related to Team Performance

Teams active in their 3rd year were higher on the following measures than teams that dropped out during their 2nd year.

#### TEAM CHARACTERISTICS

Team leader assessment of:

\*\* team impact on school crime and disruption

Cluster coordinator/trainer/ evaluator composite rating of team effectiveness

TEAM SUPPORT SYSTEM

Team leader assessment of:

- \*\*\* team focus on cluster activity
- \* team commitment to maintaining cluster
- \*\* summary measure of cluster effectiveness
- \*\* principal support for team efforts

Team leader agreement that training curriculum was appropriate<sup>2</sup>

Team leader agreement, that technical assistance was useful

Teams active in their 4th year were higher on the following measures than teams that dropped out during their 3rd year.

#### TEAM CHARACTERISTICS

Team leader assessment of:

- \* team activity level
- \*\*\* team commitment to maintaining team
- \* team planning skills
- \*\* team functioning
- \*\* summary measure of team effectiveness
- Cluster coordinator assessment of:
- \*\*\*\* team activity level
- \*\*\*\* team program development skills
- \*\*\*\* team impact on school crime and disruption

Cluster coordinator/trainer/ evaluator composite rating of team effectiveness

TEAM SUPPORT SYSTEM

Team leader assessment of:

- \*\*\* team focus on cluster activity
- \*\* team commitment to maintaining cluster
- \* cluster effectiveness in assisting team
- \*\*\* summary measure of cluster effectiveness
- \*\* principal support for team efforts Cluster coordinator assessment of:
- \*\*\* principal support for team efforts

#### KIND OF SCHOOL

- \*\*\* parent involvement in school activities<sup>4</sup>
- \* low security orientation
- \* declining enrollment, staff, and

Team leader assessment of:

- \* summary measure of student/teacher alienation (judged low)

<sup>1</sup>The composite rating of team effectiveness was developed from site visitor (evaluator) and cluster coordinator ratings of teams in 1979 and trainer and cluster coordinator ratings in 1980. Composite scores were cut at the mean and teams classified as high or low in effectiveness in each of the two years. Significance tests were not done.

59% of the 3rd year survivors were rated high in effectiveness compared to 29% of the 2nd year dropouts.

77% of the 4th year survivors were rated high in effectiveness compared to 43% of the 3rd year dropouts.

<sup>2</sup>Significance tests were not done (see footnote 3). Questions not asked 4th year. 57% of the 3rd year survivors strongly agree with this item compared to 38% of the 2nd year dropouts.

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<sup>4</sup> These items are based on questionnaires completed by school principals, students, and teachers. Except for the 5th item, all measures come from pre-tests and represent the schools as they were prior to team training.

Comparisons for 3rd vs. 4th year teams were not made on these measures.

\* inter-group communication (a composite measure including both staff inputs into and support for school and principal judgments of adequacy of school safety)<sup>4</sup>

(a composite measure based on principal, teacher, and student desires for tighter security)<sup>4</sup>

budget in year preceding team activity<sup>4</sup>

\* no decline in enrollment, staff, and budget in the course of team activity<sup>4</sup>

\* teacher alienation (judged low)

## \* p<.10; \*\* p<.05; \*\*\* p<.01: \*\*\*\* p<.10.

60% of the 3rd year survivors strongly agree with this item compared to 44% of the 2nd year dropouts.

#### Team support system

Support for a team can come from the cluster, the Training Center, and the school's administration and staff.

<u>Cluster</u>. Survivors are more cluster-oriented than non-survivors. They spend more time on cluster activity, they are committed to the concept of the cluster, and they more often see the cluster as effective in helping their own efforts. This holds for both comparison periods.

<u>Training Center</u>. Most team leaders have a favorable view of Training Center activity. Differences between survivors and non-survivors are small. The responses of the survivors are more often favorable on four of five questions concerning relationships with the Training Center (the exception is: "We got TA when we requested it.").

<u>School administration and staff</u>. A principal's support is crucial for the existence of a team. A principal as a team member helps to ensure that support. Having a principal on a second year team distinguished second from third from fourth year survivors for Group A teams (p < .05). Having a principal on the original team showed a similar trend, though a less reliable one (p < .12). This did not hold for the Group B teams, a finding we can only explain by assuming that factors other than school support were more important in determining B team survival.

Principal turnover during the course of a team's life is unrelated to team survival. The crucial question is whether or not the new principal supports the team and its activities. Individual team leaders reported both positive and negative effects from a change: a new principal whose interest has maintained a team or revived a flagging one; and a new principal whose opposition or lack of interest contributed to a team's demise.

Leaders of surviving teams are less likely than non-survivors to report teacher and student alienation (low morale, apathy, unwillingness to change). We found no such differences on measures of alienation derived from student and teacher questionnaires. This suggests that the team leader reports may be related to the perceived level of support for team activity rather than to generally low morale in the school. Unlike principal support, which continues to be important for team continuance in both follow-up periods, student/staff morale is less of an issue for the longer-term survivors, perhaps because the worst schools in this respect have already dropped out of the program.

#### Kind of school

Team continuance is unrelated to school level, but may be related to the size of a school relative to others of its kind. Teams in middle and elementary schools with enrollments of 500 or more are more likely to survive into a third year than those in smaller schools (p < .05). The same is true for teams in high schools with enrollments of 1500 or more, though this difference is not large enough to be reliable. It is unlikely that school size itself is a determinant of team survival. We may be dealing instead with some correlate of school size--perhaps organizational complexity?--for which we have no measure.

Teams survive equally well in good and bad schools. Survival is unrelated to the amount of crime and poverty in the school's immediate neighborhood

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and to the amount of crime occurring in the school. It is also unrelated to the school's physical condition, how crowded it is, the failure rate of its students, and the level of both student and teacher alienation. What <u>is</u> important is that school problems are seen as under reasonable control. Teams are less likely to do well in schools in which students, teachers, and principal are agreed on the need for tighter security--a sign that problems have gotten out of hand.

Also important to team survival is the school's openness to inputs from its own staff and from parents and the community. This is probably only possible when the school has control of its own problems.

Finally, we found that the third year survivors, compared to those that dropped out in the second year, more often reported declining enrollment, staff, and budget in the year preceding initiation of the team program, but less often reported such change over the course of the team intervention. This seemingly contradictory finding suggests that external problems may be motivators for engaging in change efforts but can prove disruptive once these efforts are underway.

## Team leader views of team survival

In the spring of 1981, we asked the leaders of still surviving teams (this was the end of the fourth year for Group A, the third year for Group B) why they believed their teams had continued to function. The dedication of team members (74 percent) and the support of the principal (58 percent) are the factors most often mentioned. The support of school staff for the team and its efforts runs a close third (42 percent). Principal (and also staff)

support is crucial, not only early but on an ongoing basis. In interviews conducted in the spring of 1982, 38 percent of the leaders of the still active teams stated that having a supportive principal was a main reason for their team's continued existence.

Cluster and cluster coordinator support are infrequently mentioned, though other data suggest that these play a role in team survival. Of the 152 team leaders interviewed in 1981, 74 percent of those in a district with a surviving cluster coordinator had active teams compared to 38 percent of those in districts without a cluster coordinator. Similarly, 62 percent of the teams that had had some contact with other cluster teams during the current school year expected to continue the team in the following year, compared to 27 percent of those that had had no such contact.

Support from the Training Center was also infrequently mentioned. Again, other data suggest a relationship between Training Center activity and team longevity. Half of the teams interviewed had had some contact with the Training Center during the 1980-81 school year. Of these, 67 percent were still functioning as teams and 62 percent expected to continue into the following year. Of those without such contact, 22 percent were still active as teams and expected to continue into the next year. In our 1982 interviews, a quarter of the leaders of still active teams attributed their survival to the strong Training Center contacts they had had in that school year. — In exit interviews conducted in 1979, 1980, and 1981 with leaders of teams that had dropped from the program, we asked why their teams had failed. The most serious problem, across all years, is lack of in-school support for team efforts (58 percent). This is followed by team member loss (48 percent

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of the failed teams). This occurs largely through transfer, resignation, retirement, or budget cuts--problems external to team functioning. The pressures of team member loss and also of time and money constraints (28 percent of the failed teams) become more important in the second year of team operation.

The team leader views of reasons for success and failure support and give some color to the findings from the questionnaire/interview measures reported earlier. Teams must function well to survive. Functioning is impeded not only by problems internal to the team (for example, failure to work together harmoniously) but by school reorganizations and reductions in staff that make it difficult to keep team membership stable. Budget reductions and threatened school closings lead to teacher demoralization and make it difficult to retain enthusiasm for volunteer team activity. Cluster and Training Center activity are less often seen by team leaders as central to team survival, but there is evidence that they play an important role in many cases and continue to do so throughout team life.

#### Summary of Findings

- 1. Teams can survive well beyond the duration of federal funding. Over a third of the teams (37 percent) were active in the year following termination of federal support (1980-81). A fifth (20 percent) were active in the following year (1981-82).
- 2. There are many forms of team continuance and these figures underestimate the longevity of team influence.

Team members may become absorbed into other school change efforts where

problems.

Teams that survive see themselves functioning well as teams and are judged · effective by others. Such teams may survive settings lacking in external support, but they do better when it is present. Supportive settings may bolster weaker teams and enable them to survive periods of difficulty and to improve their ability to function effectively.

continue.

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they put their team skills and experience to use. Team programs may become integrated into the operation of the school and continue long after team members cease to meet as a team. Teams may revive after periods of inactivity. Individual team members may initiate new programs on their own. They may make use of skills acquired in team training and affect both their classrooms and their relationships with their peers. When team members are also principals, they may change their ways of relating to staff, parents, and students and their approach to school

## 3. The support provided to the team within the school is a crucial factor in team functioning and continuance.

The support provided by the principal is critical. Staff support is also important, as is a school climate that is hospitable to change, i.e., open to inputs from staff and community.

#### 4. Effectiveness alone does not guarantee team survival.

## 5. External problems may destroy even the most dedicated teams.

Teacher layoffs, school reorganizations, and budget reductions lead to loss of team members and also take a toll in lowered morale. The resulting increased workloads may make volunteer team activity too burdensome to

- 6. The support of other schools in the district--as expressed through the activity of teams in other schools and through the district cluster coordinator--is an aid to team continuance.
- 7. The continuing support of the Training Centers is important to the survival of many teams.

Training Centers provide assistance with team program development and with internal team problems. They also work as mediators with and trainers of both administrative and teaching staff and thus help create more hospitable settings for team activity.

We summarize here what our findings suggest about the use of the School Team Approach and about efforts to change and improve schools.

fear of crime.

The School Team Approach is an open and growing system. It is not a fixed intervention that may be exactly replicated, either within or outside of the present ADAEP training system.

approach.

This approach has been consistent over the history of ADAEP. It is shared by the Training Centers and informs their specific activities, even if their interpretations of it vary across time and across Centers. The fundamentals of the approach are:

#### Chapter 5

CONCLUSIONS AND RECOMMENDATIONS

Implications of Evaluation Findings

1. The School Team Approach, when implemented well, is an effective and relatively low cost way to deal with the problem of school crime and

When we raise the question of the transferability of this intervention-either by further funding of ADAEP to train more school teams or by recommending a similar intervention to be undertaken by other agencies-we must think not of specific activities but of a general training

- developing a supportive school/district setting for the team
- creating local school problem-solving capability through team building and the development of skills in program planning and implementation
- a training emphasis on:

prevention, particularly through the creation of a more humane school environment which will minimize current problems and forestall the development of future ones,

structural change in the school, i.e., change in the way the school operates rather than change in isolated segments of the school, and

team choice about specific interventions for the team's school

- providing post-training support to the team
- institutionalizing the change process in the school by developing the team as an ongoing entity that can provide local expertise in dealing with future school problems as they arise

Within these broad guidelines, there is room for much variation. We see the fact of this variation as lending added support to the strength of the general approach.

# 2. There is a role for both local problem-solving and for a specific, though limited, federal role at the local level.

In recent years, and due in part to a Rand Corporation study of federal education change efforts, federal involvement in education has moved from an emphasis on directed development (in which a federal agency lays out a specific program for local education agencies to follow) to an emphasis on local problem-solving (in which monies are given to a local agency to implement change, with or without some local technical assistance). In her review of this change, Datta (1981) questions the interpretations of the Rand report and suggests that the case for local problem-solving has not yet been made.

The ADAEP program, with its emphasis on empowering schools to solve their own problems, may appear to be another example of "local problem-solving." Actually, it lies midway between the two approaches and thus represents a third choice.

What the School Team Approach offers is federal aid through "experts" (trainers) in developing local competence, with ongoing technical assistance used to aid the team as it runs into road blocks. The kind of technical assistance offered is clearly linked to training experiences and to a set of training principles. In this way it differs from the technical assistance used in the local problem-solving efforts described by Datta (usually given by academic experts who have had no prior contact with the local school).

The School Team Approach represents a far more clearly defined program than do most efforts to allot monies over general categories to "support local change"--either directly or through block grants. Though the Approach is centrally directed, and was developed by people at the federal (and regional) level, it does not lay out a specific program for local agencies to follow. It thus allows recognition of the great differences among schools that require programs tailored to fit individual needs, resources, obstacles, levels of sophistication, and political realities.

Its aim--as is true of all such federal efforts--is to institutionalize

the federally-funded program after the withdrawl of federal support. What it proposes to institutionalize, however, is not a specific program or set of programs but rather the presence in the school of a trained change entity which can be continually responsive to the course of local history.

## 3. Local wisdom is not necessarily sufficient to guarantee wise and effective choices in change efforts.

Our analysis of project choices and crime reduction indicated that teams do not necessarily select those projects most likely to reduce problems in their school. We found, for example, that security and discipline projects were used more widely by high school than by middle or elementary school teams though they were the least successful strategy thrust in the former and the most successful in the latter. Within any one school level, we found a wide range of intervention approaches, both those associated with good and with poor outcomes. This suggests that team effectiveness could be improved by the feedback of information on project effectiveness, both from local school-directed evaluation and from larger-scale evaluations such as the present one.

4. The longevity of teams can be improved by strengthening in-school support, by building a supportive network through other schools and the school district, and by maintaining a link with federally-sponsored technical assistance over a longer period of time.

The School Team Approach is successful in mounting change efforts in a high percentage of schools and, despite attrition over the years, in

maintaining those efforts in a substantial proportion of schools after federal support is withdrawn. Three kinds of action can improve the longevity of teams.

a. the selection and maintenance of supportive school settings A team cannot survive in a school without the principal's approval. A team has difficulty in functioning without the principal's active support. Initial selection of school sites in which the principal is really sold on the potential of a team for her or his school will help assure that support. This means that it may be necessary to allow more lead time for developing settings and perhaps to commit some team training resources to this pre-training activity.

Beyond this, since initial commitments and enthusiasm may erode with time--and since committed principals may leave the schools and be replaced by less committed ones--it may be necessary to provide for continued setting development after teams have been trained.

b. the building of supportive local networks

The training of teams in clusters of schools from the same district and the provision of a cluster coordinator contributes to team continuance. Though some teams do well on their own, teams as a whole are more likely to continue when there is active district support, as expressed through the district's maintenance of the coordinator position. Similarly, there is evidence that contact with other teams--which may be facilitated either through the district or through Training Center activities--is related to increased team longevity. Time and resources devoted to the development and

maintenance of district-level support may be as important as time given to the development of the local school setting.

c. the maintenance of technical assistance support

Team continuance is more likely when contact with the Training Center is maintained over a longer period of time. In our study technical assistance was to be given over the first two years of team activity. Those teams in which it was spread over the first three years (the total amount being the same) had higher survival rates than those teams in which it was confined to two years.

Many of our long-term survivors--teams active in their fourth and fifth years--report some contact with the Training Center. This may be in the form of inclusion of team members in regional training workshops, or participation in training activities arranged through other funding. We do not know the optimal time for contact to continue (it obviously varies by school), but there would appear to be value in making resources available for longer-term contact for teams able to benefit by it. Such contact is considerably less expensive than the training of new teams.

We cannot talk specifically about the separate vs. combined impact of the three factors we have discussed above. We know that there are individuals who rise above enormous handicaps to become successful in their lives. There are also teams that show unusual tenacity in the face of adverse settings. But as a group, both individuals and teams do better the greater the diversity and extent of their support systems.

5. It is important to measure both the quality of an intervention and its impact over time.

Although our measures of intervention quality were relatively crude, they enabled us to find differences in performance (crime reduction) that were not apparent with simple comparisons of A (longer) vs. B (shorter intervention time) teams. Cook and Poole (1982) have recently pointed to the weakness of the treatment/no treatment comparisons common in evaluation research and emphasized the need to include data on implementation quality when assessing program effects.

The strength of an intervention may wax and wane over time. We found substantial numbers of teams that strengthened their performance after a shaky beginning, and others that fell apart after initial good performance. Our later followup interviews suggest that this process may continue over time, with team performance varying as the team's membership and its base of support change. This argues for repeated measures of outcome, since how well a program appears to work depends on the point in time when it is observed. It also argues for longer followup periods, since the staying power of a given instance of an intervention may not be clear within the first year or two of its operation. In general, assessing intervention effects after longer time intervals should give a better indication of an intervention's power.

6. The School Team Approach offers a way to create promising sites for field-based research and development efforts directed to the increase of knowledge about delinguency and its prevention.

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-5-7

One of the problems in testing new approaches to delinquency reduction is finding settings in which interventions of integrity and power can be developed. It takes time to build a new program and to create the conditions under which developing a strong intervention is possible. Many new programs make minimal contributions to knowledge because they are weak and poorly implemented.

This study looked at a large number of schools, selected only on the basis of their demonstration of a crime problem and their willingness to have a school team. Not all schools were equally hospitable to the Team Approach. Not all teams functioned equally well. Not all teams survived. A sizeable number of teams, however, continue to operate in their schools five years after the initiation of the OJJDP program, have developed innovative programs and a climate for self-study within the school.

The School Team Appraoch is a way to develop promising research and development sites at relatively low cost. The teams already developed and still functioning represent a significant resource for the development of further knowledge at both a local and federal level.

#### Leads for Future Research

The original evaluation questions framed and guided our analysis of the evaluation data. What we found, and what it suggested, has been summarized in the preceding section. Other questions--those emerging in the course of our efforts to understand the data--were beyond our mandate and our resources, though they were equal in interest and importance to the questions we addressed. We put them aside reluctantly. In this section, we review some of these "other questions," each of which opens a field for productive research in the areas of delinguency prevention and school change.

The reader concerned with "real crime" (as opposed to measures of danger. fear, and so on) may have questioned the adequacy of our victimization data as measures of the amount of crime actually occurring in schools. We shared this concern at the outset of the study and invested a great deal of time and effort in collecting reports from the schools on actual incidents (those reported to school administration) of violence, disruption, theft, vandalism, and alcohol and drug offenses. The incident reports, collected over three years, were to represent our "hard data" measures of crime levels and to supplement those derived from student and teacher surveys. We expected substantial agreement across schools between the incident reports and the corresponding student/teacher measures, i.e., schools high in one set of measures were expected to be high in the other.

We found at best low to moderate agreement between the two data sources. One problem was the difficulty of obtaining quality incident data from the schools. (We reported earlier, Capell et al., 1982, on efforts to improve quality through adjustments for school failure to follow directions for collecting incident reports.) A second problem concerns the nature of the incidents themselves which do not occur with any regularity over time. A possible explanation for the poor showing of our incident vs. victimization data is uncertainty as to the proper way to model data of the incident type

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## Self-reports of victimization vs. incident counts

(Sparks et al., 1977, devoted considerable effort to this issue without reaching a definitive resolution).

Further exploration of this discrepancy was within our evaluation mandate but proved to be well beyond our resources. The issue is of practical importance in victimization studies given the cost and difficulty of gathering institutional incident data and the concern about validity sometimes raised in connection with self-report measures.

#### Sub-group differences in perception of the same school environment

The crime problem in a school--how much there is, and how much of a threat to safety--is not seen in the same way by all of the school's students. Younger students, for example, tend to be more concerned about crime than older students. Girls tend to view crime problems more seriously than do boys.

In our study, we found that groups defined in terms of their age, sex, and ethnicity perceived the school quite differently. Younger white girls, for example, did not report the school environment in the same way as younger black girls. These differences were not necessarily the same from one school to another, that is, the sub-group reporting most danger in one school was not always the same as the sub-group reporting most danger in another. We also found sub-group differences for teachers.

The problem of sub-group differences is not unique to our study and is, in fact, a common theme in organizational and social climate research (Finney & Moos, 1982; Howe, 1977; Powell & Butterfield, 1978; Schneider & Bartlett, 1970). It creates a basic measurement problem in survey research on crime and victimization (Gottfredson, 1981; Hindelang et al., 1981). Victim surveys have noted sub-group differences in social perceptions, victimization experiences, and strategies for coping with victimization (Sparks, 1976).

Sub-group differences may arise from differences in the amount and kind of victimization experience; from perception of one's vulnerability to attack (e.g., being younger, being female); from the relative minority/majority status of a given sub-group within the school (e.g., being a black student in a school that is predominantly white vs. a school that is predominantly black); or from interactions among these and/or other factors.

Our analysis of team impact on crime did not tell us whether change in a school's crime level occurs across all sub-groups or is a result of change in only one or two. Our analysis of team interventions and change in crime did not tell us what kinds of interventions reach which sub-groups within the school.

Study of sub-group differences and their correlates is important for understanding the nature of the crime problem and what it means to those within the school environment. It is also important for targeting interventions to reach those groups most at risk.

Differences in fear of crime

Within any school, there is a group of students--generally a minority--that are not only preoccupied with crime and potential danger but whose fear leads them to restrict their movement within the school. This number is

considerably larger than the number who report being victimized during that school year. It is smaller than the number who see the school as unsafe for students.

What makes some students more afraid than others, even in the face of common perceptions of danger? Research evidence on the relations among victimization, fear of crime, and exposure to crime is inconclusive (Balkin, 1979; Bush, 1982; Garofalo, 1977). One line of research from our data would look at differences in school experiences and individual attitudes and perceptions associated with excessive fear in non-victims and victims. Another would compare fearful and non-fearul students of similar background.

The study of fear of crime represents another approach to sub-group research, with the groups here defined by their attitudes rather than their background characteristics. The very fearful students are one such group. Other groups of interest include the "toughs" and the cynical, alienated students.

## Interactions between teacher and student response to school crime

Teacher perception of and response to violence depends not only on their own background characteristics, victimization experiences, and attitudes but may also be related to the same set of variables in their students. (We have already noted, for example, that teacher views of the seriousness of student behavior vary with the age of the students in the school.) The same may be true of students, that is, student response to school crime may be related to characteristics of their teachers (e.g., their amount of teaching experience, whether or not they feel prepared to cope with school violence, what they see as educational priorities).

This suggests two potentially valuable lines of research. One would deal with the interactions among student/teacher characteristics and student/ teacher perceptions of and response to school crime. A second would look at changes in these over time, specifically at the kinds of students and teachers whose response is affected by different types of team interventions.

We found in our study that students consistently overestimate the alienation from school of their fellow students. This kind of misperception is one example of a phenomenon that was called, in 1931 (Katz and Allport), pluralistic ignorance.

Though there has been relatively little investigation of the pluralistic ignorance phenomenon since it was first described, recent research interest indicates that it is a widespread occurrence in both institutional and non-institutional settings (Breed & Ktsanes, 1961; Klofas & Toch, 1982; Taylor, 1982). It has been found in schools (Packard & Willower, 1972) and among delinquent youth (Breznitz, 1975).

Most typically, pluralistic ignorance is represented by an overestimation of a tough, cynical, or anti-social stance on the part of the group that is not supported by the actual opinions of group members. This misperception leads to a reluctance to confront or raise questions about the presumed majority opinion that may help perpetuate the original misperception. Moreover, it gives disproportionate visibility to the opinions of a small minority who do in fact hold tough/cynical/anti-social views--views often held more intensely than those of the pro-social though less committed

## Misperceptions of the attitudes of others

majority. These "illusory subcultures" (klofas & Toch, 1982) justify the tough, retaliatory stance of some controllers (in schools, administrators and teachers) which serves to reinforce the perception of a "tough" group identity even though as individuals the majority of the group may hold more pro-social attitudes. The dynamics of these mutual (and mutually reinforcing) misperceptions may help explain resistance to change efforts, particularly those aimed at single sub-groups within an institutional setting or those that fail to recognize the pluralism within the setting at large.

The pluralistic ignorance phenomenon offers a promising and intriguing line of research. In particular, the notion of expressing a "tough" stance to align oneself with the (misperceived) views of peers, whether in students or teachers, may prove useful in understanding the dynamics of violence in school settings. Further, interventions designed to change attitudes and behaviors, e.g., by strengthening pro-social bonds, may need to take account of both group and individual level misperceptions as extra impediments to reform efforts.

If these research leads seem out of place in an evaluation report, we would argue that at least one function of an evaluation is to suggest where to go next. We offer this comment for both evaluators and their funders:

Those who become investigators quickly learn that the formal, preplanned design is no more than a framework within which imaginative, catch-ascatch-can improvisation does the productive work....Questions posed to get the inquiry under way prove to be far less interesting than the questions that emerge as observations are made and puzzled over. Not infrequently, questions arising out of the observations prove to be more important in the long run than the facts that the study was designed to pin down (Cronbach, 1982, p. x)

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Appendix A

Outcome Analyses: ANOVAs

#### Variables entering into ANOVAs

° CYCLEID

Training cycle: A teams (1st year training) B teams (2nd year training)

Also referred to as "C" in interaction terms (e.g., CE means cycle x effectiveness).

° EFFTM

Team effectiveness. A four-way classification based on ratings made in 1979 and 1980: high effective in both years (high-high); low effective in both years (low-low); and change in effectiveness from one year to the next (high-low and low-high).

Also referred to as "E" in interaction terms.

° 1-ST COVAR

Control for differences in length of time occurring between successive administrations of the questionnaire.

° 2-ND COVAR

Control for disruptive setting events occurring between years 1 and 3.

°R

Replication: effects due to time.

R(1) = linear effects

R(2) = quadratic (non-linear) effects

A linear effect (in the proper direction) would indicate that problem levels in schools steadily decline from the first to the second to the third year.

A quadratic or curvilinear effect would indicate that the average value for year 2 is significantly out of line from years 1 and 3. E.g., if problem levels dropped sharply from the first to the second years, but then increased in the third year, this would appear as a quadratic trend.

The linear and quadratic time components are independent--either may be present, or not, as the data indicate. One plausible combination of the two kinds of effects would be an initial decline in problem levels followed by a leveling off in the third year: scores generally drop over time (i.e., means for the second and third years are lower than that for the first), but the difference between the initial and final values is concentrated in the first time interval. This kind of pattern might be found where teams accomplish a great deal in their first year of operation but thereafter do little more than maintain their initial success. Time trends take on more meaning when they interact with other classification factors included in the analysis.



#### PAGE 4 OUTCOME ANOVAS WITH COVARS

ANALYSIS OF VARIANCE FOR 1-ST Dependent variable - VCPERS1 VCPERS2 VCPERS3

|    | SOURCE         | SUN OF<br>SQUARES | DEGREES OF<br>FREEDOM | MEAN<br>SQUARE | F    | TAIL<br>PROB. |
|----|----------------|-------------------|-----------------------|----------------|------|---------------|
|    | CYCLEID        | 0.00069           | 1                     | 0.00069        | 0.13 | 0.7211        |
|    | EFFTM          | 0.00974           | 3                     | 0.00325        | 0.61 | 0.6126        |
|    | CE             | 0.01746           | 3                     | 0.00582        | 1.08 | 0.3579        |
|    | 1-ST COVAR     | 0.00073           | 1                     | 0.00073        | 0.14 | 0.7125        |
|    | 2-ND COVAR     | 0.02927           | 1                     | 0.02927        | 5.46 | 0.0209        |
|    | ALL COVARIATES | 0.02938           | 2                     | 0.01469        | 2.74 | 0.0682        |
| 1  | ERROR          | 0.74578           | 139                   | 0.00537        |      |               |
|    | R(1)           | 0.00003           | 1                     | 0.00003        | 0.06 | 0.7996        |
|    | R(1)C          | 0.00011           | ī                     | 0.00011        | 0.27 | 0.6069        |
|    | R(1)E          | 0.00039           | 3                     | 0.00013        | 0.31 | 0.8168        |
|    | R(1)CE         | 0.00040           | 3                     | 0.00013        | 0.32 | 0.8137        |
|    | 1-ST COVAR     | 0.00000           | 1                     | 0.00000        | 0.00 | 0.9889        |
|    | 2-ND COVAR     | 0.00000           | 1                     | 0.00000        | 0.00 | 0.9943        |
|    | ALL COVARIATES | 0.00000           | 2                     | 0.00000        | 0.00 | 0.9999        |
| A  | ERKOR          | 0.05852           | 139                   | 0.00042        |      |               |
| Í. | R(2)           | 0.00200           | 1                     | 0.00200        | 5.48 | 0.0207        |
|    | R(2)C          | 0.00004           | i                     | 0.00004        | 0.12 | 0.7273        |
|    | R(2)E          | 0.00195           | 3                     | 0.00065        | 1.78 | 0.1534        |
|    | R(2)CE         | 0.00127           | 3                     | 0.00042        | 1.16 | 0.3267        |
|    | 1-ST COVAR     | 0.00198           | 1                     | 0.00198        | 5.44 | 0.0211        |
|    | 2-ND COVAR     | 0.0009            | 1                     | 0.00009        | 0.24 | 0.6251        |
|    | ALL COVARIATES | 0.00207           | 2                     | 0.00104        | 2.84 | 0.0615        |
|    | ERROR          | 0.05069           | 139                   | 0.00036        |      |               |
|    | R              | 0.00198           | 2                     | 0.00099        | 2.52 | 0.0825        |
|    | RC             | 0.00024           | 2                     | 0.00012        | 0.31 | 0.7371        |
|    | RE             | 0.00235           | 6                     | 0.00040        | 1.01 | 0.4212        |
|    | RCE            | 0.00155           | 6                     | 0.00026        | 0.66 | 0.6859        |
|    | 1-ST COVAR     | 0.00114           | 1                     | 0.00114        | 2.89 | 0.0901        |
|    | 2-ND COVAR     | 0.00001           | 1                     | 0.00001        | 0.03 | 0.8620        |
| ç  | ALL COVARIATES | 0.00118           | 2                     | 0.00059        | 1.49 | 0.2261        |
| 2  | ERROR          | 0.11011           | 280                   | 0.00039        |      |               |

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Student measure: <u>Self-reports of personal</u> victimization

#### PAGE 8 OUTCOME ANOVAS WITH COVARS

ANALYSIS OF VARIANCE FOR 1-ST Dependent Variable - Vavcts1 Vavcts2 Vavcts3

|   | SOURCE         | SUN OF<br>SQUARES | DEGREES OF<br>FREEDOM | MEAN    | F     | TAIL<br>PROB. |
|---|----------------|-------------------|-----------------------|---------|-------|---------------|
|   | CYCLEID        | 0.00635           | 1                     | 0.00635 | 0.80  | 0.3719        |
|   | EFFIM          | 0.00904           | 3                     | 0.00301 | 0.38  | 0.7670        |
|   | CE             | 0.02126           | 3                     | 0.00709 | 0.90  | 0.4450        |
|   | 1-ST COVAR     | 0.01976           | ĩ                     | 0.01976 | 2.50  | 0.1163        |
|   | 2-ND COVAR     | 0.00463           | i                     | 0.00463 | 0.58  | 0.4457        |
|   | ALL COVARIATES | 0.02996           | 2                     | 0.01498 | 1.89  | 0.1543        |
| 1 | ERROR          | 1.09928           | 139                   | 0.00791 |       |               |
|   | R(1)           | 0.01326           | 1                     | 0.01326 | 18.95 | 0.0           |
|   | R(1)C          | 0.00147           | 1                     | 0.00147 | 2.11  | 0.1489        |
|   | R(1)E          | 0.00086           | 3                     | 0.00029 | 0.41  | 0.7463        |
|   | R(1)CE         | 0.00076           | 3                     | 0.00025 | 0.36  | 0.7804        |
|   | 1-ST COVAR     | 0.00896           | 1                     | 0.00896 | 12.81 | 0.0005        |
|   | 2-ND COVAR     | 0.00025           | 1                     | 0.00025 | 0.36  | 0.5491        |
|   | ALL COVARIATES | 0.00992           | 2                     | 0.00496 | 7.09  | 0.0012        |
|   | ERROR          | 0.09727           | 139                   | 0.00070 |       |               |
|   | R(2)           | 0.00029           | 1                     | 0.00029 | 0.67  | 0.4144        |
| , | R(2)C          | 0.00167           | . 1                   | C.00167 | 3.92  | 0.0496        |
|   | R(2)E          | 0.00390           | 3                     | 0.00130 | 3.05  | 0.0307        |
|   | R(2)CE         | 0.00089           | 3                     | 0.00030 | 0.70  | 0.5537        |
|   | 1-ST COVAR     | 0.01306           | 1                     | 0.01306 | 30.67 | 0.0           |
|   | 2-ND COVAR     | 0.00044           | 1                     | 0.00044 | 1.03  | 0.3130        |
|   | ALL COVARIATES | 0.01348           | 2                     | 0.00674 | 15.83 | 0.0           |
|   | ; ERROR        | 0.05920           | 139                   | 0.00043 |       |               |
|   | R              | 0.01300           | 2                     | 0.00650 | 11.58 | 0.0000        |
|   | RC             | 0.00322           | 2                     | 0.00161 | 2.87  | 0.0582        |
|   | RE             | 0.00471           | 6                     | 0.00078 | 1.40  | 0.2154        |
|   | RCE            | 0.00153           | 6                     | 0.00026 | 0.45  | 0.8416        |
|   | 1-ST COVAR     | 0.02259           | 1                     | 0.02259 | 40.25 | 0.0           |
|   | 2-ND COVAR     | 0.00000           | 1                     | 0.00000 | 0.00  | 0.9678        |
|   | ALL COVARIATES | 0.02271           | 2                     | 0.01136 | 20.23 | 0.0           |
| 2 | ERROR          | 0.15715           | 280                   | 0.00056 |       |               |

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# Student measure: <u>Self-reports of property</u> victimization

| DACE |   | 0       |        |      |        |
|------|---|---------|--------|------|--------|
| PAGE | • | UUTCOME | ANDVAS | HITH | COVARS |

ANALYSIS OF VARIANCE FOR 1-ST DEPENDENT VARIABLE - SVCSUMS1 SVCSUMS2 SVCSUMS3

|    | SOURCE         | SUM OF<br>SQUARES | DEGREES OF<br>FREEDOM | MEAN<br>SQUARE | F     | PROB.  |
|----|----------------|-------------------|-----------------------|----------------|-------|--------|
|    | EFFIM          | 0.00483           | 3                     | 0.00161        | 66.0  | 0 9030 |
|    | CYCLEID        | 0.00264           | 1                     | 0.00264        | 0.55  | 0.6020 |
|    | EC             | 0.01099           | 3                     | 0.00366        | 0.54  | 0.4017 |
|    | 1-ST COVAR     | 0.00160           | ĩ                     | 0.00160        | 0.10  | 0.5201 |
|    | 2-ND COVAR     | 0.00875           | i                     | 0.00876        | 1.01  | 0.2007 |
|    | ALL COVARIATES | 0.01256           | ;                     | 0.00638        | 1.01  | 0.1811 |
| 1  | ERROR          | 0.67300           | 139                   | 0.00484        | 1.50  | 0.2705 |
|    | R(1)           | 0.00171           |                       | 0.00171        | 5 4 2 | 0 0213 |
|    | R(1)E          | 0.0000            | ā                     | 0.00001        | 0.05  | 0.0213 |
|    | R(1)C          | 0.00092           | í                     | 0.00001        | 0.05  | 0.9872 |
|    | R(1)EC         | 0.00018           | 1                     | 0.00092        | 2.93  | 0.0892 |
|    | 1-ST COVAR     | 0.00189           | 1                     | 0.00006        | 0.19  | 0.9033 |
|    | 2-ND COVAR     | 0.00021           | 1                     | 0.00189        | 6.00  | 0.0156 |
|    | ALL COVARIATES | 0.00021           | 1                     | 0.00021        | 0.67  | 0.4129 |
|    | ERROR          | 0.04378           | 139                   | 0.00031        | 3.74  | 0.0263 |
| A- | R(2)           | 0.0003/           |                       |                |       |        |
| 4  | RIZIE          | 0.00036           | 1                     | 0.00036        | 2.15  | 0.1451 |
|    | RIDIC          | 0.00179           | 3                     | 0.00060        | 3.52  | 0.0169 |
|    |                | 0.00081           | 1                     | 0.00081        | 4.78  | 0.0305 |
|    |                | 0.00037           | 3                     | 0.00012        | 0.72  | 0.5394 |
|    | 2-ND COVAR     | 0.00325           | 1                     | 0.00325        | 19.22 | 0.0    |
|    | ZTNU CUVAR     | 0.00015           | 1                     | 0.00015        | 0.86  | 0.3546 |
|    | ALL LUVAKIAIES | 0.00340           | 2                     | 0.00170        | 10.03 | 0.0001 |
|    | ERRUR          | 0.02354           | 139                   | 0.00017        |       |        |
|    | R              | 0.00201           | 2                     | 0.00101        | 4.16  | 0.0166 |
|    | KE             | 0.00181           | 6                     | 0.00030        | 1.24  | 0.2834 |
|    | KL             | 0.00181           | 2.                    | 0.00090        | 3.74  | 0.0249 |
|    | REC            | 0.00052           | 6                     | 0.00009        | 0.36  | 0.9032 |
|    | 1-51 COVAR     | 0.00531           | 1                     | 0.00531        | 21.98 | 0.0    |
|    | 2-ND COVAR     | 0.00001           | 1                     | 0.00001        | 0.05  | 0.8275 |
|    | ALL COVARIATES | 0.00540           | 2                     | 0.00270        | 11.17 | 0.0000 |
| 2  | ERROR          | 0.06767           | 280                   | 0.00024        |       |        |

C

Student measure: Victimization summary

Composite measure includes:

Self-reports of personal victimization Self-reports of property Victimization يريد الاختلاقية

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| PAGE  | 20       | 0         |                  |              |            |             |      |        | - <b>4</b> i |
|-------|----------|-----------|------------------|--------------|------------|-------------|------|--------|--------------|
|       |          | BUICOME   | ANDVAS WITH COVA | IRS          |            |             |      |        |              |
| ANAL  | ISES OF  | VARIANCE  | FOR 1-ST         |              |            |             |      |        |              |
| DEPEN | IDENT V. | ARIABLE - | SDRUGS1 SOBUCS2  | \$ D D U C C | -          |             |      |        |              |
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|       | CYCLE    | ID        |                  | 0 03001      |            |             |      | FRUB.  |              |
|       | EFFIM    | l I       |                  | 0.07010      | 1          | 0.03081     | 0.55 | 0 4503 |              |
|       | CE       |           |                  | 0.07919      | 3          | 0.02640     | 0.47 | 0.4583 | •            |
|       | 1-51     | CUATH     |                  | 0.11019      | 3          | 0.03940     | 0 71 | 0.7011 |              |
|       | 2-ND     | COVAR     |                  | 0.17498      | 1          | 0.15498     | 2 79 | 0.5493 |              |
|       | ALL C    | OVARIATES |                  | 0.09988      | 1          | 0.09968     | 1 70 | 0.0976 |              |
| 1     | ERROR    |           |                  | 0.21054      | 2 .        | 0.10527     | 1.19 | 0.1832 |              |
|       |          |           |                  | 1.14485      | 139        | 0.05572     | 1.89 | 0.1550 |              |
|       | R(1)     |           |                  |              |            |             |      |        |              |
|       | - K(1)C  |           | 1                | 0.00562      | 1          | 0.00562     |      |        |              |
|       | R(1)E    |           |                  | 0.00100      | 1          | 0.00100     | 1.37 | 0.2445 |              |
|       | R(1)C    | E         |                  | 0.00973      | 3          | 0.00324     | 0.24 | 0.6232 |              |
|       | 1-ST (   |           |                  | 0.01527      | 3          | 0.00524     | 0.79 | 0.5024 |              |
|       | 2-ND (   | DVAP.     | (                | 0.00178      | 1          | 0.00170     | 1.24 | 0.2987 |              |
|       | ALL CT   | VADIATEC  | (                | 0.00192      | ī          | 0.00178     | 0.43 | 0.5115 |              |
|       | ERROR    | TAPIAICS  | C                | 3.00439      | 2          | 0.00192     | 0.47 | 0.4952 | 1 ×          |
| A     |          |           | C                | 3.57193      | 139        | 0.00219     | 0.53 | 0.5881 |              |
|       | 8(2)     |           |                  |              |            | 0.00411     |      | _      |              |
| 01    | R(2)C    |           | 0                | 0.00671      | 1          | 0.00        |      |        |              |
|       | RIZIE    |           | .0               | .00000       | ī          | 0.00671     | 3.61 | 0.0594 | 1            |
|       | RIZICE   |           | 0                | .00225       |            | 0.00000     | 0.00 | 0.9667 | 1            |
|       | 1-51 0   | 0440      | 0                | .00196       |            | 0.00075     | 0.40 | 0.7511 |              |
|       | 2-ND C   |           | 0                | .01020       | í          | 0.00065     | 0.35 | 0.7877 |              |
|       |          |           | 0                | .00125       | <b>i</b> . | 0.01020     | 5.49 | 0.0205 | 1            |
|       |          | TARIAIES  | 0                | .01148       | 2          | 0.00125     | 0.67 | 0.4140 |              |
|       | LENUR    |           | 0                | .25815       | 130        | 0.00574     | 3.09 | 0.0486 | 1            |
|       | D        |           |                  |              | 174        | 0.00186     |      |        | 1            |
|       | pr .     |           | 0                | .01264       | 2          |             |      |        | 1!           |
|       | NU<br>00 |           | ő                | .00087       | 2          | 0.00632     | 2.13 | 0.1209 | 1            |
|       | RE       |           | ő                | .01193       | 4          | 0.00044     | 0.15 | 0.8637 | ļ            |
|       | K(       |           | 0                | .01700       | 0          | 0.00199     | 0.67 | 0 6740 | 1            |
|       | 1-21 00  | VAR       | 0.               | -01093       | 0          | 0.00300     | 1.01 | 0 4101 | -            |
|       | Z-ND CC  | IVAR      | 0.               | 002073       | 1          | 0.01093     | 3.68 | 0.0441 |              |
|       | ALL COV  | ARIATES   | 0,               | 01470        | 1          | 0.00287     | 0.97 | 0.0201 |              |
| -     |          |           | υ.               | .014/8       | 2          | 0.00739     | 2.49 | 0.5264 |              |
| 2     | EFROR    |           | 0                | 0311         |            |             |      | 0.0847 | :            |
|       |          |           | . 0.             | 0110         | 280        | 0.00297     |      |        |              |
|       |          |           |                  |              |            | · · · · · · |      |        |              |

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# tudent measure: <u>Alcohol/drug availability</u>

|    | SCURCE         | SUN DE<br>SQUARES | DEGR®ES CF<br>Freedom | HEAN<br>SQUARE | F     | TAIL<br>PROB. |
|----|----------------|-------------------|-----------------------|----------------|-------|---------------|
|    | CYCLEID        | 0.00000           | 1                     | 0.00000        | 0.00  | 0.9923        |
|    | EFFIN          | 0.02299           | 3                     | 0.00766        | 0.48  | 0.6991        |
|    | CE             | 0.09656           | 3                     | 0.03219        | 2.00  | 0.1170        |
|    | 1-ST COVAR     | 0.08305           | 1                     | 0.08305        | 5.16  | 0.024         |
|    | 2-ND COVAR     | 0.17564           | 1                     | 0.17564        | 10.91 | 0.001         |
|    | ALL COVARIATES | 0.32670           | 2                     | 0.16335        | 10.14 | 0.000         |
| 1  | 1 RROR         | 2.23826           | 139                   | 0.01610        |       |               |
|    | R(1)           | 0.00247           | 1                     | 0.00247        | 0.47  | 0.493         |
|    | R(1)C          | 0.00877           | 1                     | 0.00877        | 1.68  | 0.197         |
|    | R(1)F          | 0.02127           | 3                     | 0.00709        | 1.36  | 0.258         |
|    | R(1)CF         | 0.02096           | 3                     | 0.00699        | 1.34  | 0.264         |
|    | 1-ST COVAR     | 0.00779           | 1                     | 0.00779        | 1.49  | 0.223         |
|    | 2-ND COVAR     | 0.02241           | 1                     | 0.02241        | 4.29  | 0.040         |
|    | ALL COVARIATES | 0.03515           | ž                     | 0.01757        | 3.37  | 0.037         |
|    | FRANK          | 0.72560           | 139                   | 0.00522        |       |               |
| P. | 2              |                   |                       |                |       |               |
| 4  | R(2)           | 0.00000           | 1                     | 0.00000        | 0.00  | 0.980         |
| 0. | 8(2)0          | 0.00851           | ī                     | 0.00851        | 2.16  | 0.144         |
|    | R(2)F          | 0.00367           | 3                     | 0.00122        | 0.31  | 0.818         |
|    | RIZICE         | 0.00159           | 3                     | 0.00053        | 0.13  | 0.939         |
|    | 1-ST COVAR     | 0.00234           | ī                     | 0.00234        | 0.59  | 0.442         |
|    | 2-ND COVAR     | 0.00077           | 1                     | 0.00077        | 0.19  | 0.660         |
|    | ALL COVARIATES | 0.00310           | ž                     | 0.00155        | 0.39  | 0.676         |
|    | ERRUR          | 0.54867           | 139                   | 0.00395        |       |               |
|    | B              | 0.00633           | ż                     | 0.00317        | 0.69  | 0.503         |
|    | RC             | 0.01462           | 2                     | 0.00731        | 1.59  | 0.206         |
|    | Rf .           | 0.02547           | 6                     | 0.00425        | 0.92  | 0.479         |
|    | RCF            | 0.02093           | 6                     | 0.00349        | 0.76  | 0.604         |
|    | 1-ST COVAR     | 0.01029           | i                     | 0.01029        | 2.23  | 0.136         |
|    | 2-ND COVAR     | 0.01050           | 1                     | 0.01050        | 2,28  | 0.132         |
|    | ALL COVARIATES | 0.02259           | 2                     | 0:01130        | 2.45  | 0.088         |
| d  | 50000          |                   | 200                   | 0.00441        |       |               |

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PAGE 16 OUTCOME ANOVAS WITH COVARS

ANALYSIS OF VARIANCE FUR 1-ST

## Student measure: Teacher personal victimization

|   | SOURCE                  | SUM OF  | DEGREES DE | MEAN    | r            | • • • • |
|---|-------------------------|---------|------------|---------|--------------|---------|
|   |                         | SQUARES | FREEDOM    | SQUARE  | F            | PROB.   |
|   | EFFTM                   | 0.06762 | 3          | 0.02254 | 1 27         | 0 3663  |
|   | CYCLEID                 | 0.01848 | i          | 0.01848 | 1.37         | 0.2557  |
|   | EC                      | 0.15978 | 3          | 0.05326 | 1.12         | 0.2918  |
|   | 1-ST COVAR              | 0.10025 | i          | 0.10025 | 3.23         | 0.0245  |
|   | 2-ND COVAR              | 0.19868 | i .        | 0 10849 | 0.08         | 0.0149  |
|   | ALL COVARIATES          | 0.37825 | ;          | 0 19010 | 12.04        | 0.0007  |
|   | ERROR                   | 2.29342 | 139        | 0.01650 | 11.40        | 0.0000  |
|   | R(1)                    | 0.00071 | 1          | 0.00071 | 0.43         |         |
|   | R(1)E                   | 0.01064 | i          | 0.00355 | 0.92         | 0.5201  |
|   | R(1)C                   | 0.00341 | i          | 0.00241 | 2.09         | 0.1048  |
|   | R(1)EC                  | 0.00999 | 3          | 0.00333 | 2.01         | 0.1590  |
|   | 1-ST COVAR              | 0.00038 | ī          | 0.00038 | 1.70         | 0.1231  |
|   | 2-ND COVAR              | 0.00147 | ī          | 0.00147 | 0.22         | 0.03/1  |
|   | ALL COVARIATES          | 0.00166 | ;          | 0.00063 | 0.07         | 0.3535  |
|   | ERRUR                   | 0.23636 | 139        | 0.00170 | 0.49         | 0.0145  |
|   | R(2)                    | 0.00043 | 1          | 0.00043 | 0 20         | 0 6340  |
|   | R(2)E                   | 0.00419 | 3          | 0.00140 | 1 34         | 0.5348  |
|   | R(2)C                   | 0.00080 | i          | 0.00080 | 1.20         | 0.2913  |
|   | R(2)EC                  | 0.00107 | 3          | 0.00036 | 0.12         | 0.3974  |
|   | 1-ST COVAR              | 0.00069 | i          | 0.00050 | 0.32         | 0.8093  |
|   | 2-ND COVAR              | 0.0000  | i          | 0.00000 | 0.02         | 0.9339  |
|   | ALL COVARIATES          | 0.00069 | ;          | 0.00000 | 0.00         | 0.9914  |
|   | ERROR                   | 0.15433 | 139        | 0.00111 | 0.31         | 0.1350  |
|   | R                       | 0.00109 | 2          | 0.00054 | 0 30         | 0 4 704 |
|   | KE                      | 0.01482 | 6          | 0.00247 | 1 74         | 0.0784  |
|   | RC                      | 0.00372 | 2          | 0.00186 | 1 22         | 0.1005  |
|   | REC                     | 0.01090 | 6          | 0.00182 | 1.33         | 0.2609  |
|   | 1-ST COVAR              | 0.00008 | ī          | 0.00008 | 1.30         | 0.2583  |
|   | 2-ND COVAR              | 0.00072 | ī          | 0.00072 | 0.00         | 0.013/  |
|   | ALL COVARIATES          | 0.00084 | 2          | 0.00042 | 0.20         | 0.4/43  |
| 2 | ALL COVARIATES<br>ERROR | 0.00084 | 2          | 0.00072 | 0.51<br>0.30 | 0.474   |

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PAGE 16 OUTCOME ANDVAS WITH COVARS

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Student measure: Illegal behaviors in school

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|   | SOURCE         | SUM OF<br>SQUARES | DEGREES DF<br>FREEDOM | MEAN<br>SQUARE | F    | TAIL<br>Pros. |
|---|----------------|-------------------|-----------------------|----------------|------|---------------|
|   | EFFTM          | 0.00448           | 3                     | 0.00149        | 0.14 | 0.9372        |
|   | CYCLEID        | 0.02493           | 1                     | 0.02493        | 2.30 | 0.131         |
|   | EC             | 0.12057           | 3                     | 0.04019        | 3.71 | 0.0132        |
|   | 1-ST COVAR     | 0.01935           | 1                     | 0.01935        | 1.79 | 0.183         |
|   | 2-ND COVAR     | 0.05129           | 1                     | 0.05129        | 4.74 | 0.0312        |
|   | ALL COVARIATES | 0.08854           | 2                     | 0.04427        | 4.09 | 0.018         |
|   | ERROR          | 1.50537           | 139                   | 0.01083        |      |               |
|   | R(1)           | 0.00635           | 1                     | 0.00635        | 3.93 | 0.049         |
|   | R(1)E          | 0.00536           | 3                     | 0.00179        | 1.10 | 0.3495        |
|   | R(1)C          | 0.00002           | 1                     | 0.00002        | 0.01 | 0.911         |
|   | R(1)EC         | 0.00073           | 3                     | 0.00024        | 0.15 | 0.9293        |
|   | 1-ST COVAR     | 0.00051           | 1                     | 0.00051        | 0.31 | 0.5764        |
|   | 2-ND COVAR     | 0.00006           | 1                     | 0.00006        | 0.04 | 0.8490        |
|   | ALL COVARIATES | 0.00063           | 2                     | 0.00032        | 0.20 | 0.822         |
| _ | ERROR          | 0.22477           | 139                   | 0.00162        |      |               |
| - | R(2)           | 0.00119           | 1                     | 0.00119        | 1.60 | 0.2082        |
| , | R(2)E          | 0.00253           | 3                     | 0,00084        | 1.14 | 0.336         |
|   | R(2)C          | 0.00015           | 1                     | 0.00015        | 0.20 | 0.653         |
|   | R(2)EC         | 0.00113           | 3                     | 0.00038        | 0.51 | 0.6794        |
|   | 1-ST COVAR     | 0.00044           | 1                     | 0.00044        | 0.59 | 0.4426        |
|   | 2-ND COVAR     | 0.0008            | 1                     | 0.00008        | 0.10 | 0.7484        |
|   | ALL COVARIATES | 0.00052           | 2                     | 0.00026        | 0.35 | 0.7059        |
|   | ERROR          | 0.10330           | 139                   | 0.00074        |      |               |
|   | R              | 0.00759           | 2                     | 0.00380        | 3.24 | 0.0407        |
|   | RE             | 0.00792           | 6                     | 0.00132        | 1.13 | 0.3461        |
|   | RC             | 0.00017           | 2                     | 0.00009        | 0.07 | 0.9288        |
|   | REC            | 0.00186           | 6                     | 0.00031        | 0.26 | 0.9530        |
|   | 1-ST COVAR     | 0.00093           | 1                     | 0.00093        | 0.80 | 0.3733        |
|   | 2-ND COVAR     | 0.00014           | 1                     | 0.00014        | 0.12 | 0.7293        |
|   | ALL COVARIATES | 0.00114           | 2                     | 0.00057        | 0.49 | 0.6160        |

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PAGE 12 OUTCOME ANUVAS WITH COVARS

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Student measure: Disruption

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|     | SOURCE         | CU11 05  |            |         |       |        |   |  |
|-----|----------------|----------|------------|---------|-------|--------|---|--|
|     | 5111 1022      | SUM UF   | DEGREES OF | MEAN    | F     | TAIL   |   |  |
|     |                | SQUARES  | FREEDGM    | SQUARE  |       | PRO8.  | i |  |
|     | CYCLEID        | 0 09169  | ,          |         |       |        | 1 |  |
|     | EFFTH          | 0.04308  | 1          | 0.09168 | 3.38  | 0.0683 | 1 |  |
|     | CE             | 0.00709  | 2          | 0.02236 | 0.82  | 0.4831 | 1 |  |
|     | 1-ST COVAR     | 0.04439  | ,          | 0.11303 | 4.16  | 0.0074 |   |  |
|     | 2-ND COVAR     | 0.04428  | 1          | 0.04428 | 1.63  | 0.2038 |   |  |
|     | ALL COVARIATES | 0.1/250  | 1          | 0.17250 | 6.35  | 0.0129 | 1 |  |
| 1   | FRENE          | 0.26/46  | 2          | 0.13373 | 4.92  | 0.0086 | 1 |  |
| •   |                | 3.1/494  | 139        | 0.02716 |       |        |   |  |
|     | R(1)           | 0.00775  | · ·        | 0 00775 | 3 34  |        |   |  |
|     | R(1)C          | 0.00288  | i          | 0.00775 | 2.19  | 0.1002 |   |  |
|     | R(1)E          | 0.00665  | 3          | 0.00200 | 1.02  | 0.3149 |   |  |
|     | R(1)CE         | 0.00542  | á          | 0.00222 | 0.78  | 0.5049 |   |  |
|     | 1-ST COVAR     | 0.00087  | 1          | 0.00181 | 0.64  | 0.5912 |   |  |
|     | 2-ND COVAR     | 0.00019  | ;          | 0.00087 | 0.31  | 0.5809 |   |  |
|     | ALL COVARIATES | 0 00095  | 2          | 0.00019 | 0.07  | 0.7971 |   |  |
|     | ERROR          | 0 30320  | 130        | 0.00048 | 0.17  | 0.8453 |   |  |
|     |                | 0157520  | 139        | 0.00283 |       |        |   |  |
| l l | R(2)           | 0 0004 7 |            |         |       |        | ļ |  |
| 0   | R(2)C          | 0.00007  | 1          | 0.00067 | 0.42  | 0.5173 |   |  |
|     | P(2)E          | 0.00944  | 1          | 0.00347 | 2.20  | 0.1403 |   |  |
|     | R(2)CE         | 0.00866  | ,          | 0.00289 | 1.83  | 0.1447 |   |  |
|     | 1-ST COVAR     | 0.00356  | 1          | 0.00119 | 0.75  | 0.5225 |   |  |
|     | 2-ND COWAR     | 0.00386  | 1          | 0.00386 | 2.45  | 0.1201 |   |  |
|     | ALL COVARIATES | 0.00003  | 1          | 0.00003 | 0.02  | 0.8875 |   |  |
|     | FRRIR          | 0.00389  | 2          | C.00194 | 1.23  | 0.2949 |   |  |
|     |                | 0.21942  | 139        | 0.00158 |       |        |   |  |
|     | R              | 0.00819  | 2          | 0.00400 | • • • |        |   |  |
|     | RC             | 0.00660  | ;          | 0.00107 | 1.86  | 0.1578 |   |  |
|     | RF             | 0.01570  |            | 0.00330 | 1.50  | 0.2252 |   |  |
|     | RCE            | 0.00911  | 6          | 0.00202 | 1.19  | 0.3125 |   |  |
|     | 1-ST COVAR     | 0.00085  | 1          | 0.00152 | 0.69  | 0.6586 |   |  |
|     | 2-ND COVAR     | 0.0000   | 1          | 0.00085 | 0.38  | 0.5358 |   |  |
|     | ALL COVARIATES | 0.00086  | 1          | 0.00000 | 0.00  | 0.9755 |   |  |

PAGE 12

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CUTCOME ANDVAS WITH EDVARS

Student safety from personal attack

PAGE 4 OUTCOME ANOVAS WITH COVARS

ANALYSIS OF VARIANCE FOR 1-ST Dependent variable - Dangers1 Dangers2 Dangers3

|   | SOURCE         | SUM OF<br>Squares | DEGREES OF<br>FREEDDM | MEAN<br>SQUARE | F     | TAIL<br>PROB. |  |
|---|----------------|-------------------|-----------------------|----------------|-------|---------------|--|
|   | EFFTH          | 0.19856           | 3                     | 0.06619        | 1.24  | 0.2963        |  |
|   | CYCLEID        | 0.03035           | 1.                    | 0.03035        | 0.57  | 0.4514        |  |
|   | EC             | 0.27881           | 3                     | 0.09294        | 1.75  | 0.1603        |  |
|   | 1-ST COVAR     | 0.05049           | 1                     | 0.05049        | 0.95  | 0.3317        |  |
|   | 2-ND COVAR     | 0.76769           | ì                     | 0.76768        | 14.43 | 0.0002        |  |
|   | ALL COVARIATES | 0.94875           | 2                     | 0.47437        | 8.91  | 0.0002        |  |
| 1 | ERROR          | 7.39665           | 139                   | 0.05321        |       |               |  |
|   | R(1)           | 0.00300           | 1                     | 0.00300        | 0.78  | 0.3794        |  |
|   | R(1)E          | 0.00781           | 3                     | 0.00260        | 0.68  | 0.5687        |  |
|   | R(1)C          | 0.00102           | 1                     | 0.00102        | 0,26  | 0.5086        |  |
|   | R(1)EC         | 0.02305           | 3                     | 0.00768        | 1.99  | 0.1178        |  |
|   | 1-ST COVAR     | 0.0008            | 1                     | 0,00008        | 0.02  | 0.8825        |  |
|   | 2-ND COVAR     | 0.00126           | 1                     | 0.00126        | 0.33  | 0.5686        |  |
|   | ALL COVARIATES | 0.00148           | 2                     | 0.00074        | 0.19  | 0.8256        |  |
| A | ERROR          | 0.53575           | 139                   | 0.00385        |       |               |  |
| Ë | R(2)           | 0.00343           | 1                     | 0.00343        | 1.68  | 0.1967        |  |
| 0 | R(2)E          | 0.01145           | 3                     | 0.00382        | 1.88  | 0.1365        |  |
|   | R(2)C          | 0.00235           | 1                     | 0.00235        | 1.16  | 0.2840        |  |
|   | R(2)EC         | 0.00224           | 3                     | 0.00075        | 0.37  | 0.7774        |  |
|   | 1-ST COVAR     | 0.00108           | r                     | 0.00108        | 0.53  | 0.4678        |  |
|   | 2-ND COVAR     | 0.00003           | 1                     | 0.00003        | 0,02  | 0.9016        |  |
|   | ALL COVARIATES | 0.00111           | 2                     | 0.00056        | 0.27  | 0.7614        |  |
|   | ERROR          | 0.28297           | 139                   | 0.00204        |       |               |  |
|   | R              | 0.00648           | 2                     | 0.00324        | 1.11  | 0.3324        |  |
|   | RE             | 0.01949           | 6                     | 0.00325        | 1.11  | 0.3572        |  |
|   | RC             | 0.00304           | 2                     | 0.00152        | 0.52  | 0.5963 .      |  |
|   | REC            | 0.02564           | 6                     | 0.00427        | 1.46  | 0.1925        |  |
|   | 1-ST COVAR     | 0.00030           | 1                     | 0.00030        | 0.10  | 0.7475        |  |
|   | 2-ND COVAR     | 0.00071           | 1                     | 0.00071        | 0.24  | 0.6225        |  |
| 0 | ALL COVARIATES | 0.00095           | 2                     | 0.00047        | 0.16  | 0.8508        |  |
| 2 | ERROR          | 0.82036           | 280                   | 0.00293        |       | · 1           |  |

Student measure: Tension in the school

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| FROE D DOICDHE ANDTAS HITH CUTARS | PAGE | 8 | OUTCOME | ANDVAS | HITH | COVARS |
|-----------------------------------|------|---|---------|--------|------|--------|
|-----------------------------------|------|---|---------|--------|------|--------|

ANALYSIS OF VARIANCE FOR 1-ST DEPENDENT VARIABLE - FEARSI FEARS2 FEARS3

| 500055         | 61111 OF  |            |         | ~    | • • • • |
|----------------|-----------|------------|---------|------|---------|
| JUUKLE         | SUM OF    | DEGREES OF | PEAN    | F    | TAIL    |
|                | SUUAKES   | FREEDEM    | SQUARE  |      | PROB.   |
| EFFTM          | 0.07329   | 3          | 0.02443 | 1.99 | 0.1181  |
| CYCLEID        | 0.00274   | 1          | 0.00274 | 0.22 | 0.6374  |
| EC             | 0.03272   | 3          | 0.01091 | 0.89 | 0.4486  |
| 1-ST COVAR     | 0.00238   | 1          | 0.00238 | 0.19 | 0.6600  |
| 2-ND COVAR     | 0.02592   | 1          | 0.02592 | 2.11 | 0.1483  |
| ALL COVARIATES | 0.03331   | 2          | 0.01665 | 1.36 | 0.2607  |
| ERRDR          | , 1.70516 | 139        | 0.01227 |      |         |
|                |           |            |         |      |         |
| R(1)           | 0.00822   | 1          | 0.00822 | 7.42 | 0.0073  |
| R(1)E          | 0.00451   | 3          | 0.00150 | 1.36 | 0.2585  |
| R(1)C          | 0.00728   | 1          | 0.00728 | 6.58 | 0.0114  |
| R(1)EC         | 0.01215   | 3          | 0.00405 | 3.66 | 0.0141  |
| 1-ST COVAR     | 0.00163   | 1          | 0.00163 | 1.47 | 0.2273  |
| 2-ND COVAR     | 0.00072   | 1          | 0.00072 | 0.65 | 0.4214  |
| ALL COVARIATES | 0.00206   | 2          | 0.00103 | 0.93 | 0.3964  |
| ERROR          | 0.15396   | 139        | 0.00111 |      |         |
|                |           |            |         |      |         |
| R(2)           | 0.00397   | 1          | 0.00397 | 4.19 | 0.0424  |
| R(Z)E          | 0.00935   | 3          | 0.00312 | 3.30 | 0.0224  |
| RIZIC          | 0.00043   | 1          | 0.00043 | 0.46 | 0.4989  |
| K(Z)EL         | 0.00184   | 3          | 0.00061 | 0.65 | 0.5843  |
| 1-ST COVAR     | 0.00036   | 1          | 0.00036 | 0.38 | 0.5398  |
| Z-NU LUVAR     | 0.00142   | 1          | 0.00142 | 1.50 | 0.2230  |
| ALL LUVAKIATES | 0.00178   | 2          | 0.00089 | 0.94 | 0.3926  |
| FKKUK          | 0.13144   | 139        | 0.00095 |      |         |
| R              | 0.01178   | 2          | 0.00589 | 5.74 | 0.0036  |
| RE             | 0.01406   | 6          | 0.00234 | 2.28 | 0.0363  |
| RC             | 0.00808   | 2          | 0.00404 | 3.93 | 0.0207  |
| REC            | 0.01300   | 6          | 0.00217 | 2.11 | 0.0522  |
| 1-ST COVAR     | 0.00016   | ĩ          | 0.00016 | 0.15 | 0.6961  |
| 2-ND COVAR     | 0.00167   | ī          | 0.00167 | 1.62 | 0.2035  |
| ALL COVARIATES | 0.00175   | 2          | 0.00088 | 0.85 | 0.4266  |
|                |           | * '        |         |      |         |
| ERROR          | 0.28749   | 280        | 0.00103 |      |         |

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-2 ERROR

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Student measure: Fear of being attacked

#### PAGE 24 OUTCOME ANDVAS WITH COVARS ANALYSIS OF VARIANCE FOR 1-ST DEPENDENT VARIABLE - SCLMS1 SCLMS2 SCLMS3 DEGREES OF FREEDOM TAIL PROB. SUURCE SUM OF MEAN F SQUARES SQUARE CYCLEID EFFTM 0.00950 0.02734 0.09278 0.00950 0.00911 0.03093 0.3652 0.5005 0.0489 0.1163 1 0.83 0.79 2.69 2.50 12.26 9.01 CE 1-ST COVAR 0.02876 0.02876 0.1/111 0.10370 0.01151 0.0006 2-ND COVAR 0.14111 ALL COVARIATES 0.20740 139 1 0.00266 0.00001 0.00495 0.00377 0.00009 0.00266 0.00001 0.00165 0.00126 0.00009 2.44 0.01 1.51 1.15 0.09 0.1208 R(1) R(1)C R(1)E R(1)CE 1-ST COVAR 0.2141 0.3312 0.7700 0.2760 1.20 2-ND COVAR 0.00131 0.00131 ALL COVARIATES ERROR A-12 0.00155 0.00077 0.4946 139 0.84 0.94 2.44 0.36 0.01 0.05 0.3598 0.3342 0.0673 0.7829 0.9270 0.8188 0.9700 R(2) 0.00038 0.00038 R(2)C 0.00042 0.00042 R(2)E R(2)CE 1-ST COVAR 0.00325 0.00108 0.00048 0.00016 2-ND COVAR 0.00002 0.00002 ALL COVARIATES 0.00003 0.00001 0.03 ERROR 0.06178 139 0.00044 2.20 0.24 1.79 0.93 0.05 1.34 0.72 0.1129 0.7678 0.00336 0.00168 R 2 RC 0.00036 0.00018 RE RCE 1-ST COVAR 0.00822 0.00137 0.1006 0.4737 0.8284 0.2478 0.4882 0.00427 0.00071 0.00004 0.00103 0.00103 2-ND COVAR ALL COVARIATES 0.00110 0.00055 2 1~ 2 FRROR 0.21406 280 0.00076

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Student measure: School climate

Composite measure includes:

Teacher personal victimization Illegal behaviors in school Disruption Student safety from personal attack Tension in the school

Fear of being attacked

| DEPEN   | DENT VARIABLE - SSUMSI SSUM | S2 SSUMS3         |                       |                |      |               |   |
|---------|-----------------------------|-------------------|-----------------------|----------------|------|---------------|---|
|         | SOURCE                      | SUM OF<br>SQUARES | DEGREES CF<br>FREEDCM | MEAN<br>SQUARE | F    | TAIL<br>PROB. |   |
|         | EFFTM                       | 0.01507           | 3                     | 0.00502        | 0.61 | 0.6099        |   |
|         | CYCLEID                     | 0.00261           | 1                     | 0.00261        | 0.32 | 0.5742        |   |
|         | EC                          | 0.05311           | 3                     | 0.01770        | 2.15 | 0.0969        |   |
|         | 1-ST COVAR                  | 0.01613           | 1                     | 0.01613        | 1.96 | 0.1641        | 1 |
|         | 2-ND COVAR                  | 0.07908           | 1                     | 0.07908        | 9.60 | 0.0024        | ſ |
|         | ALL COVARIATES              | 0.11624           | 2                     | 0.05812        | 7.05 | 0.0012        |   |
| 1       | ERROR                       | 1.14539           | 139                   | 0.00824        |      |               |   |
|         | R(1)                        | 0.00042           | 1                     | 0.00042        | 0.63 | 0.4294        | i |
|         | R(1)E                       | 0.00233           | 3                     | 0.00078        | 1.16 | 0.3260        |   |
|         | R(1)C                       | 0.00012           | 1                     | 0.00012        | 0.17 | 0.6767        | 1 |
|         | R(1)EC                      | 0.00144           | 3                     | 0.00048        | 0.72 | 0.5422        |   |
|         | 1-ST COVAR                  | 0.00044           | 1                     | 0.00044        | 0.66 | 0.4184        |   |
|         | 2-ND COVAR                  | 0.00057           | 1                     | 0.00057        | 0.86 | 0.3546        |   |
|         | ALL COVARIATES              | 0.00120           | 2                     | 0.00060        | 0.90 | 0.4093        |   |
| A-      | ERROR                       | 0.09265           | 139                   | 0.00067        |      |               |   |
| ப்<br>ப | R(2)                        | 0.00003           | 1                     | 0.00003        | 0.11 | 0.7455        |   |
| •••     | R(2)E                       | 0.00262           | 3                     | 0.00087        | 3.19 | 0.0257        |   |
|         | R(2)C                       | 0.00033           | 1                     | 0.00033        | 1.22 | 0.2707        |   |
|         | R(2)EC                      | 0.00047           | 3                     | 0.00016        | 0.57 | 0.6334        |   |
|         | 1-ST COVAR                  | 0.00039           | 1                     | 0.00039        | 1.44 | 0.2319        |   |
|         | 2-ND COVAR                  | 0.00000           | 1                     | 0.00000        | 0.02 | 0.8975        |   |
|         | ALL COVARIATES              | 0.00040           | 2                     | 0.00020        | 0.73 | 0.4838        |   |
|         | ERROR                       | 0.03801           | 139                   | 0.00027        |      | 1             |   |
|         | R                           | 0.00055           | 2                     | 0.00028        | 0.59 | 0.5539        |   |
|         | RE                          | 0.00495           | 6                     | 0.00082        | 1.76 | 0.1065        | 1 |
|         | RC                          | 0.00043           | 2                     | 0.00022        | 0.46 | 0.6289        | Ì |
|         | REC                         | 0.00192           | 6                     | 0.00032        | 0.69 | 0.6616        | l |
|         | 1-ST COVAR                  | 88060.0           | 1                     | 0.00068        | 1.67 | 0.1721        |   |
|         | 2-ND COVAR                  | 0.00041           | 1                     | 0.00041        | 0.88 | 0.3478        |   |
|         | ALL COVARIATES              | 0.00139           | 2                     | 0.00070        | 1.49 | 0.2268        |   |
| ÷       |                             |                   |                       |                |      |               |   |

ent measure: Overall summary

Composite measure includes:

School climate Victimization summary

|     |                |         |            | ME A M  | E     | TATE I   |
|-----|----------------|---------|------------|---------|-------|----------|
|     | SOURCE         | SUM UF  | UEGREES UF | FEAN    | r     | PPOR     |
|     |                | SQUAKES | FREEDUM    | SADAKE  |       | PROD.    |
|     | EFETH          | 0.03326 | 3          | 0.01109 | 1.92  | 0.1290   |
|     | CYCLEID        | 0.00877 | 1          | 0.00877 | 1.52  | 0.2199   |
|     | EC             | 0.09778 | 3          | 0.03259 | 5.65  | 0.0011   |
|     | 1-ST COVAR     | 0.02247 | 1          | 0.02247 | 3.89  | 0.0505   |
|     | 2-ND COVAR     | 0.06169 | 1          | 0.06169 | 10.69 | 0.0014   |
|     | ALL COVARIATES | 0.10227 | 2          | 0.05114 | 8.86  | 0.0002   |
| 1   | ERROR          | 0.80243 | 139        | 0.00577 |       |          |
|     | 8(1)           | 0.00060 | 1          | 0.00060 | 0.83  | 0.3648 . |
|     |                | 0.00278 | 3          | 0.00093 | 1.27  | 0.2870 . |
|     |                | 0.00004 | ī          | 0.00004 | 0.05  | 0.8258 ' |
|     |                | 0.00537 | 3          | 0.00179 | 2.46  | 0.0655   |
|     |                | 0.00093 | ĩ          | 0.00093 | 1.27  | 0.2608   |
|     |                | 0.00294 | ī          | 0.00294 | 4.04  | 0.0464 1 |
|     | ALL COVARIATES | 0.00435 | 2          | 0.00217 | 2.98  | 0.0538   |
| >   | ERROR          | 0.10128 | 139        | 0.00073 |       |          |
| _   | 8/2)           | 0.00001 | 1          | 0.00001 | 0.02  | 0.8914   |
| · · |                | 0.00128 | 3          | 0.00043 | 0.99  | 0.4009   |
|     | N147C          | 0.00000 | ĩ          | 0.00000 | 0.00  | 0.9548   |
|     | P1216C         | 0.00169 | 3          | 0.00056 | 1.30  | 0.2773   |
|     |                | 0.00136 | ĩ          | 0.00136 | 3.14  | 0.0786   |
|     |                | 0.00066 | ĩ          | 0.00066 | 1.52  | 0.2190   |
|     | ALL COVARIATES | 0.00191 | 2          | 0.00095 | 2.20  | 0.1142   |
|     | ERROR          | 0.06021 | 139        | 0.00043 |       |          |
|     | P              | 0.00135 | 2          | 0.00068 | 1.15  | 0.3183   |
|     | RF .           | 0.00405 | 6          | 0.00068 | 1.15  | 0.3338   |
|     | RC .           | 0.00012 | 2          | 0.00006 | 0.10  | 0.9050   |
|     | REC            | 0.00710 | 6          | 0.00118 | 2.02  | 0.0636   |
|     | 1+ST COVAR     | 0.00238 | ī          | 0.00238 | 4.05  | 0.0452   |
|     | 2-ND COVAR     | 0.00067 | ī          | 0.00067 | 1.14  | 0.2874   |
| 1   | ALL COVARIATES | 0.00331 | 2          | 0.00166 | 2.82  | 0.0614   |

cher measure: <u>Self-reports of personal</u> <u>victimization</u>

#### PAGE 24 OUTCOME ANOVAS WITH COVARS

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## ANALYSIS OF VARIANCE FOR 1-ST DEPENDENT VARIABLE - STPERS1 STPERS2 STPERS3

|         | SOURCE         | SUN UF<br>SQUARES | DEGREES CF<br>FREEDOM | MEAN    | f    | TAIL<br>PROB. |
|---------|----------------|-------------------|-----------------------|---------|------|---------------|
|         | EFFIN          | 0.13429           | 3                     | 0.04476 | 1.02 | 0.3855        |
|         | CYCLEID        | 0.06563           | ī                     | 0.06563 | 1.50 | 0.2234        |
|         | EC '           | 0.54941           | 3                     | 0.13314 | 4.17 | 0.0073        |
|         | 1-ST COVAR     | 0.03952           | 1                     | 0.03952 | 0.90 | 0.3443        |
|         | 2-ND COVAR     | 0.39612           | ī                     | 0.39612 | 9.03 | 0.0032        |
|         | ALL COVARIATES | 0.50237           | 2                     | 0.25119 | 5.72 | 0.0041        |
| 1       | ERROR          | 6.10008           | 139 .                 | 0.04389 |      | -             |
|         | R(1)           | 0.00166           | ì                     | 0.00166 | 0.23 | 0.6302        |
|         | R(1)E          | 0.00960           | 3                     | 0.00320 | 0.45 | 0.7180        |
|         | R(1)C          | 0.03045           | 1                     | 0.03045 | 4.28 | 0.0405        |
|         | R(1)EC         | 0.03891           | 3                     | 0.01297 | 1.82 | 0.1460        |
|         | 1-ST COVAR     | 0.00606           | 1                     | 0.00606 | 0.85 | 0.3577        |
|         | 2-ND COVAR     | 0.01385           | 1                     | 0.01385 | 1.94 | 0.1654        |
| A       | ALL COVARIATES | 0.02254           | 2                     | 0.01127 | 1.58 | 0.2091        |
| i<br>H  | ERROR          | 0.98972           | 139                   | 0.00712 |      |               |
| 5<br>Ci | R(2)           | 0.00306           | 1                     | 0.00306 | 0.68 | 0.4106        |
|         | R(2)E          | 0.01256           | 3                     | 0.00419 | 0.93 | 0.4277        |
|         | R(2)C          | 0.00079           | 1                     | 0.00079 | 0.18 | 0.6761        |
|         | R(2)EC         | 0.03130           | 3                     | 0.01043 | 2.32 | 0.0780        |
|         | 1-ST COVAR     | 0.00435           | 1                     | 0.00435 | 0.97 | 0.3270        |
|         | 2-ND COVAR     | 0.00494           | 1                     | 0.00494 | 1.10 | 0.2967        |
|         | ALL COVARIATES | 0.00874           | 2                     | 0.00437 | 0.97 | 0.3808        |
|         | ERROR          | 0.62514           | 139                   | 0.00450 |      |               |
|         | R              | 0.00485           | 2                     | 0.00243 | 0.42 | 0.6598        |
|         | RE             | 0.02204           | 6                     | 0.00367 | 0.63 | 0.7060        |
|         | RC             | 0.03511           | 2                     | 0.01755 | 3.01 | 0.0508        |
|         | REC            | 0.06834           | 6                     | 0.01139 | 1.95 | 0.0723        |
|         | 1-ST COVAR     | 0.01073           | 1                     | 0.01073 | 1.84 | 0.1759        |
|         | 2-ND COVAR     | 0.00228           | 1                     | 0.00228 | U.39 | 0.5326        |
| ,       | ALL COVARIATES | 0.01406           | 2                     | 0.00703 | 1.21 | 0.3008        |
| `,      | FRANK          | 1.63207           | 280                   | 0.00583 |      |               |

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## Teacher measure: Student personal victimization

|         | SOURCE         | SUN DF<br>SQUARE S | DEGREES CF<br>FREEDOM | ME AN<br>SQUARE | F    | TAIL<br>PROB. |
|---------|----------------|--------------------|-----------------------|-----------------|------|---------------|
|         | EFFIN          | 0.04143            | 3                     | 0.01381         | 0.35 | 0.7913        |
|         | CYCLEID        | 0-18040            | 1                     | 0.18040         | 4.53 | 0.0350        |
|         | EC             | 0.35682            | 3                     | 0.11894         | 2.99 | 0.0332        |
|         | 1-ST COYAR     | 0.29075            | 1                     | 0.29075         | 7.31 | 0.0077        |
|         | 2-ND COVAR     | 0.00000            | 1                     | 0.00000         | 0.00 | 0.9989        |
|         | ALL COVARIATES | 0.30198            | 2                     | 0.15099         | 3,80 | 0.0248        |
| 1       | ERROR          | 5.52968            | 139                   | 0.03978         |      |               |
|         | R(1)           | 0.01122            | 1                     | 0.01122         | 2.62 | 0.1079        |
|         | R(1)E          | 0.00853            | 3                     | 0.00284         | 0.66 | 0.5757        |
|         | R(1)C          | 0.00234            | 1                     | 0.00234         | 0.55 | 0.4611        |
|         | R(1)EC         | 0.01082            | 3                     | 0.00361         | 0.84 | 0.4735        |
|         | 1-ST COVAR     | 0.00043            | 1                     | 0.00043         | 0.10 | 0.7527        |
|         | 2-ND COVAR     | 0.01679            | 1                     | 0.01679         | 3.92 | 0.0498        |
|         | ALL COVARIATES | 0.01681            | 2                     | 0.00841         | 1.96 | 0.1446        |
| A<br>I  | ERROR          | 0.59576            | 139                   | 0.00129         |      |               |
| -i<br>6 | R(2)           | 0.00041            | 1                     | 0.00041         | 0.15 | 0.6967        |
| •       | R(2)E          | 0.00472            | 3                     | 0.00157         | 0.59 | 0.6227        |
|         | R(2)C          | 0.00420            | 1                     | 0.00420         | 1.57 | 0.2117        |
|         | R(2)EC         | 0.00506            | 3                     | 0.00169         | 0.63 | 0.5950        |
|         | 1-ST COVAR     | 0.00000            | 1                     | 0.00000         | 0.00 | 0.9680        |
|         | 2-ND COVAR     | 0.00042            | 1                     | 0.00042         | 0.16 | 0.6923        |
|         | ALL COVARIATES | 0.00043            | 2                     | 0.00022         | 0.08 | 0.9225        |
|         | ERROR          | 0.37050            | 139                   | 0.00267         |      |               |
|         | R              | 0.01577            | 2                     | 0.00789         | 2.26 | 0.1059        |
|         | RE             | 0.01259            | 6                     | 0.00210         | 0.60 | 0.7285        |
|         | RC             | 0.00698            | 2                     | 0.00349         | 1.00 | 0.3688'       |
|         | REC            | 0.01800            | 6                     | 0.00300         | 0.86 | 0.5242        |
|         | 1-ST COVAR     | 0.00019            | 1                     | 0.00019         | 0.05 | 0.8159        |
|         | 2-ND COVAR     | 0.00760            | 1                     | 0.00160         | 2.18 | 0.1409        |
|         | ALL COVARIATES | 0.00763            | 2                     | 0.00381         | 1.09 | 0.3361        |
| 2       | FRRUR          | 0.97588            | 280                   | 0.00349         |      |               |

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DUTCOME ANOVAS WITH COVARS

Teacher measure: Illegal behaviors in school

| DEPEN             | NDENT VARIABLE - TOISRSI | IDISRS2 TDISRS3   | I.                    |                |       |               |
|-------------------|--------------------------|-------------------|-----------------------|----------------|-------|---------------|
|                   | SOURCE                   | SUM OF<br>SQUARES | DEGREES OF<br>FREEDOM | MEAN<br>SQUARE | F     | TAIL<br>PROB, |
|                   | EFFIN                    | 0.05975           | 3                     | 0.01992        | 0.85  | 0.4683        |
|                   | CYCLEID                  | 0.00005           | 1                     | 0.00005        | 0.00  | 0.9622        |
|                   | EC                       | 0.06953           | 3                     | 0.02318        | U. 99 | 0.3994        |
|                   | 1-ST COVAR               | 0.01838           | 1                     | 0.01838        | 0.79  | 0.3770        |
|                   | 2-ND COVAR               | 0.19046           | 1                     | 0.19046        | 8.14  | 0.0050        |
|                   | ALL COVARIATES           | 0.24051           | 2                     | 0.12026        | 5.14  | 0.0070        |
| 1                 | ERROR                    | 3.25308           | 139                   | 0.02340        |       |               |
|                   | Ř(1)                     | 0.00642           | 1                     | 0.00642        | 2.60  | 0.1089        |
|                   | R(1)E                    | 0.00929           | 3                     | 0.00310        | 1.26  | 0.2919        |
|                   | R(1)C                    | 0.00330           | 1                     | 0.00330        | 1.34  | 0.2489        |
|                   | R(1)EC                   | 0.01117           | 3                     | 0.00372        | 1.51  | 0.2144        |
|                   | 1-ST COVAR               | 0.00055           | - 1                   | 0.00055        | 0.22  | 0.6362        |
|                   | 2-ND COVAR               | 0.02547           | 1                     | 0.02547        | 10.33 | 0.0016        |
| $\mathbf{\Sigma}$ | ALL COVARIATES           | 0.02548           | 2                     | 0.01274        | 5.17  | 8400.0        |
| آ<br>ا            | ERROR                    | 0.34263           | 139                   | 0.00246        |       |               |
| 7                 | R(2)                     | 0.01945           | 1                     | 0.01945        | 8.22  | 0.0048        |
|                   | R(2)E                    | 0.00739           | 3                     | 0.00246        | 1.04  | 0.3766        |
|                   | R(2)C                    | 0.00717           | 1                     | 0.00717        | 3.03  | 0.0840        |
|                   | R(2)EC                   | 0.02173           | 3                     | 0.00724        | 3.06  | 0.0303        |
|                   | 1-ST COVAR               | 0.00012           | 1                     | 0.00012        | 0.05  | 0.8200        |
|                   | 2-NO COVAR               | 0.00453           | 1 I                   | 0.00453        | 1.91  | 0.1689        |
|                   | ALL COVARIATES           | 0.00476           | 2                     | 0.00238        | 1.01  | 0.3684        |
|                   | ERROR                    | 0.32896           | 139                   | 0.00237        |       |               |
|                   | R                        | 0.02248           | 2                     | 0.01124        | 4.53  | 0.0116        |
|                   | RE                       | 0.01915           | 6                     | 0.00319        | 1.29  | 0.2031        |
|                   | KC                       | 0.01088           | ź                     | 0.00544        | 2.19  | 0.1136        |
|                   | REC                      | 0.03243           | 6                     | 0.00540        | 2.18  | 0.0453        |
|                   | 1-SI COVAR               | 0.00046           | I                     | 0.00046        | 0.18  | 0.0687        |
|                   | Z-ND CUVAR               | 0.00658           | 1<br>1                | 0.00058        | 2.05  | 0.1045        |

Teacher measure: Disruption

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#### DUTCOME ANDVAS WITH COVARS PAGE 12

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ANALYSIS OF VARIANCE FOR 1-ST Dependent variable - tprats1 (prats2) tprats3

SUM OF DEGREES LF SQUARES FREEDOM MEAN SQUARE SOURCE F TAIL PRUB. 2.15 6.84 6.23 4.48 1.17 3.40 EFFTM 0.36711 0.12237 0.0963 3 CYCLEID 0.35872 0.38872 0.0099 EC 1-ST COVAR 0.0005 0.0361 0.2808 0.0362 1.06241 0.35414 0.25456 0.25456 2-ND COVAR ALL COVARIATES ERROR 0.06661 0.06661 2 138 7.84143 0.05682 1 12.67 0.46 0.03 2.03 0.00 9.35 4.73 0.07854 0.00288 0.00018 0.0005 0.7073 0.8649 0.07854 R(1) R(1)E R(1)C R(1)EC 0.00864 • 0.03776 0.01259 0.1124 0.00000 0.05797 0.02933 0.00620 0.9982 0.0027 0.0103 1-ST COVAR 0.00000 2-ND COVAR ALL COVARIATES ERROR 0.05797 1. 0.05866 2 138 A-18 

 2.84
 0.0941

 0.84
 0.4757

 0.67
 0.4158

 0.86
 0.4635

 2.63
 0.1075

 1.77
 0.1855

 2.33
 0.1007

R(2) 0.01455 0.01455 1 R(2)E R(2)C R(2)EC 0.00429 0.01286 3 0.00341 0.01322 0.00441 - 3 1-ST COVAR 0.01344 0.01344 0.00907 2-ND COVAR 0.00907 ALL COVARIATES 0.02391 2 138 ERROR 0.00512 0.70671 0.11325 2 0.05663 9.70 0.0001 R R RE RC 1-ST COVAR 2-ND COVAR ALL COVARIATES 0.00383 0.00320 0.00885 0.00685 0.66 0.55 1.52 1.17 2.84 0.6852 0.5790 0.1729 0.2797 0.0931 0.02298 0.00639 0.05309 0.00685 2 0.01658 0.01658 1 2 0.02179 0.01090 1.87 0.1566 1.62280 278 0.00584 ERROR 2 i

Teacher measure: Student safety from personal attack

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#### PAGE 16 OUTCOME ANOVAS WITH COVARS

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ANALYSIS OF VARIANCE FOR 1-ST DEPENDENT VARIABLE - TDANGS1 TDANGS2 TDANGS3

SUM OF DEGREES OF FREEDOM MEAN SQUARE TAIL PRUB. SOURCE F EFFTM CYCLEID EC 1-ST COVAR 2-ND COVAR ALL COVARIATES ERROR 1.70 2.02 3.39 4.98 8.66 8.39 0.11099 0.13182 0.22114 0.1692 0.1572 0.0198 0.33298 0.13182 0.66341 3 1 3 0.32449 0.56432 0.54698 0.06517 0.0273 0.0038 0.0004 0.32449 0.56432 1 2 139 1 9.05804 0.08709 0.00689 0.01046 0.01426 8.78 0.69 1.05 1.44 0.00 1.02 0.52 0.0036 0.5567 0.3064 0.2348 R(1) R(1)E R(1)C R(1)EC 0.08709 1 0.02068 0.01046 0.04277 1 0.00002 0.9617 0.3132 1-ST COVAR 0.00002 2-ND COVAR ALL COVARIATES ERROR 0.01017 0.01023 0.00512 2 139 0.5984 A-19 2.29 0.1324 0.38 0.7710 0.52 0.4721 2.43 0.0683 0.04 0.8348 1.48 0.2251 0.75 0.4737 0.01469 R(2) 0.01469 1 0.00722 0.00334 0.04667 0.00028 0.00241 0.00334 0.01556 R(2)E R (2)C R (2)C 1-ST COVAR 2-ND COVAR ALL COVARIATES 1 0.00028 0.00952 0.00952 0.00964 2 139 0.89167 0.00641 ERROR 6.84 0.0013 0.59 0.7362 0.68 0.5094 1.71 0.1194 0.02 0.8982 0.03 0.8585 0.11192 0.05596 2 R RE 0.02908 0.00485 0.01106 0.08376 0.00013 0.00026 0.00553 RC REC 1-ST COVAR 2-ND COVAR ALL COVARIATES 0.00013 1 0.00026 1 0.00043 2 0.00022 0.03 0.9738 280 0.00818 ERROR 2.29052 2

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Teacher measure: Tension in the school

|     | SOURCE         | SUM OF    | DEGREES CF | ME AN   | F    | TAIL   |
|-----|----------------|-----------|------------|---------|------|--------|
|     |                | SQUARE S  | FREEDOM    | SQUARE  |      | PRUB.  |
|     | EFFTN          | 0.09773   | Э          | 0.03258 | 1.08 | 0.3587 |
|     | CYCLEID        | 0.06941   | 1          | 0.06941 | 2.31 | 0.1311 |
|     | EC             | 0.24998   | 3          | 0.08333 | 2.77 | 0.0446 |
|     | 1-ST COVAR     | 0.12824   | 1          | 0.12824 | 4.26 | 0.0400 |
|     | 2-ND COVAR     | 0.01338   | 1          | 0.01338 | 0.44 | 0.5059 |
|     | ALL COVARIATES | 0.16362   | 2          | 0.08181 | 2.72 | 0.069  |
| 1   | ERRÚR          | 4.18295   | 139        | 0.03009 |      |        |
|     | R(1)           | 0.01721   | 1          | 0.01721 | 3.13 | 0.0789 |
|     | R(I)E          | 0.02182   | 3          | 0.00727 | 1.32 | 0.2691 |
|     | R(1)C          | 0.00112   | 1          | 0.00112 | 0.20 | 0.6510 |
|     | R(1)EC         | 0.02434   | 3          | 0.00811 | 1.48 | 0.223  |
|     | 1-ST COVAR     | 0.00126   | 1          | 0.00126 | 0.23 | 0.6333 |
|     | 2-ND COVAR     | 0.00880   | 1          | 0.00880 | 1.60 | 0.207  |
|     | ALL COVARIATES | 0.01106   | 2          | 0.00553 | 1.01 | 0.368) |
| A   | ERROR          | 0.76371   | 139        | 0.00549 |      |        |
| ·20 | R(2)           | 0.00051   | 1          | 0.00051 | 0.13 | 0.7209 |
| 0   | R(2)E          | 0.01795   | 3          | 0.00598 | 1.51 | 0.213  |
|     | R(2)C          | 0,00003   | ī          | 0.00003 | 0.01 | 0.933  |
|     | R(2)EC         | 0.04243   | 3          | 0.01414 | 3.58 | 0.0156 |
|     | 1-ST COVAR     | 0.00368   | ī          | 0.00368 | 0.93 | 0.3360 |
|     | 2-ND COVAR     | 0.00304   | ĩ          | 0.00304 | 0.77 | 0.3820 |
|     | ALL COVARIATES | 0.00633   | 2          | 0.00316 | 0.80 | 0.450  |
|     | ERROR          | 0.54906   | 139        | 0.00395 |      |        |
|     | R              | 0.02310   | 2          | 0.01155 | 2.44 | 0.088  |
|     | RE             | 0.04020   | 6          | 0.00670 | 1.42 | 0.207  |
|     | RC             | . 0.00064 | 2          | 0.00032 | 0.07 | 0,934  |
|     | REC            | 0.06216   | 6          | 0.01036 | 2.19 | 0.0439 |
|     | 1-ST COVAR     | 0.00497   | 1          | 0.00497 | 1.05 | 0.305  |
|     | 2-NO COVAR     | 0.00140   | 1          | 0.00140 | 0.30 | 0.586  |
|     | ALL COVARIATES | 0.00694   | 2          | 0.00347 | 0.73 | 0.4810 |
| •   | CDDf.p         | 1 2222    | 280        | 0.00473 |      |        |
|     |                |           |            |         |      |        |

PAGE 8 OUTCOME ANOVAS WITH COVARS

Teacher measure: Fear of being attacked
### PAGE 8 DUTCOME ANDVAS WITH COVARS

ANALYSIS OF VARIANCE FOR 1-ST Dependent variable - Tpers1 tpers2 tpers3

|   | SOURCE         | SUM OF  | DEGREES OF | MEAN    | F    | TATI   |
|---|----------------|---------|------------|---------|------|--------|
|   |                | SQUARES | FREEDGH    | SQUARE  |      | PROB.  |
|   | EFFTM          | 0 08383 |            |         |      |        |
|   | CYCLEID        | 0.08283 | 3          | 0.02761 | 1.70 | 0.1695 |
|   | EC             | 0.056/1 | 1          | 0.05671 | 3.50 | 0 0677 |
|   | 1-ST COVAR     | 0.26370 | 3          | 0.08790 | 5.42 | 0.0036 |
|   | 2-ND COVAR     | 0.05145 | 1          | 0.05145 | 3.17 | 0.0015 |
|   | ALL COVARIATES | 0.10342 | 1          | 0.10342 | A 37 | 0.0117 |
| 1 | FRROR          | 0.19039 | 2          | 0.09520 | 5 97 | 0.0127 |
| - | SANDA          | 2.23877 | 138        | 0.01622 | 2.07 | 0.0036 |
|   | R(1)           | 0 00774 |            |         |      |        |
|   | R(1)E          | 0.00174 | 1          | 0.00774 | 4.17 | 0.0430 |
|   | R(1)C          | 0.00420 | 3          | 0.00140 | 0.75 | 0.5214 |
|   | R(1)EC         | 0.00187 | 1          | 0.00187 | 1.01 | 0.3170 |
|   | 1-ST COVAR     | 0.01555 | 3          | 0.00518 | 2.80 | 0 0424 |
|   | 2-ND COVAR     | 0.00067 | 1          | 0.00067 | 0.36 | 0 6477 |
|   | ALL ENVARIATES | 0.01727 | 1          | 0.01727 | 9 33 | 0.0077 |
| - | ERROR          | 0.01889 | 2          | 0.00945 | 5 10 | 0.0027 |
| T |                | 0.25583 | 138        | 0.00185 | 5.10 | 0.0073 |
| 2 | R(2)           | 0 00388 |            |         |      |        |
|   | R(2)E          | 0.00378 | 1          | 0.00388 | 3.40 | 0.0673 |
|   | R(2)C          | 0.00378 | 3          | 0.00126 | 1.10 | 0.3495 |
|   | R(2)EC         | 0.00000 | 1          | 0.00000 | 0.00 | 0.9788 |
|   | 1-ST COVAR     | 0.01287 | 3          | 0.00429 | 3.76 | 0 0126 |
|   | 2-ND COVAR     | 0.00004 | 1          | 0.00004 | 0.04 | 0.0125 |
|   | ALL COVARIATES | 0.00364 | 1          | 0.00364 | 3 10 | 0.03(4 |
|   | ERROR          | 0.00364 | 2          | 0.00182 | 1 60 | 0.0766 |
|   |                | 0.15760 | 138        | 0.00114 | 1.37 | 0.2066 |
|   | R              | 0.01403 | · 3        |         |      |        |
|   | RE             | 0 00854 | <u> </u>   | 0.00701 | 4.52 | 0.0117 |
|   | RC             | 0.00396 | 0          | 0.00143 | 0.92 | 0.4805 |
|   | REC            | 0.00283 | 2          | 24100.0 | 0.92 | 0.4006 |
|   | 1-ST COVAR     | 0.02691 | 6          | 0.00449 | 2.89 | 0.0094 |
|   | 2-ND COVAR     | 0.00056 | 1          | 0.00056 | 0.36 | 0.5469 |
|   | ALL COVARIATES | 0.00409 | 1          | 0.00409 | 2.64 | 0 1063 |
| - |                | 0.00495 | 2          | 0.00247 | 1.60 | 0.2046 |
| 2 | ERROR          | 0.43102 | 278        | 0.00155 |      |        |

# Teacher measure: Person summary

Composite measure includes:

Self-reports of personal victimization Student personal victimization Illegal behaviors in school Disruption Student safety from personal attack Tension in the school Fear of being attacked

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PAGE 16 DUTCOME ANDVAS WITH COVARS

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A-22

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ERROR

ANALYSIS OF VARIANCE FOR 1-ST DEPENCENT VARIABLE - TVAVCS1 TVAVCS2 TVAVCS3

DEGREES OF FREEDDM SUM OF SQUARES SOURCE

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EFFTM CYCLEID EC 1-ST COVAR 2-ND COVAR ALL COVARIATES ERKOR 0.01092 0.00045 0.07176 0.01128 0.01336 0.03050 1.02131 0.00364 0.00045 0.02392 0.01128 0.01336 0.01525 0.00735 3 2 139 0.06088 0.06088 R(1) R(1)E 1 3

| R(1)           | 0.06088             | 1   | 0.06088 | 16.07 | 0.0001 |
|----------------|---------------------|-----|---------|-------|--------|
| R(1)E          | 0.01171             | 3   | 0.00390 | 1.03  | 0.3813 |
| R(1)C          | 0.00424             | 1   | 0.00424 | 1.12  | 0.2921 |
| R(1)EC         | 0.01470             | 3   | 0.00490 | 1.29  | 0.2790 |
| 1-ST COVAR     | 0.01364             | 1   | 0.01364 | 3.60  | 0.0599 |
| 2-ND COVAR     | 0.01303             | ĩ   | 0.01303 | 3.44  | 0.0658 |
| ALL COVARIATES | 0.03045             | ž   | 0.01523 | 4.02  | 0.0201 |
| ERROR          | 0.52649             | 139 | 0.00379 |       | -      |
| R(2)           | 0.00702             | 1   | 0.00702 | 2.89  | 0.0912 |
| R(2)E          | 0.00830             | 3   | 0.00277 | 1.14  | 0.3349 |
| R(2)C          | 0.00052             | 1   | 0.00052 | 0.22  | 0.6436 |
| R(2)EC         | 0.02341             | 3   | 0.00780 | 3.22  | 0.0249 |
| 1-ST COVAR     | 0.01484             | 1   | 0.01484 | 6.12  | 0.0146 |
| 2-ND COVAR     | 0.00004             | 1   | 0.00004 | 0.01  | 0.9028 |
| ALL COVARIATES | 0.01484             | 2   | 0.00742 | 3.06  | 0.0501 |
| ERROR          | 0.33724             | 139 | 0.00243 |       |        |
| R              | 0.06206             | 2   | 0.03103 | 9.99  | 0.0001 |
| RE             | 0.01978             | 6   | 0.00330 | 1.06  | 0.3861 |
| RC             | 0.00442             | 2   | 0.00221 | 0.71  | 0.4919 |
| REC            | 0.03494             | 6   | 0.00582 | 1.87  | 0.0852 |
| 1-ST COVAR     | 0.02894             | ĩ   | 0.02894 | 9.32  | 0.0025 |
| 2-NO COVAR     | 0 00724             | i   | 0.00724 | 2. 11 | 0.1280 |
|                | 0.00161<br>0 0.2076 | 2   | 0.01043 | 6.32  | 0.0021 |
| ALL LUYANIATES | 0,03723             | ٤.  |         | 0.52  |        |

0.96977 280

TAIL PROB.

0.50 0.6860 0.06 0.8049 3.26 0.0236 1.54 0.2174 1.82 0.1796 2.08 0.1294

F

MEAN SQUARE

0.00311

C

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Teacher measure: Self-reports of property victimization

PAGE 20 DUTCOHE ANOVAS WITH COVARS

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ANALYSIS OF VARIANCE FOR 1-ST DEPENDENT VARIABLE - TCCARS1 TCCARS2 TCCARS3

|    | SDURCÉ         | SUM OF<br>SQUARES | DEGREES OF<br>FREEDOM | MEAN<br>SQUARE | F     | TAIL<br>PROB. |
|----|----------------|-------------------|-----------------------|----------------|-------|---------------|
|    | ËFFTH          | 0.00969           | 3                     | 0.00323        | 0.78  | 0.5083        |
|    | CYCLEID        | 0.00000           | 1                     | 0.00000        | 0.00  | 0.9988        |
|    | EC             | 0.02357           | 3                     | 0.00786        | 1.89  | 0.1336        |
|    | 1-ST COVAR     | 0.04556           | 1                     | 0.04556        | 10.97 | 0.0012        |
|    | 2-ND COVAR     | 0.00000           | 1                     | 0.00000        | 0.00  | 0.9744        |
|    | ALL COVARIATES | 0.04714           | 2                     | 0.02357        | 5.68  | 0.0043        |
| 1  | ERROR          | 0.57709           | 139                   | 0.00415        |       |               |
|    | R(1)           | 0.00073           | 1                     | 0.00073        | 0.57  | 0.4533        |
|    | R(1)E          | 0.00215           | 3                     | 0.00072        | 0.55  | 0.6468        |
|    | R(1)C          | 0.00215           | 1                     | 0.00215        | 1.67  | 0.1987        |
|    | R(1)EC         | 0.00364           | 3                     | 0.00121        | 0.94  | 0,4239        |
|    | 1-ST COVAR     | 0.00041           | 1                     | 0.00041        | 0.32  | 0.5737        |
|    | 2-ND COVAR     | 0.00204           | 1                     | 0.00204        | 1.58  | 0.2113        |
|    | ALL COVARIATES | 0.00226           | 2                     | 0.00113        | 0.87  | 0.4200        |
| A  | ERROR          | 0.17963           | 139                   | 0.00129        |       |               |
| 2  | R ( 2 )        | 0.00030           | 1                     | 0.00030        | 0.23  | 0.6286        |
| 5  | R(2)E          | 0.00049           | 3                     | 0.00016        | 0.13  | 0.9435        |
|    | R(2)C          | 0.00075           | 1                     | 0.00075        | 0.59  | 0.4424        |
|    | R(2)EC         | 0.00109           | 3                     | 0.00036        | 0.28  | 0.8362        |
|    | 1-ST COVAR     | 0.00166           | 1                     | 0.00166        | 1.30  | 0.2556        |
|    | 2-ND COVAR     | 0.00003           | 1                     | 0.00003        | 0.02  | 0.8759        |
|    | ALL COVARIATES | 0.00166           | 2                     | 0.00083        | 0.66  | 0.5209        |
|    | ERROR          | 0.17661           | 139                   | 0.00127        |       |               |
|    | R              | 0.00103           | 2                     | 0.00052        | 0.40  | 0.6676        |
|    | RÉ             | 0.00248           | 6                     | 0.00041        | 0.32  | 0.9240        |
|    | RC             | 0.00271           | 2                     | 0.00135        | 1.06  | 0.3473        |
|    | REC            | 0.00485           | 6                     | 0.00081        | 0.63  | 0.7028        |
|    | 1-ST COVAR     | 0.00187           | 1                     | 0.00187        | 1.47  | 0.2269        |
|    | 2-ND COVAR     | 0.00153           | 1                     | 0.00153        | 1.20  | 0.2736        |
|    | ALL COVARIATES | 0.00311           | 2                     | 0.00156        | 1.22  | 0.2966        |
| ·z | ERROR          | 0.35705           | 280                   | 0.00128        |       |               |

0.35705 280

0.00128

# Teacher measure: Self-reports of car victimization

|     | SOURCE         | SUM OF<br>SQUARES | DEGREES OF<br>FREEDOM | MEAN<br>SQUARE | F    | JAIL<br>Prob. |
|-----|----------------|-------------------|-----------------------|----------------|------|---------------|
|     | EFFTH          | 0,12119           | 3                     | 0.04040        | 1.24 | 0.2992        |
|     | CYCLEID        | 0.00886           | 1                     | 0.00886        | 0,27 | 0.6035        |
|     | EC             | 0.62746           | Э                     | 0.20915        | 6.40 | 0.0004        |
|     | 1-ST COVAR     | 0.23641           | 1                     | 0.23641        | 7.23 | 0.0080        |
|     | 2-ND COVAR     | 0.25936           | 1                     | 0.25936        | 7.93 | 0.0056        |
|     | ALL COVARIATES | 0.61376           | 2                     | 0.30688        | 9.39 | 0.0002        |
| 1   | ERROR          | 4.54479           | 139                   | 0.03270        |      |               |
|     | R(1)           | 0.00028           | 1                     | 0.00028        | 0.03 | 0.8661        |
|     | R(1)E          | 0.00123           | 3                     | 0.00041        | 0.04 | 0,9886        |
|     | R(1)C          | 0.04201           | 1                     | 0.04201        | 4.29 | 0.0401        |
|     | R(1)EC         | 0.03883           | 3                     | 0.01294        | 1.32 | 0.2694        |
|     | 1-ST COVAR     | 0.00275           | 1                     | 0.00275        | 0.28 | 0.5969        |
|     | Z-ND COVAR     | 0.02563           | 1                     | 0.02563        | 2.62 | 0.1078        |
|     | ALL COVARIATES | 0.03095           | 2                     | 0.01547        | 1.58 | 0.2094        |
| A   | ERROR          | 1.36008           | 139                   | 0.00978        |      |               |
| .24 | R(2)           | 0.00041           | 1                     | 0.00041        | 0.05 | 0.8163        |
| -   | R(2)E          | 0.02581           | 3                     | 0.00860        | 1.15 | 0.3332        |
|     | R{2}C          | 0.00670           | 1                     | 0.00670        | 0.89 | 0.3466        |
|     | R(2)EC         | 0.01056           | 3                     | 0.00352        | 0.47 | 0.7048        |
|     | 1-ST COVAR     | 0.00124           | 1                     | 0.00124        | 0.17 | 0.6848        |
|     | 2-ND COVAR     | 0.00105           | ĩ                     | 0.00105        | 0.14 | 0.7090        |
|     | ALL COVARIATES | 0.00245           | 2                     | 0.00122        | 0.16 | 0.8500        |
|     | ERROR          | 1.04434           | 139                   | 0.00751        |      |               |
|     | R              | 0.00001           | 2                     | 0.00001        | 0.00 | 0.9994        |
|     | RE             | 0.02611           | 6                     | 0.00435        | 0.51 | 0.8040        |
|     | RC             | 0.05029           | 2                     | 0.02514        | 2.92 | 0.0555        |
|     | REC            | 0.05292           | 6                     | 0.00882        | 1.02 | 0.4096        |
|     | 1-ST COVAR     | 0.00395           | 1                     | 0.00395        | 0.46 | 0.4990        |
|     | 2-ND COVAR     | 0.02118           | 1                     | 0.02118        | 2.46 | 0.1179        |
|     | ALL COVARIATES | 0.02709           | ž                     | 0.01355        | 1.57 | 0.2092        |
| 5   |                | 2 - · · ·         |                       |                |      |               |

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Teacher measure: Student property victimization

PAGE 4 OUTCONE ANDVAS HITH COVARS

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| PAGE | 12 | OUTCOME | ANDVAS | HITH | COVARS |
|------|----|---------|--------|------|--------|
|------|----|---------|--------|------|--------|

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Teacher measure: <u>School safety from vandalism</u> and theft

|        | SOURCE         | SUM OF<br>SQUARES | DEGREES OF<br>FREEDOM | MEAN<br>Square | F     | TAIL<br>PROB. |
|--------|----------------|-------------------|-----------------------|----------------|-------|---------------|
|        | EFFIN          | 0.32124           | 3                     | 0.10708        | 1.54  | 0.2074        |
|        | CYCLEID        | 0.23936           | 1                     | 0.23936        | 3.44  | 0,0658        |
|        | EC             | 0.85154           | 3                     | 0.28385        | 4.08  | 0.0082        |
|        | 1-ST COVAR     | 0.22665           | 1                     | 0.22665        | 3.26  | 0.0734        |
|        | 2-ND COVAR     | 0.00772           | 1                     | 0.00772        | 0.11  | 0.7396        |
|        | ALL COVARIATES | 0.22666           | 2                     | 0.11333        | 1.63  | 0.2001        |
| 1      | ERROR          | 9.67773           | 139                   | 0.06962        |       |               |
|        | R(1)           | . 0.10820         | 1                     | 0.10820        | 14.63 | 0.0002        |
|        | R(1)E          | 0.00140           | 3                     | 0.00047        | 0.06  | 0.9791        |
|        | R(1)C          | 0.00519           | 1                     | 0.00519        | 0.70  | 0.4034        |
|        | R(1)EC         | 0.04826           | 3                     | 0.01609        | 2.18  | 0.0936        |
|        | 1-ST COVAR     | 0.00032           | 1                     | 0.00032        | 0.04  | 0.8348        |
|        | 2-ND COVAR     | 0.02494           | 1                     | 0.02494        | 3.37  | 0.0684        |
|        | ALL COVARIATES | 0.02638           | 2                     | 0.01319        | 1.78  | 0.1718        |
| A      | ERROR          | 1.02776           | 139                   | 0.00739        |       |               |
| 2<br>5 | R(2)           | 0.00754           | 1                     | 0.00754        | 1.35  | 0.2481        |
|        | R(2)E          | 0.01864           | 3                     | 0.00621        | 1.11  | 0.3475        |
|        | R(2)C          | 0.00482           | 1                     | 0.00482        | 0.86  | 0,3551        |
|        | R(2)EC         | 0.02706           | 3                     | 0.00902        | 1.61  | 0.1897        |
|        | 1-ST COVAR     | 0.00041           | 1                     | 0.00041        | 0.07  | 0.7863        |
|        | 2-ND COVAR     | 0.00216           | 1                     | 0.00216        | 0.39  | 0.5353        |
|        | ALL COVARIATES | 0.00270           | 2                     | 0.00135        | 0.24  | 0.7859        |
|        | ERROR          | 0.77856           | 139                   | 0.00560        |       |               |
|        | R              | 0.13176           | 2                     | 0.06588        | 10.10 | 0.0001        |
|        | RE             | 0.01832           | 6                     | 0.00305        | 0.47  | 0.8318        |
|        | RC             | 0.00997           | 2                     | 0.00498        | 0.76  | 0.4668        |
|        | REC            | 0.07429           | 6                     | 0.01238        | 1.90  | 0.0812        |
|        | 1-ST COVAR     | 0.00000           | 1                     | 0.00000        | 0.00  | 0.9963        |
|        | 2-ND COVAR     | 0.00895           | 1                     | 0.00895        | 1.37  | 0.2424        |
|        | ALL COVARIATES | 0.00903           | 2                     | 0.00451        | 0.69  | 0.5015        |
| 2      | ERROR          | 1.82638           | 260                   | 0.00652        |       |               |

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### PAGE 12 OUTCOME ANDVAS NITH COVARS

ANALYSIS OF VARIANCE FOR 1-ST DEPENDENT VARIABLE - TPROSI TPROS2 TPROS3

|   | SOURCE         | SUH OF<br>SQUARES | DEGREES DF<br>FREEDDM | MÉAN<br>SQUARE | F    | TAIL<br>PROB. |  |
|---|----------------|-------------------|-----------------------|----------------|------|---------------|--|
|   | EFFTM          | 0.02152           | 3                     | 0.00717        | 0.64 | 0.4732        |  |
|   | CYCLEID        | 0.01584           | 1                     | 0.01584        | 1.86 | 0.1749        |  |
|   | EC             | 0.14290           | 3                     | 0.04763        | 5.59 | 0.0012        |  |
|   | 1-ST CUVAR     | 0.04663           | 1                     | 0.04663        | 5.47 | 0.0207        |  |
|   | 2-ND COVAR     | 0.00491           | 1                     | 0.00491        | 0.58 | 0.4489        |  |
|   | ALL COVARIATES | 0.05957           | ,2                    | 0.02978        | 3.50 | 0.0330        |  |
| 1 | ERROR          | 1.18436           | 139                   | 0.00852        |      |               |  |
|   | R(1)           | 0.00050           | 1                     | 0.00050        | 0.38 | 0.5408        |  |
|   | R(1)E          | 0.00057           | 3                     | 0.00019        | 0.14 | 0.9336        |  |
|   | R(1)C          | 0.00270           | 1                     | 0.00270        | 2.04 | 0.1558        |  |
|   | R(1)EC         | 0.00980           | 3                     | 0.00327        | 2.46 | 0.0650        |  |
|   | 1-ST COVAR     | 0.00123           | 1                     | 0.00123        | 0.92 | 0.3382        |  |
|   | 2-ND COVAR     | 0.00495           | 1                     | 0.00495        | 3.73 | 0.0554        |  |
|   | ALL COVARIATES | 0.00690           | 2                     | 0.00345        | 2.60 | 0.0779        |  |
| A | ERROR          | 0.18436           | 139                   | 0.00133        |      |               |  |
| 2 | R(2)           | 0.00114           | 1                     | 0.00114        | 1.27 | 0.2623        |  |
| σ | R(2)E          | 0.00413           | 3                     | 0.00138        | 1.53 | 0.2089        |  |
|   | R(2)C          | 0.00019           | ī                     | 0.00019        | 0.21 | 0.6450        |  |
|   | R(2)EC         | 0.00376           | i                     | 0.00125        | 1.40 | 0.2467        |  |
|   | 1-ST COVAR     | 0.00094           | ī                     | 0.00094        | 1.04 | 0.3086        |  |
|   | 2-ND COVAR     | 0.00008           | i                     | 0.00008        | 0.09 | 0.7596        |  |
|   | ALL COVARIATES | 0.00099           | 2                     | 0.00050        | 0.55 | 0.5771        |  |
|   | ERROR          | 0.12488           | 139                   | 0.00090        |      |               |  |
|   | R              | 0.00149           | 2                     | 0.00074        | 0.67 | 0.5135        |  |
|   | RE             | 0.00446           | 6                     | 0.00074        | 0.67 | 0.6766        |  |
|   | RC             | 0.00320           | 2                     | 0.00160        | 1.44 | 0.2393        |  |
|   | REC            | 0.01358           | 6                     | 0.00226        | 2.03 | 0.0617        |  |
|   | 1-ST COVAR     | 0.00223           | 1                     | 0.00223        | 2.00 | 0.1507        |  |
|   | 2-ND COVAR     | 0.00241           | 1                     | 0.00241        | 2.17 | 0.1423        |  |
|   | ALL COVARIATES | 0.00512           | 2                     | 0.00256        | 2.30 | 0.1024        |  |
| Ž | ERROR          | 0.31202           | 280                   | 0.00111        |      | i             |  |

Teacher measure: Property summary

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Composite measure includes:

Self-reports of property victimization Self-reports of car victimization Student property victimization School safety from vandalism and theft

| 6040 cc              |          |                        |                              |   | 1   | Teacher   | : measur  |
|----------------------|----------|------------------------|------------------------------|---|---|---|---|
| SUURCE               | SUM OF   | DEGREES OF             | MEAN                         | F   | TA11  |   |   |
|                      | SQUARES  | FREEDOM                | SCUARE                       | r   | PROB.   |   |   |
| EFFTH                | 0.04552  | 2                      | 0.01517                      |   |   |   |   |
| CYCLEID              | 0.03281  | 1                      | 0.01017                      | 1.63  | 0.1841  |   |   |
| EC                   | 0.18978  | 1                      | 0.03281                      | 3.54  | 0.0622  |   |   |
| 1-ST COVAR           | 0.04897  | 2                      | 0.06326                      | 6.82  | 0.0003  |   |   |
| 2-ND COVAR           | 0 03637  | 1                      | 0.04887                      | 5.27  | 0.0233  |   |   |
| ALL COVARIATES       | 0.03582  | 1                      | 0.03582                      | 3.86  | 0.0515  |   |   |
| ERROR                | 0.10499  | 2                      | 0.05245                      | 5.65  | 0.0044  |   |   |
|                      | 1.28055  | 138                    | 0.00928                      |   |   |   |   |
| R(1)                 | 0.00227  | 1                      | 0 00000                      | •   | 1   |   |   |
| R(1)E                | 0.00153  | 2                      | 0.00227                      | 1.68  | 0.1974  |   |   |
| R(1)C                | 0.00225  | ,                      | 0.00051                      | 0.38  | 0.7694 .  |   |   |
| R(1)EC               | 0.01144  | 1                      | 0.00225                      | 1.66  | 0.1998  |   |   |
| 1-ST COVAR           | 0.001146 | 5                      | 0.00382                      | 2.82  | 0.0412  |   |   |
| 2-ND COVAR           | 0.00100  | 1                      | 0.00100                      | 0.74  | 0.3906  |   |   |
| ALL COVARIATES       | 0.01052  | 1                      | 0.01052                      | 7.77  | 0.0061  |   |   |
| FRADE                | 0.01237  | 2                      | 0.00618                      | 4.57  | 0.0120  |   |   |
|                      | 0.18688  | 138                    | 0.00135                      |   | 0.0120  |   |   |
| R(2)                 | 0.00220  | ,                      |                              |   | 1   |   |   |
| R(2)E                | 0 00348  | 1                      | 0.00220                      | 2.80  | 0.0963  |   |   |
| R(2)C                | 0.00003  | 3                      | 0.00116                      | 1.48  | 0.2235  |   |   |
| R(2)EC               | 0.00003  | 1                      | 0.00003                      | 0.03  | 0.8550  |   |   |
| I-ST COVAR           | 0.00557  | 3                      | 0.00186                      | 2.36  | 0.0741  |   |   |
| 2-ND COVAR           | 0.00033  | 1                      | 0.00033                      | 0.42  | 0.5171  |   |   |
| ALL COVADIANCE       | 0.00118  | 1                      | 0.00118                      | 1.50  | 0 1116  |   |   |
| EDDUD                | 0.00144  | 2                      | 0.00072                      | 0.02  | 0.2225  |   |   |
| CONDR .              | 0.10849  | 138                    | 0.00079                      | 0.72  | 0.1019  |   |   |
| , R                  | 0.00497  | 2                      |                              |   |   |   |   |
| RE                   | 0.00501  | 2                      | 0.00249                      | 2.27  | 0.1049  |   |   |
| RC                   | 0.00301  | 0                      | 0.00083                      | 0.76  | 0.5997  |   |   |
| REC                  | 0.00292  | 2                      | 0.00146                      | 1.33  | 0.2654  |   |   |
| 1-ST COVAR           | 0.01637  | 6                      | 0.00273                      | 2.49  | 0.0229  |   |   |
| 2-ND COVAR           | 0.00129  | 1                      | 0.00129                      | 1.18  | 0.2782  |   |   |
| ALL COVARIATES       | 0.00336  | 1                      | 0.00336                      | 3.07  | 0 0807  |   |   |
| ALL CUVARIATES       | 0.00504  | 2                      | 0.00252                      | 2.30  | 0.1019  |   |   |
| ERKOR                | 0 30415  |                        |                              |   |   |   |   |
| ALL COVARIA<br>ERKOR | TES      | TES 0.00504<br>0.30413 | TES 0.00504 2<br>0.30413 279 | TES      0.00304      1      0.00336        0.30413      279      0.00109 | TES      0.00504      2      0.00109        0.30413      279      0.00109 | TES      0.00504      2      0.00252      2.30      0.1019        0.30413      279      0.00109      0.00109      0.00109 | TES      0.00504      2      0.00252      2.30      0.1019        0.30413      279      0.00109      0.00109      0.00109 |

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PAGE 16 OUTCOME ANDVAS WITH COVARS

Composite measure includes:

Overall summary

Person summary Property summary

### Predictors entering into "x-on-t" regressions

Up to 11 predictors can enter into the regression equations. Some are forced in, while others enter only if they make a certain size contribution to the prediction of outcome,

The following variables are forced into the equation:

<sup>o</sup> WxAOIR (x = S for students, T for teachers)

Weighted amount of intervention: the number of 20 school day intervals since team training up to the time data were gathered, adjusted for team effectiveness. Ranges from 0 to 21.

° WxAOI2

CDISRPTN

Control for disruptive setting events, used to adjust for interference during periods of team operation. Since little or no team activity had taken place when year 1 scores were gather, CDISRPTN = 0 for outcome scores for the first year. For year 2 scores, CDISRPTN = number of disruptive setting events occurring during the second year. For year 3 scores, CDISRPTN = number of disruptive setting events occurring during second plus third year, i.e., disruptive events are treated as cumulative.

DE

"0" otherwise.

° DM

Dummy variable equally "1" if the score is from a middle school, "O" otherwise. Since there are three school levels, two dummies fully control for level differences. To obtain the grand mean for high schools, the intercept in the regression equation is used. The middle school grand mean is the sum of the intercept and the regression coefficient for DM. The elementary school grand mean is the sum of the intercept and the DE coefficient.

The following variables enter the regression equation only if their regression coefficient reaches approximately the .10 level of significance.

° WXAOIDE

### Appendix B

### Outcome Analyses: Regressions

WxAOIR squared. Allows for curvilinear relations between effective intervention time and outcomes.

Dummy variable equally "1" if the score is from an elementary school.

Product of linear intervention time and elementary school dummy. Allows that the linear relation between time and outcome may be different in elementary schools.

### ° WxAOI2DE

Product of squared intervention time and elementary school dummy. Allows that the curvilinear relation between time and outcome may be different in elementary schools.

° WxAOIDM

Same as WxAOIDE, but for middle schools.

° WxAOI2DM

Same as WxAOI2DE, but for middle schools.

° CDISRPTE

Product of disruption index and elementary school dummy. Allows that effects of disruptive events may be different in elementary schools.

° CDISRPTM

Same as CDISRPTE, but for middle schools.

# Guide for interpreting regression coefficients

° WxAOIR

Linear time. Negative coefficients mean a reduction in problem levels with increasing amounts of intervention time.

° WxAOI2

Quadratic time. Positive coefficients mean a U-shaped relationship between time and outcome, i.e., rapid outcome reduction for short intervention times, tapering off for moderate amounts of time, with time-outcome relationship turning positive for large amounts of intervention time. Negative coefficients mean an inverted U-shaped relationship between intervention time and outcome.

° DE, DM

School level dummies. Positive coefficients mean these schools have higher problem levels overall than other types of schools. E.g., +DM means things are worse in middle schools.

° CDISRPTN

Disruption index. Positive coefficients mean disruptive events are related to higher problem levels.

### ° WxAOIDE/M, WxAOI2DE/M

Time x level dummy product variables. Time effect in the given school type is different from that in the total sample of schools. E.g., +WxAOIDE would mean that the linear relation between time and outcome in elementary schools is less positive than in other schools; if WxAOIR is negative, this would mean that things are improving overall, but not as fast (or at all) in elementary schools. Another example: +WxAOI2DM with WxAOI2 non-significant would mean that the U-shaped time effect occurs only in middle schools.

° CDISRPTE/M

events are high.

In interpreting time effects, the greatest emphasis should be given to the linear ones. Quadratic effects typically are of a smaller order of magnitude and do not necessarily have to be strictly interpreted. That is, for positive quadratic time effects (which most of them are), the reveral to a positive time-outcome relationship for longer intervention times (i.e., the right half of the "U") may be an artifact of approximating, via polynomial regression, a curve that in fact does not turn up at the end. In either event, data are sparse in the area of the intervention time distribution, so the tail of the curve should be viewed as poorly estimated.

Disruption x level dummy product variables. Positive coefficients mean that things are worse in the given type of school when disruptive

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| MULTIFLE F<br>F SQUARE<br>Adjusted f<br>STD Deviati  | .76389<br>.59752<br>SCUARE .57532<br>IOM .02997                                       | AN ALYSIS<br>Regressi<br>Residual<br>Coeff of  | GR VARIANCE<br>Gn<br>Variability   | DF SUM OF<br>5.<br>456.<br>13.3 PCT  | SOUARES<br>•62406<br>•44541 | MEAN SQUARE<br>.12461<br>.70090 |          |
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| VARIAELE   | B<br>.73356577E-01  | STE ERROR 8  | F<br>51GNIFICANCE<br>404.77044   | BETA<br>EL 4STICITY<br>.6392250  | Student                     | measure: <u>Self-re</u>         | 2        |
| VARIAELE<br>DE<br>CDISRPIN                           | B<br>• 73356577E-01<br>• 9477n270E-03   | 5TC ERROR 8<br>,36463763E-02<br>.74794866E-03  | F<br>51GNIFICANCE<br>404.77044<br>0<br>1.6954643   | BETA<br>EL ASTICITY<br>.639750<br>.06594<br>.0498748   | Student                     | measure: <u>Self-re</u> p       | <u>)</u> |
| VARIAELE<br>DE<br>CDISRPIN<br>DM                     | 8<br>.73356577E-01<br>.94770270E-03<br>.79315973E-01                                  | STC ERROR 8<br>.36463763E-02<br>.74794866E-03<br>.30141666E-02                                   | F<br>51GNIFICANCE<br>404.73046<br>0<br>1.6054643<br>.206<br>544.26668                                    | BET4<br>EL 4STICITY<br>.639750<br>.0408748<br>.0408748<br>.00574<br>.7432655                     | Student                     | measure: <u>Self-re</u> p       | 2        |
| VARIAELE<br>DE<br>CDISRPIN<br>DM<br>NSADI2           | B<br>.73356577E-01<br>.94770270E-03<br>.79315973E-01<br>45120429E-04                  | STC ERROR 8<br>.36463763E-02<br>.74794866E-03<br>.30141666E-02<br>.53542534E-04                  | F<br>51GN1F1CANCE<br>404.73046<br>0<br>1.6054643<br>.206<br>544.26668<br>0<br>.70069348                  | BET4<br>EL 4STICITY<br>.6397250<br>.04594<br>.0478748<br>.0574<br>.7432655<br>.12169<br>0700745  | Student                     | measure: <u>Self-rep</u>        | 2        |
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| DE                 | •8462791<br>N •957491             | 85E-01 .479<br>83E-03 .983            | 402726-02<br>35605E-03                         | 311.62121<br>.000<br>.94606801         | .6120901<br>.03795<br>.0342768          | ł                           |                                   |                      |
| DN                 | .765434<br>1270441                | 44E-01 .396<br>80E-03 .708            | 28375 <i>E-02</i><br>67675E-04                 | .331<br>373.08129<br>.000<br>3.2137893 | .00289<br>.671530[<br>.06607<br>1637685 |                             |                                   |                      |
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| •           | VARIABLE(S) ENT  | ERED ON STEP  | NUNBER 2.00 1                                   | SAGI2<br>ISAGTR           |  | ****                        |                                 |                           |
| - B-6       | PULTIPLE F<br>F Square<br>Adjusted F Squa<br>Std Deviation | .84020<br>.70593<br>IRE .70297<br>.02296  | AN AL YS [<br>RE GRESS]<br>RESIDUAL<br>COEFF OF | S OF VARIANCE             | 0F SUM 0F<br>5.<br>496.<br>6.4 PCT     | SQUARES<br>.62431<br>.26006 | NEAN SQUARE<br>•12486<br>•00052 | • ··· · ••• •• •• ••• ••• |
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| Г. <u> </u> | DE .7  | 5928973E-01   | .27967483E-02                                   | 742.63504                 | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | •                           | Со                              | mposite                   |
| -           | CDISRPIN .7  | 43848246-03   | .57151826E-03                                   | 0<br>1.6939807            | .04333<br>.0352605                     |                             |                                 | 0.10                      |
| -           | DM .6  | 8818449E-01   | .230316788-02                                   | 497.80907                 | .00286                                 |                             |                                 | Self-re                   |
|             | WSAC12 -06   | 1334903E-04   | •41187657E-04                                   | 2.2175654                 | •07560<br>-•1047519                    |                             |                                 | vict                      |
| -           | WSACIR .9  | 1651351E-03   | •63091322E-03                                   | 2.1102722                 | -1059283                               |                             |                                 | Self-re                   |
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----- VARIABLES IN THE EQUATION ------ 

 B
 SIGNIFICANCE
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 .14318199E-01
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 .10591724E-32
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 .60015346E-01
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| VAPIABLE   | VARIAI<br>6   | ALES IN THE EQUA<br>Sto Error B  | TION             | BET A<br>ELASTICITY   |    | Studen                        | t measure              | : Illega          | <u>1 be</u> |
| VAPIABLE   | 03198561E-02  | BLES IN THE EQUA<br>STO ERROR 8<br>.107387111-91   | SIGN IF ICANCE   | 8674<br>ELASTICITY<br>0284526   |    | Studen                        | t measure              | : <u>Illega</u>   | <u>1 be</u> |
| VAPTABLE<br>DE<br>CD1SRPTN                           | 031985CTE-02<br>.69(773(3E-02   | BLES IN THE EQUA<br>Sto Error 8<br>.107387111-01<br>.220273606-02  | TION             | 8674<br>ELASTICITY<br>0284928<br>70150<br>.1342847  |    | Studen                        | t measure              | : <u>Illega</u>   | <u>1 be</u> |
| VARTABLE<br>DE<br>CD ISRPIN<br>DM                    | 63198561E-02<br>.60(773(3E-02<br>.19954506E-01                                  | BLES IN THE EQUA<br>STO ERROR 8<br>.10738711E-91<br>.22027360E-02<br>.82768305E-02                                   | TION             | 6674<br>EL 4571C17Y<br>0284928<br>00150<br>.1342847<br>.01154<br>.091246  |    | Studen                        | t measure              | : <u>Illega</u>   | <u>1 be</u> |
| VARTABLE<br>DE<br>CDISRPIN<br>DM<br>WS4012           | 63198567E-02<br>.64(773(3E-02<br>.19954506F-01<br>.14592070E-03                 | BLES IN THE EQUA<br>STO ERROR 8<br>.107387118-01<br>.220273606-02<br>.827683058-02<br>.158744928-03                  | F                | 8674<br>EL4571C177<br>0284928<br>0150<br>.1342847<br>.1154<br>.1091246<br>.01094<br>.1172936                      |    | Studen                        | t measure              | : <u>111ega</u>   | <u>1 be</u> |
| VARIABLE<br>DE<br>CDISRPIN<br>DM<br>WSA012<br>WSA017 | 631985C1E-02<br>.64(773(3E-02<br>.19954506F-01<br>.14592070E-03<br>403248110-92 | BLES IN THE EQUA<br>STO ERROR 8<br>.10738711E-01<br>.22027360E-02<br>.02768305E-02<br>.15874492E-03<br>.24316351E-02 | TION             | 8674<br>ELASTICITY<br>0284928<br>0150<br>.1342847<br>.0154<br>.1091246<br>.01094<br>.1172996<br>.00824<br>2192748 |    | Studen                        | t measure              | : <u>111ega</u>   | <u>1 be</u> |

F-LEVEL CR TOLERANCE-LEVEL INSUFFICIENT FOR FURTHER COMPUTATION.

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|  |   |  |  | 01/07/82  | 23.14.26. PAGE 1   |
|--|---|--|--|---|--|
| ATS (CREATION DA                               | TE = 01/03/82   | )  |  | •   |  |
| * * * * * * * *                                |   | . HULTEP   | LE REGRE   | SSIDN 1   |  |
| ARIABLE DISP                                   | NUPS  |  |  |   |  |
| ENTERED ON STEP                                | NUMBER 5  | SAC 12DE   |  |   |  |
| .56407<br>.31812<br>SQUARE .37703<br>DN .05886 | AN 4LYSI<br>Re (Ress<br>Residua<br>Colff oi                   | S CF VARIANCE<br>Iùn<br>L<br>F Variability   | DF SUM DF<br>8.<br>493.<br>7.6 PCT   | 50UARES<br>• 75684<br>1•70801   | MEAN SQUARE<br>. 19960<br>. 00346  |
|  |   |  |  |   |  |
| VARLAE   | LES IN THE EQUA   | TION   | *****  |   |  |
| 8  | STO EARCA B   | F  | OETA   | Student   | mageura: Dicrupti  |
|  |   | SIGNIFICANCE   | ELASTICITY   | Student   | measure. Distupti  |
| .50745223E-01                                  | .53626950E-02   | 25.375724  | .2889383   |   |  |
| 350252926-02                                   | .24830606E-0?   | 1.9997059  | 0987097  |   |  |
| .77833201E-01                                  | .70793909E-02   | 120.88163  | .5375758   |   |  |
| .12323932E-01                                  | .42439141E-02   | 0<br>8+4326756   | .03926   |   |  |
| .56206902E-02                                  | .29930887E-02   | .004<br>3.5264769  | •00476<br>•1288939   |   |  |
| .56201338E-04                                  | .10642342E-03   | .061<br>.27868098  | +00439<br>+0570333   |   |  |
| ~.943290485-03                                 | .167510796-02   | .598   | •90292<br>••0647508  |   |  |
| 21 5957636-03                                  | .1)3612236-03   | .3442529   | 00498  |   |  |
| 73601644                                       | -541952308-02   | •038<br>18393+799  | 00208  |   |  |
|  | ATS (CREATION 04<br>ARIABLE DISF<br>ENTERED ON STEP<br>SOUARE | ATS (CREATION DATE = 01/07/82<br>ARIABLE DISRUPS<br>ENTERED ON STEP NUMBER 5<br>SQUARE | ATS (CREATION DATE = 01/03/82)<br>ARIABLE DISRUPS<br>ENTERED ON STEP NUMBER 5., WSACI2DE<br>.56402 ANALYSIS CF VARIANCE<br>.31912 RE(RESSION<br>.39705 RE( | ATS (CREATION DATE = 01/07/82 )<br>ARIABLE DISPUPS<br>ENTERED ON STEP NUMBER 5., WSAC(2DE<br> | A15 (CREATION DATE = 01/03/82)<br>ARIABLE DISRUPS<br>ENTERED ON STEP NUMBER 5 WSAC12DE<br> |

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|      | DEPENDENT VARIABLE. PE  | * * * * * * * * * * * * * * * * * * *  | *<br>* * V L T I   | PLE REGR   | ESSICN                         | • • • • • • • • • • • •         | 3e ·         |
|------|---|--|--|--|--------------------------------|---------------------------------|--------------|
| B-11 | NULTIPLE R .3097<br>R SQUARE .0959<br>ADJUSTED F SQUARE .0849<br>STO DEVIATION .1058  | 3 AN ALYSI<br>7 REGRESS<br>3 RESIDUA<br>6 COLFF O  | S OF VARIANCE<br>ICN<br>E<br>F VARIABILITY   | DF SUN 0<br>6.<br>493.<br>14.3 PCT   | F SQUARES<br>•59624<br>5•5246J | NEAN SQUARE<br>•09771<br>•71121 | F<br>8.71899 |
| [    | VARIARLE      B        DE      21023663E-01        COISRPTN      .33966310E-02        DM      .61660937E-01        DSA012      .26000427E-03        BSA012      .26000427E-03        BSA012      .647372145E-03        LCONSTANTI      .627466473 | ABLES IN THE EQUA<br><u>SID</u> ERR <u>CR</u> <u>E</u><br>.14500264 <u>E-01</u><br>.26480130 E-02<br>.10672146E-01<br>.19115132E-03<br>.26*67999E-02<br>.17913281E-03<br>.53844768E-02 | F<br>SIGNIFICANCE<br>2.1004174<br>1.6453432<br>33.382334<br>1.8615504<br>.173<br>2.1824286<br>6.9958632<br>4770,7245 | EETA<br>EL 4ST (CITY<br>-0764873<br>.00657<br>.0611642<br>.06715<br>.272117<br>.03710<br>.1691094<br>.91617<br>1903771<br>139764<br>0545 | Student                        | measure: <u>Student</u>         | safety from  |

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|-----|---|---|--|---------------------------------------|-------------------------------------|--------------------------------|---------------------------------|
|     | FILE DISD   | ATS ICPEATION D                                 | ATE = 01/07/82                             | •                                     |                                     |                                |                                 |
|     | • • • • • •   | * * * * * * * * *                               | * * * * * * * * *                          | + HULTEP                              | LE REGRE                            | SSICN 4                        |                                 |
|     | DEPENDENT V   | ARIABLE CAN                                     | GERS                                       |                                       |                                     |                                |                                 |
| a   | VARIABLE(S)   | ENTERED CN STEP                                 | NUMBER 2 H                                 | SAGI2<br>SACIR                        |                                     | •                              |                                 |
| в-1 | MULTIPLE R<br>R SQUARE<br>Adjusted R<br>Std Deviati | .58565<br>.34299<br>SGUARE .33637<br>ION .12830 | ANILYSI<br>RECRESS<br>RESIDUAL<br>COEFF CF | S OF VARIANCE<br>Ion<br>F Variability | DF SUM DF<br>5.<br>496.<br>20.4 PCT | SOU ARES<br>4.26266<br>9.16524 | NEAN SQUARE<br>.05253<br>.01646 |
|     |   |   | RES IN THE FOULA                           |                                       |                                     | 4                              |                                 |
| •·· | V 161 161 P   | ·····   | STO FREDE E                                | F                                     | BETA                                |                                |                                 |
|     |   | -   | 510 0                                      | SIGNIFICANCE                          | ELASTICITY                          | Student                        | measure: Ten                    |
|     | 05-   | +19504777                                       | .150121008-01                              | 156.08195                             | .4985872                            | 1                              |                                 |
|     | CDISRPIN  | .12709239E-01                                   | .320238728-02                              | .300                                  | .1562463                            | 1                              |                                 |
|     | DM  | . 10551 990                                     | .129953308-01                              | .000                                  | .5135178                            |                                |                                 |
|     | WS4C12  | ,20511036E-03                                   | .231786548-03                              | .78986472                             | .0934460                            |                                |                                 |
| •-  | \$104E#   | 64869134E-02                                    | .353519496-02                              | 3.3670493                             | 2000001                             |                                |                                 |
|     | ICCNSTANT!  | .52679832                                       | .10841686E-01                              | -067<br>2356-4260<br>7                | 74219                               |                                |                                 |
| •   | F-LEVEL OR  | TOLERANCE-LEVEL                                 | INSUFFICIEN 1 FCP                          | FUFTHER COMPUT                        | ATION.                              |                                |                                 |
|     | •   |   |  |                                       |                                     | -                              |                                 |
|     |   |   |  |                                       |                                     |                                |                                 |
|     |   |   |  |                                       |                                     |                                |                                 |
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| FILE DISC  | DATS (CREATION D  | ATE = 01/07/82 1  | )  |  |          |          |                     |
| * * * * * *  |   |   | . HULTER   | LE RE  | GRE      | SSICN    |                     |
|  | VARIABLE FEA  | RS  |  |  |          |          |                     |
| VARIABLEIS   | ) ENTERED CN STEP   | NUMBER 2 I  | SACI2  |  |          |          |                     |
| ULTIFLE F  | .66350  | AN ILYSI  | S OF VARIANCE  | DF S   | UM OF    | SQUARES  | NEAN SCUARE         |
| ADJUSTED F   | -44323<br>SQUARE -43459   | RECRESS   | ION  | 5.   |          | 1.20277  | . 24055             |
| STD DEVIATI  | IGN .05553  | COEFF OF  | VARIABILITY  | IL 6 PCT   |          | 1195934  | 100 30 8            |
|  |   |   |  |  |          |          |                     |
|  |   |   | - •.   |  |          | · ·      |                     |
|  | VARIA   | BLES IN THE EQUAT   | FION   |  | _        | · ·      |                     |
| VAR I AEL E  | V 4R I 4<br>8   | BLES IN THE EQUAT<br>STD ERRCR B  | F  | EETA   | _        | Student  | measure: Fe         |
| VAR I AELE   | VARIA<br>8  | BLES IN THE EQUAT<br>STO ERRCR 0  | F<br>51GNIFICANCE  | EETA<br>ELASTICITY   | _  <br>; | Student  | measure: <u>Fe</u>  |
| VAR I AEL E  | VARIA<br>B<br>.58772676E-01   | BLES IN THE EQUAT<br>STO ERRCR 8<br>.67566453E-02   | F<br>F<br>SIGNIFICANCE<br>210 \$68513  | EETA<br>ELASTICITY<br>534586   | _        | Student  | measure: <u>F</u> e |
| VARIAELE<br>DE<br>CDISAPIN                           | VARIA<br>B<br>.58772676E-01<br>.26250391E-02  | BLES IN THE EQUAT<br>STO ERRCR 8<br>.67566453E-02   | F<br>F<br>SIGNIFICANCE<br>210 .68510<br>.090<br>1.545286   | EETA<br>EL 4STICITY<br>.5345866<br>.0416   |          | Student  | measure: <u>F</u> e |
| VARIAELE<br>DE<br>EDISAPIN                           | 0<br>.58772676E-01<br>.26258091E-02   | BLES IN THE EQUAT<br>STO ERRCR 8<br>.67566453E-02<br>.128593.4E-02  | F<br>SIGNIFICANCE<br>210.68510<br>.000<br>3.585786<br>.057   | EET 4<br>EL 4ST I C I T<br>.534586<br>.0416<br>.073857<br>.073857  | -  <br>- | Student  | measure: <u>Fe</u>  |
| VARIAELE<br>DE<br>CDISAPIN<br>DN                     | 0<br>.58772676E-01<br>.26258091E-02<br>.97628517E-01                                  | BLES IN THE EQUAT<br>STO ERRCR 8<br>.67566453E-02<br>.12859334E-02<br>.55E51764E-02                                   | F<br>SIGNIFICANCE<br>210.68513<br>.000<br>3.585786<br>.057<br>305.54810<br>0                       | EET A<br>EL ASTICITY<br>.534586<br>.0416<br>.073877<br>.075876<br>.045630                                      |          | Student  | measure: <u>Fe</u>  |
| V AR I 4 EL E<br>DE<br>CD I SAPTN<br>DM<br>#SAD 1 2  | B<br>.58772676E-01<br>.26258091E-02<br>.97628517E-01<br>.10465870E-03                 | BLES IN THE EQUAT<br>STO ERRCR 8<br>.67566453E-02<br>.12859334E-02<br>.55E51764E-02<br>.55E51764E-02                  | F<br>SIGNIFICANCE<br>210.68513<br>.000<br>3.525786<br>.057<br>305.54810<br>1.0979766               | EETA<br>ELASTICITY<br>.534586<br>.073657<br>.073557<br>.645630<br>.0797<br>.10594                              |          | Student  | measure: <u>Fe</u>  |
| VARIAELE<br>DE<br>CDISAPIN<br>DN<br>WSADI2<br>WSADIR | B<br>.58772676E-01<br>.26258091E-02<br>.97628517E-01<br>.10465978E-03<br>29024555F-02 | BLES IN THE EQUAT<br>STO ERRCR 8<br>.67566453E-02<br>.12859334E-02<br>.55E51764E-02<br>.99980065E-04<br>.15299530E-02 | F<br>SIGNIFICANCE<br>210.68513<br>.000<br>3.5455786<br>305.54810<br>1.0979766<br>.265<br>3.5989256 | EETA<br>ELASTICITY<br>.534586<br>.04166<br>.07987<br>.645630<br>.0797<br>.101694<br>.00881<br>.00881<br>.09956 |          | Student  | measure: <u>Fe</u>  |



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|                           | *********                  |                         |                | LE REGRE           | SSICN           |                      |
| 0505ND5NT V               | ARTABLESS SCLM             | s                       |                |                    |                 |                      |
| VARIABLE(S)               | ENTEPED ON STEP            | NUMBER 2 W              | 54012          |                    |                 |                      |
|                           |                            | Ĩ                       | ISACIR         | • • • •            |                 |                      |
| MULTIPLE P<br>P SQUARE    | •58090<br>•33745           | AN 4L YSIS<br>RE (RESSI | GE VARLANCE    | DF SUM OF          | SQUARES . 93614 | HEAN SQUARE<br>18723 |
| ADJUSTED R<br>STD DEVIATI | SQUARE .13076<br>DN .06394 | RESIDUAL<br>COEFF OF    | VARIABILITY    | 495.<br>10.0 PCT   | 1.83803         | .00371               |
|                           |                            |                         |                |                    |                 |                      |
|                           | VARIAE                     | LES IN THE EQUAT        | (ON            |                    |                 |                      |
| VARTABLE                  | 8                          | STD ERRCF B             | F              | BETA               | Student         | measure: Scl         |
|                           |                            |                         | SIGNIFICANCE   | ELASTICITY         |                 |                      |
| DE                        | .85245555C-01              | .74221165E-02           | 131.91311      | .4607560           |                 |                      |
| DISRPIN                   | .52451402E-02              | .15224326E-02           | 11.869654      | •1403217<br>•01173 |                 |                      |
| DM                        | .82546175E-01              | .61357691 8-02          | 1 91 .02011    | •5411933<br>•05273 |                 |                      |
| #SAC12                    | .98574702E-34              | .10971739E-03           | .81376213      | .0953445           |                 |                      |
| S401P                     | 32409765E-02               | .16806512E-92           | 3.7187467      | 03165              |                 |                      |
| (CENSTANT)                | .56441531                  | .51541546E-02           | 11991.567      |                    |                 |                      |
|                           |                            |                         |                |                    |                 |                      |
| F-LEVEL CF                | TOLER ANCE-LEVEL           | INSUFFICIENT FOR        | FURTHER COMPUT | TATEON.            |                 |                      |
|                           |                            |                         |                |                    |                 |                      |
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|     |   |   |  |  |                                   | 01/07/82                          | 23.14.26.                    | PAGE           |
| 1   | FILE DISDATS  | CREATION DA                             | TE = 01/01/82                                | )  |                                   |                                   |                              |                |
|     |   |   |  |  | LE REGR                           | ESSICN                            |                              |                |
|     | DEPENDENT VARIA   | BLE SSUM                                | S  |  |                                   |                                   |                              |                |
| L   | VARIABLE(S) ENT   | ERED CN STEP                            | NUMBER 2                                     | WSACIR                                     |                                   |                                   | · •                          |                |
| B-1 | WULTIFLE F<br>R Souare<br>Adjusted R Scuar<br>Sto deviation | .66010<br>.43573<br>RE .43003<br>.04577 | AN 4L VSI<br>RE CRESS<br>RE LIDUA<br>COEFF O | S OF VARIANCE<br>IDN<br>L<br>F VARIABILITY | OF SUN (<br>5.<br>495.<br>8.4 PCT | F SQUARES<br>• 80061<br>1 • 93678 | HEAN SCUAR<br>.1601<br>.0020 | RE<br>12<br>99 |
|     |   |   |  |  | <b>49</b>                         |                                   |                              |                |
|     |   | VARIAB                                  | LES IN THE EQUA                              | TICN                                       |                                   |                                   |                              |                |
|     | VARIABLE  | 8                                       | STO EPROP 6                                  | F  | BETA                              | Student                           | measure: 0                   | verall         |
|     |   |   |  | SIGNIFICANCE                               | ELASTICITY                        |                                   | ſ                            | omnosi         |
|     | DE  | 21 800 58E-01                           | •55743451 E-02                               | 217.34266                                  | .5457992                          |                                   | 0                            | ompoor         |
|     | COISAPIN .3   | 6047699E-02                             | • 11434165E-02                               | 9.5390797                                  | -1184983                          | 1                                 |                              | Schoo          |
|     | DM .7   | 7059982E-01                             | .46079670E-02                                | 279.66977                                  | .6207906                          |                                   |                              | Vict:          |
|     | W54012 .4   | 08450888-44                             | .82402779E-04                                | .24593547                                  | .04#3716                          | 1                                 |                              |                |
|     | WSADIRI   | 7430211E-02                             | +12622459E-02                                | 1.5068534                                  | 1396239                           | 1                                 |                              |                |
|     | ICCNSTANTI .5   | 0091335                                 | .387193601-02                                | 16744.447                                  | 01 904                            |                                   |                              |                |
|     | F-LEVEL CR TOLE   | RANCF-LEVEL I                           | NSUFFICIENT FCR                              | EURTHER COMPU                              | TATION.                           |                                   |                              |                |
|     |   |   |  |  |                                   | 1                                 |                              |                |
|     |   |   |  |  |                                   |                                   |                              |                |
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# summary

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|                              |  |   |   |                                   | 01/07/82 | 23.14.26. FAGE         |
|------------------------------|--|---|---|-----------------------------------|----------|------------------------|
| FILE DISC                    | ATS CREATION D                                     | ATE = 01/07/82                                  | )   |                                   |          |                        |
|                              |  | * * * * * * * *                                 |   | LE REGRE                          | SSION    |                        |
| DEPENCENT V                  | ARTABLE TVC  | PERS  |   |                                   |          |                        |
| VARIABLESS                   | ENTERED ON STEP                                    | NUNBER 4  | TACIZDE   |                                   |          |                        |
| NULTIPLE A                   | . 15552  | AN AL YST                                       | E OF VARIANCE                                       | DE SUN DE                         | SQUARES  | MEAN SQUARE            |
| ADJUSTED A                   | 50UARE .20025<br>Ch .04786                         | RESIDUAL  | F VARIABILITY                                       | 491.<br>12.3 PCT                  | 1.12488  | •00229                 |
| -16                          |  |   |   |                                   |          |                        |
|                              | VARIA  | BLES IN THE EQUA                                |   |                                   | -        |                        |
| VARIABLE                     | 9  | STC ERROR E                                     | f   | BETA                              | Teacher  | measure: <u>Self-r</u> |
|                              |  | 2   | SIGNIFICANCE  | ELASTICITY                        |          |                        |
| DE                           | 107275518-01                                       | .670961436-02                                   | 2.5562661   | 0806931                           |          |                        |
| CDISRPIN                     | +45034275E-02                                      | .11977249E-02                                   | 14.137485   | .1676670                          |          |                        |
| DM                           | .47716081E-01                                      | .62556409E-02                                   | 50.181634   | .4353695                          |          |                        |
| NTADE2                       | .22210150E-03                                      | .01086497E-04                                   | 7.5024985   | .34893                            |          |                        |
|                              |  |   | • 006   | .02425                            |          |                        |
| WTACIE                       | 279683856-32                                       | 13586879E-02                                    | 4.23/3258   | - 15636043                        |          |                        |
| NTACIE<br>NTACIEM            | 27568385E-32<br>203366E0E-02                       | .13586879E-02<br>.54211450E-03                  | 4.2373258<br>.040<br>7.6147426                      | 03019                             |          |                        |
| NTACIE<br>NTACIEM<br>NTACIZE | -,27568385E-32<br>-,26336660E-02<br>-,16122161E-03 | .135868798-02<br>.542114508-03<br>.671381508-04 | 4.23/3258<br>.040<br>7.6147426<br>.403<br>3.423{778 | 03019<br>1556579<br>1217<br>01217 |          |                        |



|     | *  |  |  |                                   |                                     | 01/07/82                      | 23.14.26.                |
|-----|--|--|--|-----------------------------------|-------------------------------------|-------------------------------|--------------------------|
| 1   | FILE DISC  | ATS CREATION D                                   | TE = 01/07/82                              |                                   |                                     |                               | • • • •                  |
|     |  |  |  |                                   | LE REGRE                            |                               |                          |
|     | DEPENDENT  | VARIABLE STP                                     | E# 5                                       |                                   |                                     |                               |                          |
|     | VARIABLESS   | ENTERED ON STEP                                  | NUNBER 3 I                                 | TACION                            |                                     |                               |                          |
|     | MULTIPLE R<br>R SCUARE<br>Adjusted R<br>Std Deviat | . 47085<br>.22170<br>SQUARE .21221<br>IQN .13257 | ANALYSI<br>Regress<br>Residual<br>Coeff of | CF VARIANCE<br>ION<br>VARIABILITY | DF SUM DF<br>6.<br>492.<br>19.0 PCT | SQUARES<br>2.47786<br>8.69961 | MEAN SOI<br>• 41<br>• 01 |
| 17  |  |  |  |                                   |                                     | 1                             |                          |
|     |  | VARLA  | BLES IN THE EQUAT                          | ICN                               |                                     |                               |                          |
|     | VARIABLE   | e  | STC ERPCR E                                | F<br>SIGNIFICANCE                 | BETA                                | Teacher                       | measure                  |
|     | DE   | .77576672E-01                                    | .162236898-01                              | 22.864573                         | . 2084850                           |                               |                          |
|     | CGISAPTN   | .12947563E-01                                    | .33269711E-02                              | 15-145350                         | .1722268                            | ļ                             |                          |
|     | DM   | .16192302  | .16891450E-01                              | 91.691013                         | ,5278474                            | 1                             |                          |
| , 1 | WT4012   | .68041302E-03                                    | .22499228E-03                              | 9.1455533                         | .3480565                            |                               |                          |
|     | WT AD LR   | -,99304709E-02                                   | .36715676E-02                              | 7.3153754                         | 3306679                             |                               |                          |
|     | HTACICH  | ~.57365671E-02                                   | .24054505E-02                              | 8.6683116                         | 1522635                             |                               |                          |
| ,   |  |  |  |                                   | 01467                               | 1                             |                          |

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# e: Student personal victimization

|   |  |   |   |  |  |                                    | 01/07/82                        | 23.14.26.                       |
|---|--|---|---|--|--|------------------------------------|---------------------------------|---------------------------------|
| FILE DIS  | DATS (CREATIO  | N DATE . O  | 01/01/82  | 1  |  |                                    |                                 |                                 |
|   |  | * * * * * *   |   |  | PLE RE   | GR                                 | ESSION                          |                                 |
| DEPENDENT   | VARIABLE   | TINCOS  |   |  |  |                                    |                                 |                                 |
| VARIAELE(S  | I ENTERED ON S   | TEP NU¥8ER  | 2   | WTACIR   |  |                                    |                                 | <b>.</b>                        |
| PULTIFLE F<br>P SQUARF<br>ADJUSTED F<br>STO DEVIAT        | .6)<br>.77<br>.36<br>.0N .10                                     | 895<br>952<br>444<br>713  | AN ALYS<br>REGRESS<br>RESIDU<br>COEFF   | IS OF VARIANCE<br>Sion<br>AL<br>Of Variability   | DF<br>5.<br>493.<br>15.5 PCT   | 5UM 01                             | F SQUARES<br>3.33499<br>5.65851 | MEAN SQUARE<br>.66700<br>.01148 |
| 510 001141  |  |   |   | • •  | · •  |                                    | ł                               |                                 |
| VARIAELE  | VA<br>8  | FTABLES IN<br>Std ef  | THE EGU   | F<br>SIGNIFICANCE  | BET4<br>ELASTICI   | <br>; ,                            | l<br>Teach                      | per measure; <u>I</u>           |
| VIGTAELE<br>DE  | VA<br>8<br>21648479  | RTABLES IN<br>Std Er<br>.13071  | THE EQU<br>RROA B<br>7777E-01   | AT ION<br>F<br>SIGNIFICANCE<br>274.27279   | BET4<br>EL 4STICI<br>- ,64857  |                                    | l<br>Teach                      | er measure; <u>I</u>            |
| VARTAELE<br>DE<br>COLSEPTN                                | VA<br>B<br>21648409<br>.64562799E-                               | FT48LES IN<br>STD EF<br>.13073  | THE EQU<br>RROA B<br>1777E-01<br>5955E-02                                     | AT ION<br>F<br>SIGNIFICANCE<br>274.27275<br>5.8013798  | BET4<br>ELASTICI<br>64857<br>063<br>.09573   | TV<br>11<br>57<br>76               | l<br>Teach                      | oer measure; <u>I</u>           |
| VARTAELE<br>DE<br>CDISRPIN<br>DM                          | 21648409<br>.64562799E-<br>10289142                              | FI48LES IN<br>STD EF<br>.13073<br>02 .26805<br>.13804                           | THE EQU<br>RROR B<br>1777E-01<br>5955E-02<br>8648E-01                         | AT ION<br>51GNIFICANCE<br>274.27275<br>5.8013798<br>.016<br>50.600608  | BET4<br>ELASTICI<br>64857<br>063<br>.09573<br>.012<br>37327  | TV<br>11<br>57<br>76<br>35         | l<br>Teach                      | er measure; <u>I</u>            |
| VARTAELE<br>DE<br>CDISRPIN<br>DM<br>WTAC12                | 21648409<br>.645627995-<br>10288142<br>.54000670F-               | FI+BLES IN<br>STD EF<br>.13073<br>02 .26805<br>.13806<br>03 .16087              | THE EQU<br>RROR B<br>7777E-01<br>5955E-02<br>8648E-01<br>7464 <i>E</i> -03    | AT ION<br>51GNIFICANCE<br>274.27275<br>5.8013798<br>-016<br>50.600608<br>0<br>6.6133504                              | BET4<br>ELASTICI<br>64857<br>  | TV<br>1157<br>76<br>35<br>36<br>87 | l<br>Teach                      | er measure; <u>I</u>            |
| V AFT AELE<br>DE<br>CDI SRPTN<br>DM<br>bTAC 12<br>bTAC 15 | 2(648479<br>.64562799E-<br>10288142<br>.54000670F-<br>95483930E- | FIABLES IN<br>STD EF<br>.13073<br>02 .26835<br>.13807<br>03 .16083<br>02 .28763 | THE EQU<br>RROR B<br>7777E-01<br>5955E-02<br>8648E-01<br>7464E-03<br>3072E-02 | ATION<br>F<br>SIGNIFICANCE<br>274.27275<br>0<br>5.8013798<br>016<br>50.600608<br>0<br>6.5133504<br>.303<br>11.020191 | BET4<br>ELASTICI<br>64857<br>063<br>.09573<br>.012<br>37327<br>054<br>.30753<br>.30753<br>.30753<br>.30753 |                                    | l<br>Teach                      | er measure; <u>I</u>            |

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F-LEVEL OF TOLERANCE-LEVEL INSUFFICIENT FOR FURTHER COMPUTATION.

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legal behaviors in school



|      | DEGENDENT   |                                      |  | • • • • • • • • • • |                            | CESSIUN (                         |                          |
|------|---|--------------------------------------|--|---------------------|----------------------------|-----------------------------------|--------------------------|
|      | VARIARIESS  | ENTERED ON STEP                      | NUMBER 3                                   | TAC 12              |                            |                                   |                          |
|      |   |                                      |  | TACIR               |                            |                                   |                          |
| B-21 | MULTIFLE F<br>R-SQUARE<br>ADJUSTED F<br>STD DEVIATI | .41994<br>5004RE .16622<br>0N .15665 | AN 4LYST<br>RECRESS<br>RESIDUAL<br>COEFF O | S OF VARIANCE       | DF SUN<br>468-<br>27-4 PCT | DF SQUARES<br>2:50405<br>11,97582 | HEAN 500<br>+ 42<br>+024 |
| · 😅  | ·   | VARIAE                               | LES IN THE EQUA                            | TION                |                            |                                   |                          |
|      | VARIABLE  |                                      | - STO- ERROR -8-                           | F                   |                            | ] maaabau                         |                          |
|      |   |                                      |  | SIGNIFICANCE        | EL ASTICITY                | leacher                           | measure:                 |
|      | DE  |                                      |  |                     |                            |                                   | •                        |
|      | COLSEPTN  | .34002545E-02                        | .55646793E-02                              | . 37 337 271        | .0354552                   |                                   |                          |
|      | 04  | 132805098-01                         | .10494090E-01                              | . 1150560           | 0378038                    | -                                 |                          |
|      | CDISRPTM  | .13207e17E-01                        | .71566556E-02                              | 3.405978            | e1248326                   |                                   |                          |
| Ι.   | WTAD I Z  | .199726898-02                        | .269309142-03                              | 17.015012           | .4901293                   | ,                                 |                          |
|      | WTADI9  | 19801443E-01                         | .42393773E-02                              | 21.916725           | 5757578                    |                                   |                          |
|      | (CONSTANT)  | .03149350                            | .130270086-01                              | 2085.5762-          |                            |                                   |                          |
| 1    |   |                                      |  |                     |                            | 2                                 |                          |
| • .  | F-LEVEL CR  | TOLERANCE-LEVEL                      | INSUFFICIENT FCR                           | FURTHER COMPUT      | ATION.                     |                                   |                          |
|      |   |                                      |  |                     |                            |                                   |                          |
|      |   |                                      |  |                     |                            |                                   |                          |



# tudent safety from personal attack

----01/07/82 23.14.20. PAGE ILS FILE DISDATS (CREATION DATE = 01/07/82) DEPENDENT VARIABLE.. TDANGS VARIABLE(S) ENTERED ON STEP NUMBER J.. BTACION . . . . . . NULTIPLE F R Square Adjusted R Square Sto Deviation ANALYSIS OF VARIANCE OF S Regression 6. Restoure 92: Coeff of Variability 41.5 Pct .29782 .09870 .07759 .18258 SUN OF SQUARES 1.59634 16.40987 MEAN SQUARE F SIGNIFICANCE .26606 7.98128 .000 .03334 hid ..... ----- VARIABLES IN THE EQUATION ------F BETA SIGNIFICANCE ELASTICITY VARIABLE 8 STO EFROR E Teacher measure: Tension in the school 

 DE
 .22482923E-01
 .22277071E-01
 1.0185605

 COISRPTN
 .19423773E-01
 .45683306E-02
 16.078073

 DM
 .69729528E-01
 .23194263E-01
 14.966134

 WT4012
 .11238874E-02
 .30894140E-03
 13.234068

 NT4014
 -.19702466E-01
 .50415029E-02
 15.272867

 WT401CM
 -.64567219E-02
 .33085156E-02
 3.600

 NT401CM
 -.64567219E-02
 .33085156E-02
 3.600

 WT401CM
 -.64567219E-02
 .33085156E-02
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.0476153 .01738 .2036062 .06041 .2305074 .07971 .4530537 .10832 -.5170023 -.137075 .1350953 -.02634 . . . . F-LEVEL CR TOLERANCE-LEVEL INSUFFICIENT FOR FURTHER COMPUTATION. - ----. 



01/07/82 23.14.26 FILE DESDATS (CREATION DATE = 01/07/02 ) DEPENDENT VARIABLE.. TEARS VARIABLEIST ENTERED ON STEP NUMBER 3.. WTADI2 YULTIFLE F P Souare-Adjusted R Square STD Deviation ANALYSIS OF VARIANCE DF S Regression 6. Residual 492. Coeff of Variability 27.6 Pct SUN OF SQUARES .50925 7.27266 NEAN SOUARE .08407. .25581 .06544 .05404 .12158 . . . . . . . . . ------------ VARIABLES IN THE EQUATION -----F \_\_\_\_\_ Teacher measure: Fear of being attacked VARIABLE 8 STO ERROR C SIGNIFICANCE ELASTICITY • DE --.74276014E-01 .14869827E-01 24.950852\*\*\* -.2362222 -.03419 .0095841 .00186 -.1389801 -.03152 .1102736 .01164 .2912972 .01665 -.3050665 -.07265 .60121403E-03 .43014044E-02 .15536091E-01 CDISPPTN .60121403E-03 .43014044E-02 .155360916 .899 -.35574555E-01 .14295530E-01 6.1927036 .85016989E-02 .55319756E-02 2.3618425 .47517067E-03 .20562064F-03 5.3403069 .021 -.76454988F-32 .32765680E-02 5.4433623 .020 DM: CDISAPTM BTAC.LR .106887208-01 1983.8014 {CCNSTANT} .47607569 P-LEVEL OR TOLFRANCE-LEVEL INSUFFICIENT FOR FURTHER COMPUTATION.



|        |  |   |                                       |                                    | 01/07/82                     | 23.14.20.                    |
|--------|--|---|---------------------------------------|------------------------------------|------------------------------|------------------------------|
|        | FILE DISDATS (CREATION   | DATE + 01/07/82                                   | •                                     |                                    |                              |                              |
| · ·    |  |   | HULTIP                                | LE REGRO                           | ESSICN (                     |                              |
| Į      | DEPENDENT VARIABLE TP  | ERS   |                                       |                                    |                              |                              |
|        | VARIABLE(S) ENTERED ON STE   | P NUMBER 3  | NTACION                               |                                    | л<br>н н ц                   |                              |
|        | MULTIPLE F .3750<br>R SQUARE .1436<br>Adjusted R Square .1331<br>STD Deviation .0474 | 7 AN ILYST<br>9 RECRESS<br>8 RESIDUA<br>9 COEFF O | S OF VARIANCE<br>ION<br>F VARIABILITY | DF SUM D<br>6.<br>483.<br>16.1 PCT | SQUARES<br>.62685<br>J.73557 | NEAN SQUAR<br>.1944<br>.0076 |
| _ L.۵. | VARI   | ABLES IN THE EQUA                                 | TION                                  |                                    |                              | ·                            |
|        | VARIABLE B   | STD EFRCE E                                       | F                                     | EETA                               | Teacher                      | r measure:                   |
|        | •  |   | SIGNIFICANCE                          | ELASTICITY                         |                              |                              |
| ′ L    | DE14110663E-01   | 107183325-01                                      | 1.7331671                             | 0604548                            | •                            |                              |
|        | DN   | •11159627E-01                                     | .000<br>33.840433                     | .02067<br>.3373687                 |                              |                              |
|        | BTA012 .003148595-03   | -14864326E-03                                     | .000<br>16.464582<br>.000             | ,34005<br>,4915572<br>,34702       |                              |                              |
| f ·    |  |   |                                       |                                    |                              |                              |
|        | 1401R ~.95175437E-02   | -24256555E-02                                     | 15.395419                             | 07335                              |                              |                              |
|        | NTADIR95175437E-02<br>NTACIDE35268202E-02  | +24256555E-02<br>+15918525E-02                    | 15.395419<br>.000<br>4.9086382        | 07335<br>1452325<br>01164          |                              |                              |

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கு பிருந்து பரக்கும் இரு வான் பார்க்கார் குது பரக்கும் இரு வான் பார்க்கார்

| PAGE 140                  | 1999 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - |  |
|---------------------------|---|--|
|                           |   |  |
| ···· ••• ••• ••• •• •• •• | +   |  |
| F<br>7 13.648             | SIGN LF I CANCE   |  |
|                           | 1<br>1<br>1   |  |

### Person summary

Composite measure includes:

Self-reports of personal victimization Student personal victimization Illegal behaviors in school Disruption Student safety from personal attack Tension in the school Fear of being attacked

01/07/82 FILE DISDATS (CREATION DATE + 01/07/82 ) 23,14.26, DEPENDENT VARIABLE. TVAVCS VARIABLE(S) ENTERED ON STEP HUNBER 4.. BTACIDE

. ....

| B-24 | MULTIPLE &<br>P SQUARE<br>Adjusted #<br>STD Deviat | .3019<br>.0909<br>SQUARE .0779<br>IQN .0718 | 13 AN AL YSI<br>12 RE GRESS<br>16 RE STDUA<br>15 COLFF O | S OF VARIANCE<br>ICN<br>L<br>F VARIABILITY | DF SUM<br>7.<br>491.<br>10.6 PCT | OF SQUARES<br>+23354<br>2+53510 | NEAN SQUARE<br>.03627<br>.00516 |  |  |  |  |  |
|------|--|---|--|--|----------------------------------|---------------------------------|---------------------------------|--|--|--|--|--|
|      | VARIABLES IN THE EGLATION                          |   |  |  |                                  |                                 |                                 |  |  |  |  |  |
| 1    | VAR LABLE  | 8   | STO EARCE E  | F  | 8ET A                            | _                               |                                 |  |  |  |  |  |
| 1    |  |   |  | SIGNIFICANCE                               | ELASTICITY                       | Teache                          | r measure: Self-                |  |  |  |  |  |
| Ł    | DE   | 78614047E-02                                | .10993568E-01  | .51135556                                  | 0422563                          |                                 |                                 |  |  |  |  |  |
|      | CDISEPTN   | +42276818E-02                               | .25515150E-02  | 475  | 00473                            |                                 |                                 |  |  |  |  |  |
|      | C M  | 13428964E-01                                | - 94602720F-02   | .098                                       | .01496                           |                                 |                                 |  |  |  |  |  |
|      | CDISRPIN   | .69614718E-32                               | .329832456-02  | +113                                       | 0876386                          |                                 |                                 |  |  |  |  |  |
|      | #14012   | .22544L43E-03                               | .122194936-03  | .035                                       | .01088                           |                                 |                                 |  |  |  |  |  |
|      | NTACIR   | 12212609E-02                                | .199663436-02  | •066<br>•37412768                          | .2308699                         |                                 |                                 |  |  |  |  |  |
|      | WTADICE  | 32507478E-02                                | •17027780F-02  | .541                                       | 01324                            |                                 |                                 |  |  |  |  |  |
|      | [COPSTANT]   | .38158937                                   | .65405254E-02  | .153                                       | 09674                            |                                 |                                 |  |  |  |  |  |

F-LEVEL CR TOLEPANCE-LEVEL INSUFFICIENT FOR FURTHER COMPUTATION.





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23.14.24. 01/07/82 PAGE 74 FILE DISDATS (CREATION DATE = 01/07/82 ) \* DEPENDENT VARIABLE.. TVATHS 7 VARIABLE(S) ENTERED ON STEP NUMBER 4 .. CDISRPTE -----MEAN SQUARE •77946 •02169 SUN OF SOUARES 5.45621 10:56211 
 NULTIPLE R
 .58363

 R SQUARE
 .34062

 ADJUSTED F SQUARE
 .33115

 STD DEVIATION
 .14727
 ANALYSIS OF VARIANCE OF SU RECRESSION 7. Resident 407: Coeff of Variability 21.2 PCT 2 B-2 --· · • 1 and a management of the second s ------. SIGNIFICANCE ELASTICITY Teacher measure: School safety from vandalism and theft STD ERROR 8 VARIAELE <u>8</u> +22923021 E-01 158 +27598 DE -.20836945 COISEPTN -.50532838E-92 .61966915E-02 .66500916 -.415 .17812286E-01 45.642641 DH -.12033862 +21730159E-01 +75243249E-02 8+3404737 CDISRPTM .25019275E-03 19.901360 .39882699E-02 25.503592 -11133257E-02 STOATE -.20141194E-01 BTADLA .17458403E-01 .10292327E-01 2.8772784 COLSAPTE .136328228-01 3678.2164 (CCNSTANT) .82680747 -F-LEVEL OR TOLERANCE-LEVEL INSUFFICIENT FOR FURTHER COMPUTATION. . ⁺, ----7



|              |   |  |  |                                   |                                    | 01/07/82       | 23.14.26.                     | PAG            |
|--------------|---|--|--|-----------------------------------|------------------------------------|----------------|-------------------------------|----------------|
|              | FILE DISD   | ATS (CREATION DA                               | TE = 01/07/82 1                            |                                   |                                    |                |                               |                |
|              |   | <u>*.* * * * * * *</u> .                       | <u>*</u> * * * * * * * * *                 | • HULTIP                          | LE REGRE                           | <u>5310N</u> . |                               |                |
| ĺ            | DEPENDENT V   | ARIABLE TPRO                                   | S  |                                   |                                    |                |                               |                |
| l.,          | VAR LABLETS)  | ENTERED ON STEP                                | NUPBER Tet                                 | TACI2                             |                                    |                |                               |                |
| B-28         | AULTIPLE E<br>R SQUARE<br>Adjusted F<br>Sto Devlati | .51449<br>.26470<br>SQUARE .25566<br>Dh .03851 | AN ALYSIS<br>REGRESS<br>RESIDUA<br>COEFF O | OF VARIANCE<br>ICN<br>Variability | DF SUM OF<br>6.<br>488.<br>9.3 PCT | 50UARES        | NEAN SOUAR<br>. 1001<br>.0034 | 12<br>12<br>12 |
| <u> </u>     |   | VARIAB   | LES IN THE EQUA                            | TION                              |                                    |                |                               |                |
|              | VADTABLE (  | ····   | STO ERROR D                                | F                                 | EETA                               | Teache         | r measure.                    | Pro            |
|              | VANIAUEE  | U  |  | SIGNIFICANCE                      | ELASTICITY                         | , reaction     | i measure.                    | 110            |
|              | DE  | 86811854E-31                                   | -718446298-02                              | 146.00571                         | 5154010                            | ·· •*          |                               | Com            |
|              | CDISAPTN  | .30356713E-92                                  | .20782542E-02                              | 2.1335958                         | .0852050                           |                |                               |                |
| r ·          | DW  | 24926255E-01                                   | .69070356E-02                              | 13.023589                         | 179506                             |                |                               |                |
|              | CDISRPTM  | .40913786E-02                                  | .26728135E-02                              | 2.3431605                         | .0976291                           |                |                               |                |
|              | WTADE2  | .414520556-03                                  | .59347478E-04                              | 17.409725                         | .4694710                           |                |                               |                |
|              | BTADER  | 70551053E-02                                   | .15832905E-02                              | 19.855727                         | 04682                              |                |                               |                |
| 1            | ICCNSTANT   | .66434703                                      | .51643349E-D2                              | 16248.558                         | •••••••                            |                |                               |                |
| 1<br>1<br>1  | F-LEVEL CR  | TOLERANCE-LEVEL                                | INSUFFICIENT FCR                           | FURTHER COMPUT                    | TATION.                            |                |                               |                |
|              |   |  |  |                                   |                                    |                |                               |                |
| 1            |   |  |  |                                   |                                    |                |                               |                |
| . <u>.</u> . |   |  |  | <b></b> .                         | •••                                | •              |                               |                |
|              |   |  |  |                                   |                                    | l              |                               |                |
|              |   |  |  |                                   |                                    |                |                               |                |
|              |   |  |  |                                   |                                    |                |                               |                |



## erty summary

osite measure includes:

elf-reports of property victimization elf-reports of car victimization tudent property victimization chool safety from vandalism and theft



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Appendix C

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Comparison of Teams with Different Strategy Thrusts on Outcome Change Scores


|        | ·                      | + Discipline<br>- Communications | + Discipline<br>- Human relns | + Human relns<br>- Communications | + DISCIPLINE<br>- Communications | + Discipline<br>- Human relns | + Human relns<br>- Communications |
|--------|------------------------|----------------------------------|-------------------------------|-----------------------------------|----------------------------------|-------------------------------|-----------------------------------|
|        |                        | Hi                               | gh schools                    |                                   | <br>                             | Middle schools                |                                   |
| 1      | Student pers. vict'n   | +                                | -                             | +                                 | *                                | -                             | -                                 |
| S      | Teacher pers. vict'n   | *_                               | -                             | -                                 | +                                | +                             | +                                 |
| sure   | Student prop. vict'n   | -                                | -                             | +                                 | -                                | +                             | <b>-</b>                          |
| lea    | Alcohol/drugs          | _                                | -                             |                                   | +                                | +                             | +                                 |
| lt P   | Illegal behaviors      | **_                              | -                             | -                                 | +                                | +                             | +                                 |
| lder   | Disruption             | ***_                             | +                             | **→                               | +                                | +                             | -                                 |
| Stı    | Student pers. safety   | -                                | -                             | +                                 | +                                | +                             | +                                 |
|        | Tension                | -                                | _                             | -                                 | +                                | +                             | +                                 |
|        | Fear                   | -                                | -                             | -                                 | +                                | +                             | -                                 |
|        | Student pers. vict'n   | <i></i>                          | +                             |                                   | <br>+                            |                               | +                                 |
|        | Teacher pers. vict'n   | **                               | -                             | *-                                | +                                | **+                           | -                                 |
| 10     | Student prop. vict'n   | ~-                               | ·                             | -                                 | -                                |                               | +                                 |
| ure:   | Teacher prop. vict'n   | -                                | -                             | **                                | +                                | ÷                             | -                                 |
| easi   | Teacher car vict'n     | ***_                             | -                             | -                                 | *                                | -                             | -                                 |
| й<br>ч | Illegal behaviors      | +                                | +                             | -                                 | *+                               | **+                           | - 1                               |
| cher   | Disruption             | -                                | +                             | ***-                              |                                  | +                             | -                                 |
| lea    | Student pers. safety   | -                                | ·+                            | *_                                | +                                | +                             | -                                 |
| • • ·  | Safety vandalism/theft |                                  | · +                           | **-                               | *+                               | **+                           |                                   |
|        | Tension                | -                                | -                             | _                                 | -                                | +                             | <b></b>                           |
|        | Fear                   | *_                               | · _                           | -                                 | -                                | +                             | -                                 |

Comparison of Teams with Different Strategy Thrusts on Outcome Change Scores

\* p<.10; \*\* p<.05; \*\*\* p<.01.

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A + indicates teams with the strategy thrust labelled + (first in pair) have more reduction in crime than teams with the strategy thrust labelled -(second in pair). A - indicates the reverse.

| + Discipline<br>- Communications | + Díscíplíne<br>- Human relns | + Human relns<br>- Communications |
|----------------------------------|-------------------------------|-----------------------------------|
| Elem                             | entary scho                   | ools                              |
| +                                | +                             | -                                 |
| +                                | +                             | -                                 |
| +                                | +                             | -                                 |
| -                                | +                             | *_                                |
|                                  | **-                           | +                                 |
| +                                | -}-                           | -                                 |
| +                                | +                             | +                                 |
| +                                | -                             | *+                                |
| +                                | +                             | *                                 |
|                                  | +                             | *_                                |
| -                                | ***+                          | ***-                              |
| -                                | +                             | -                                 |
| +                                | *+                            | · -                               |
| +                                | +                             | -                                 |
| _                                | +                             | *_                                |
| **+                              | **+                           | -                                 |
|                                  | +                             | ·                                 |
| +                                | **+                           | _                                 |
| **+                              | *+                            | -                                 |
| +                                | **+                           |                                   |

Appendix D

# Relative Standing of Strategy Thrust Groups





### Relative Standing of Strategy Thrust Groups

|  |   | High      | Middle | Elementary                            |
|--|---|-----------|--------|---------------------------------------|
| ability of strat   | tegy thrust group showing l<br>tion than other two groups   |           |        |                                       |
| Discipline   | - student measures  | •         | **     | **                                    |
|  | teacher measures  |           |        |                                       |
|  | stud+tchr measures  |           | **     | **                                    |
| Communications   | - student measures  | **        |        |                                       |
|  | teacher measures  | ***       |        |                                       |
|  | stud+tchr measures  | ****      |        |                                       |
| Human relations  | s - student measures  |           |        |                                       |
|  | teacher measures  |           |        |                                       |
|  |   |           |        |                                       |
|  | stud+tchr measures  |           |        |                                       |
| ability of strat<br>crime reduction<br>Discipline                                      | stud+tchr measures<br>tegy thrust groups showing<br>h than other two groups<br>- student measures<br>teacher measures   | **        |        |                                       |
| ability of strat<br>crime reductior<br>Discipline                                      | stud+tchr measures<br>tegy thrust groups showing<br>h than other two groups<br>- student measures<br>teacher measures<br>stud+tchr measures   | **        |        |                                       |
| ability of strat<br>crime reductior<br>Discipline<br>Communications                    | <pre>stud+tchr measures tegy thrust groups showing than other two groups - student measures teacher measures stud+tchr measures - student measures</pre>  | **        |        |                                       |
| ability of strat<br>crime reduction<br>Discipline<br>Communications                    | <pre>stud+tchr measures tegy thrust groups showing than other two groups - student measures teacher measures stud+tchr measures - student measures teacher measures</pre>   | **        |        | · · · · · · · · · · · · · · · · · · · |
| ability of strat<br>crime reductior<br>Discipline<br>Communications                    | <pre>stud+tchr measures tegy thrust groups showing than other two groups - student measures teacher measures stud+tchr measures teacher measures stud+tchr measures stud+tchr measures</pre>                                      | **        |        |                                       |
| ability of strat<br>crime reduction<br>Discipline<br>Communications<br>Human relations | <pre>stud+tchr measures tegy thrust groups showing than other two groups - student measures teacher measures stud+tchr measures teacher measures stud+tchr measures stud+tchr measures stud+tchr measures</pre>                   | **<br>*** |        | **                                    |
| ability of strat<br>crime reduction<br>Discipline<br>Communications<br>Human relations | <pre>stud+tchr measures tegy thrust groups showing than other two groups - student measures teacher measures stud+tchr measures teacher measures stud+tchr measures stud+tchr measures stud+tchr measures teacher measures </pre> | **        | **     | **                                    |

<sup>1</sup>Probabilities are based on sign test which takes account of the direction but not the amount of differences among groups.

\* p<.10; \*\* p<.05; \*\*\* p<.01; \*\*\*\*p<.001.

Appendix E

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Correlations: Objective Change Targets x Change in Crime Levels

### High Schools (n=57/58)

|      |                        | Students | Teachers | Parents | School |   | Students |
|------|------------------------|----------|----------|---------|--------|---|----------|
|      | Student pers. vict'n   | -14      | -18      | -03     | -12    |   | 03       |
|      | Teacher pers. vict'n   | 07       | -11      | 03      | ** 29  |   | 04       |
| res  | Student prop. vict'n   | -14      | 17       | -15     | 10     |   | 09       |
| asu  | Alcohol/drugs          | 10       | -04      | 01      | 03     |   | 10       |
| M    | Illegal behaviors      | -10      | -01      | **-24   | -06    |   | 12       |
| lent | Disruption             | -12      | -09      | **-26   | 10     |   | 16       |
| tu   | Student pers. safety   | -05      | -00      | -02     | -13    |   | 13       |
| .,   | Tension                | -02      | . –06    | **29    | -02    |   | 00       |
|      | Fear                   | -12      | 15       | **-30   | -06    |   | 10       |
|      | Student pers. vict'n   | *-21     | ·02      | 06      | **-25  |   | -02      |
|      | Teacher pers. vict'n   | 05       | -16      | -11     | 04     |   | 05       |
|      | Student prop. vict'n   | 04       | 02       | 04      | 12     | • | 1.3      |
| res  | Teacher prop. vict'n   | -09      | * 20     | -12     | 10     |   | 11       |
| easu | Teacher car vict'n     | 02       | -12      | -07     | * 21   |   | * 19     |
| M    | Illegal behaviors      | 05       | -06      | -10     | -07    |   | 02       |
| ther | Disruption             | 02       | -08      | -10     | 06     |   | * 20     |
| lead | Student pers. safety   | 04       | -08      | *-18    | *-17   |   | ** 25    |
|      | Safety vandalism/theft | 09       | -09      | *-19    | -06    |   | ** 25    |
|      | Tension                | 03       | **-22    | *-20    | -15    |   | 12       |
|      | Fear                   | 15       | **-26    | -11     | 04     |   | 08       |

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\* p<.10; \*\* p<.05; \*\*\* p<.01.

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Negative correlations indicate decrease in crime level, positive correlations an increase in crime level. Decimals omitted.

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Middle Schools (n=62)

| Teachers | Parents | School |
|----------|---------|--------|
| 07       | -15     | ** 25  |
| * 20     | 14      | -13    |
| ** 22    | *-17    | 04     |
| -05      | 02      | -05    |
| 09       | 04      | -04    |
| ** 26    | 16      | 02     |
| 12       | -00     | -01    |
| *** 30   | 07      | -10    |
| 04       | -14     | -08    |
| -05      | 12      | 15     |
| 10       | -08     | *-17   |
| 08       | -07     | 05     |
| 08       | -02     | 06     |
| 00       | **-22   | -09    |
| * 18     | -01     | -15    |
| 03       | 10      | -15    |
| 09       | * 19    | -01    |
| 12       | 03      | -1.3   |
| 12       | *-19    | -07    |
| 16       | -14     | 03     |

|      |                        | Students | Teachers | Parents | School |
|------|------------------------|----------|----------|---------|--------|
|      | Student pers. vict'n   | 15       | -03      | -20     | 16     |
|      | Teacher pers. vict'n   | *-32     | 00       | -12     | -12    |
| ires | Student prop. vict'n   | *-27     | 08       | 11      | -25    |
| ası  | Alcohol/drugs          | 16       | *-25     | -21     | -11    |
| Σ    | Illegal behaviors      | -05      | 14       | 07      | 08     |
| ent  | Disruption             | **-33    | 05       | -13     | -22    |
| tu   | Student pers. safety   | -03      | · 02     | -19     | 07     |
|      | Tension                | -09      | 20       | -00     | 08     |
|      | Fear                   | 07       | 13       | **-36   | -13    |
| 1    | Student pers. vict'n   | -12      | . 01     | -03     | -00    |
|      | Teacher pers. vict'n   | ***-46   | -05      | -06     | **-36  |
|      | Student prop. vict'n   | -04      | 04       | -10     | **-41  |
| ire  | Teacher prop. vict'n   | 04       | -04      | -06     | -08    |
| easi | Teacher car vict'n     | -25      | 02       | 19      | -16    |
| ž    | Illegal behaviors      | -01      | · -02    | 09      | -17    |
| che  | Disruption             | **-33    | -16      | -20     | -24    |
| Tea  | Student pers. safety   | 10       | 16       | -04     | ** 40  |
| -    | Safety vandalism/theft | 16       | 05       | -03     | 22     |
|      | Tension                | **-33    | 17       | -04     | 02     |
|      | Fear                   | **-33    | 05       | -05     | -11    |

Elementary Schools (n=27)

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Appendix F

Correlations: Team Objectives x Change in Crime Levels



|            | ·                      | Safety/<br>security | Discipline<br>effect'ness | Clarity<br>of rules | Academic<br>performance | Stud. coping<br>skills | Student<br>self-esteem | Teacher<br>morale | Stud/tchr<br>relnships | Tchr/parent<br>relnships |
|------------|------------------------|---------------------|---------------------------|---------------------|-------------------------|------------------------|------------------------|-------------------|------------------------|--------------------------|
|            | Student pers. vict'n   | -03                 | -03                       | -09                 | 10                      | **-26                  | -04                    | 06                | 01                     | -10                      |
|            | Teacher pers. vict'n   | * 21                | ** 26                     | 11                  | 17                      | 01                     | 03                     | 03                | -05                    | -03                      |
| res        | Student prop. vict'n   | 03                  | 13                        | 11                  | 09                      | -08                    | -03                    | **** 42           | 06                     | 01                       |
| asu        | Alcohol/drugs          | -04                 | 09                        | -10                 | 09                      | 02                     | -00                    | -01               | 00                     | 01                       |
| Me         | Illegal behaviors      | -05                 | 10                        | -11                 | -06                     | -12                    | * 19                   | 10                | -13                    | ****-42                  |
| ent        | Disruption             | 07                  | 08                        | 08                  | 07                      | **-25                  | 08                     | -02               | 01                     | *-21                     |
| tuđ        | Student pers. safety   | -10                 | -17                       | -11                 | 04                      | *-18                   | 09                     | -10               | 11                     | **-24                    |
| 101        | Tension                | 00                  | 04                        | -06                 | 00                      | *-22                   | 13                     | 01                | **-24                  | ****-53                  |
|            | Fear                   | -13                 | *-19                      | -04                 | -01                     | ***-32                 | 06                     | -03               | -08                    | ***-36                   |
|            | Student pers. vict'n   | *-19                | *-22                      | ****-39             | -02                     | **-23                  | 05                     | 06                | **-27                  | -01                      |
|            | Teacher pers. vict'n   | 13                  | 10                        | -14                 | 07                      | -13                    | * 22                   | -04               | **-26                  | -12                      |
|            | Student prop. vict'n   | 11                  | 15                        | 04                  | 07                      | -03                    | 04                     | 11                | 03                     | 07                       |
| res        | Teacher prop. vict'n   | 08                  | 17                        | 09                  | -06                     | -13                    | 08                     | ** 29             | 02                     | -09                      |
| ası        | Teacher car vict'n     | 10                  | * 19                      | 12                  | . 02                    | -03                    | 17                     | -10               | *-19                   | -05                      |
| Me         | Illegal behaviors      | -07                 | 01                        | *-18                | -04                     | *-11                   | * 18                   | -01               | -0.3                   | -10                      |
| her        | Disruption             | * 20                | 04                        | 00                  | 08                      | *-21                   | 03                     | -00               | **-22                  | -13                      |
| eac<br>eac | Student pers. safety   | **-22               | -01                       | **-24               | -08                     | -16                    | ** 27                  | -02               | **-29                  | ***-34                   |
| [          | Safety vandalism/theft | -03                 | 09                        | · -12               | 10                      | *-19                   | *** 30                 | 04                | *-19                   | **-24                    |
|            | Tension                | -07                 | 06                        | **-29               | -09                     | **-28                  | ** 26                  | -13               | ***-34                 | ***38                    |
|            | Fear                   | 09                  | * 17                      | *-18                | 14                      | *-19                   | ** 27                  | 00                | -13                    | -13                      |

High Schools (n=57, Student measures; n=58, Teacher measures)

\* p<.10; \*\* p<.05; \*\*\* p<.01; \*\*\*\* p<.001.

Negative correlations indicate decrease in crime level, positive correlations an increase in crime level. Decimals omitted.

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|        |                        | Stud human<br>relns skills | Tchr human<br>relns skills | Parent human<br>relns skills | Student<br>involvement | Teacher<br>involvement | Parent<br>involvement | Stud decision<br>participation | Tchr decision<br>participation | Parent decision<br>participation |
|--------|------------------------|----------------------------|----------------------------|------------------------------|------------------------|------------------------|-----------------------|--------------------------------|--------------------------------|----------------------------------|
|        | Student pers. vict'n   | -02                        | -06                        | 16                           | -03                    | -16                    | 01                    | -02                            | -17                            | 13                               |
| ا<br>د | Teacher pers. vict'n   | 10                         | -09                        | . 09                         | -13                    | **-29                  | 12                    | **-28                          | -09                            | -06                              |
| ure    | Student prop. vict'n   | -08                        | -3.0                       | -10                          | -04                    | 04                     | -14                   | -11                            | -10                            | -13                              |
| east   | Alcohol/drugs          | -00                        | *-21                       | 04                           | 07                     | 01                     | -01                   | 06                             | 03                             | 06                               |
| Ц<br>Ц | Illegal behaviors      | -08                        | 05                         | -09                          | -03                    | **-27                  | -17                   | 04                             | 05                             | 00                               |
| den    | Disruption             | *-20                       | -09                        | **-25                        | -00                    | *-19                   | 05                    | 07                             | 02                             | -05                              |
| Stu    | Student pers. safety   | -02                        | 05                         | 12                           | 10                     | -03                    | -07                   | -07                            | 11                             | 01                               |
|        | Tension                | -01                        | 01                         | -08                          | -02                    | **-25                  | -09                   | 05                             | 07                             | 02                               |
|        | Fear                   | -06                        | 10                         | *-20                         | -05                    | 05                     | -13                   | -11                            | 07                             | 02                               |
|        | Student pers. vict'n   | -07                        | -00                        | 10                           | -10                    | -13                    | 08                    | **-29                          | -14                            | 08                               |
|        | Teacher pers. vict'n   | -08                        | *-17                       | -12                          | -06                    | *-19                   | -11                   | -06                            | 01                             | 10                               |
|        | Student prop. vict'n   | 12                         | 01                         | 17                           | -04                    | **25                   | -03                   | *19                            | -14                            | -16                              |
| res    | Teacher prop. vict'n   | *-17                       | -02                        | 05                           | -10                    | * 20                   | -01                   | 11                             | * 21                           | -05                              |
| asu    | Teacher car vict'n     | 04                         | -12                        | *-19                         | -15                    | **-27                  | -03                   | 08                             | * 18                           | 04                               |
| Me     | Illegal behaviors      | 05                         | 02                         | -03                          | -04                    | ***-32                 | *-20                  | 03                             | -02                            | 10                               |
| her    | Disruption             | -01                        | -05                        | -02                          | -03                    | -01                    | -01                   | -14                            | -13                            | -03                              |
| eac    | Student pers. safety   | 04                         | 12                         | 05                           | -11                    | ***-33                 | -13                   | 13                             | -14                            | 10                               |
| [+     | Safety vandalism/theft | -07                        | -03                        | -11                          | -00                    | **-30                  | *-20                  | 13                             | -16                            | 10                               |
|        | Tension                | 02                         | -10                        | -05                          | 09                     | *-20                   | -11                   | 13                             | -03                            | 15                               |
|        | Fear                   | -03                        | **-23                      | -03                          | 14                     | *-18                   | -05                   | 03                             | *-20                           | 03                               |

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High Schools (n=57, Student measures; n=58, Teacher measures)

| Middle | Schools | (n=62) |
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|      |                        | Safety/<br>security | Discipline<br>effect'ness | Clarity<br>of rules | Academic<br>performance | Stud. coping<br>skills | Student<br>self-esteem |
|------|------------------------|---------------------|---------------------------|---------------------|-------------------------|------------------------|------------------------|
|      | Student pers. vict'n   | 12                  |                           | ** 23               | 06                      | * 19                   | 07                     |
|      | Teacher pers. vict'n   | -10                 | -13                       | -16                 | -09                     | 06                     | 00                     |
| res  | Student prop. vict'n   | 01                  | -01                       | -01                 | 13                      | *** 32                 | -01                    |
| asu  | Alcohol/drugs          | -06                 | -15                       | -03                 | 10                      | ** 27                  | 09                     |
| Σ    | Illegal behaviors      | -14                 | -12                       | 05                  | 06                      | ** 29                  | 00                     |
| lent | Disruption             | -14                 | 01                        | -02                 | . 15                    | 15                     | 10                     |
| Stud | Student pers. safety   | -06                 | -10                       | 00                  | 07                      | ** 22                  | 06                     |
| 1    | Tension                | **-27               | 10                        | 04                  | -02                     | 15                     | -05                    |
|      | Fear                   | 00                  | -08                       | -13                 | -04                     | ** 23                  | 03                     |
|      | Student pers. vict'n   | 02                  | 07                        | ** 23               | 16                      | 11                     | -14                    |
|      | Teacher pers. vict'n   | **-22               | -16                       | -08                 | -07                     | 16                     | 02                     |
|      | Student prop. vict'n   | -04                 | 14                        | 01                  | 12                      | 11                     | -05                    |
| ire  | Teacher prop. vict'n   | 14                  | -06                       | 06                  | 14                      | ** 25                  | 00                     |
| east | Teacher car vict'n     | -10                 | -04                       | -03                 | 12                      | 08                     | *** 31                 |
| ž    | Illegal behaviors      | **-21               | **-23                     | -01                 | -07                     | 16                     | 02                     |
| cher | Disruption             | *-17                | -06                       | -06                 | 15                      | 15                     | -02                    |
| lea( | Student pers. safety   | -03                 | -04                       | 04                  | 12                      | ** 27                  | 07                     |
|      | Safety vandalism/theft | *-19                | -14                       | -01                 | 05                      | ** 24                  | * 19                   |
|      | Tension                | -03                 | -08                       | -01                 | 07                      | ** 23                  | ** 24                  |
| I    | Fear                   | -09                 | 01                        | 11                  | *-18                    | ** 25                  | 03                     |

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| Teacher<br>morale | Stud/tchr<br>relnships | Tchr/parent<br>relnships |
|-------------------|------------------------|--------------------------|
| 14                | -06                    | -11                      |
| 14                | * 18                   | 05                       |
| ** <u>22</u>      | 03                     | **22                     |
| -02               | 02                     | -13                      |
| 02                | -07                    | -01                      |
| 04                | -15                    | -06                      |
| 12                | 13                     | 05                       |
| 16                | 02                     | 03                       |
| 08                | -15                    | **-26                    |
| -15               | -11                    | 03                       |
| -11               | -11                    | **-26                    |
| 08                | 06                     | 07                       |
| -09               | *-17                   | *-18                     |
| -06               | 07 <sup>.</sup>        | -04                      |
| 05                | 01                     | *-19                     |
| -03               | -07                    | -00                      |
| -06               | -09                    | 09                       |
| 02                | -06                    | -03                      |
| 03                | -04                    | *-18                     |
| 01                | 11                     | -13                      |
|                   |                        |                          |

## Middle Schools (n=62)

|      |                        | Stud human<br>relns skills | Tchr human<br>relns skills | Parent human<br>relns skills | Student<br>involvement | Teacher<br>involvement | Parent<br>involvement |
|------|------------------------|----------------------------|----------------------------|------------------------------|------------------------|------------------------|-----------------------|
|      | Student pers. vict'n   | -13                        | 10                         | 04                           | 00                     | -03                    | -00                   |
|      | Teacher pers. vict'n   | 10                         | **22                       | 06                           | 03                     | 15                     | -01                   |
| es   | Student prop. vict'n   | 00                         | 07                         | -04                          | 09                     | 08                     | -02                   |
| sur  | Alcohol/drugs          | * 19                       | 06                         | * 20                         | -00                    | -11                    | 10                    |
| Mea  | Illegal behaviors      | ** 22                      | 09                         | 06                           | 01                     | -06                    | 06                    |
| nt   | Disruption             | 15                         | 16                         | * 17                         | -05                    | 10                     | 15                    |
| nde  | Student pers. safety   | 14                         | 08                         | -02                          | 02                     | 04                     | -05                   |
| St   | Tension                | 05                         | ** 28                      | -00                          | 07                     | * 17                   | 06                    |
|      | Fear                   | * 19                       | -02                        | -04                          | -02                    | -07                    | -04                   |
|      | Student pers. vict'n   | -08                        | -09                        | 08                           | 06                     | -03                    | * 17                  |
|      | Teacher pers. vict'n   | * 19                       | 15                         | 06                           | 01                     | 14                     | 16                    |
|      | Student prop. vict'n   | -07                        | 01                         | -12                          | 13                     | 06                     | -01                   |
| S    | Teacher prop. vict'n   | 07                         | 01                         | 10                           | -01                    | 16                     | * 20                  |
| sure | Teacher car vict'n     | ** 24                      | 13                         | -15                          | -12                    | -02                    | -10                   |
| leas | Illegal behaviors      | 16                         | 15                         | * 18                         | -04                    | * 18                   | ** 23                 |
| L L  | Disruption             | * 21                       | 08                         | -06                          | 13                     | 02                     | 06                    |
| che  | Student pers. safety   | 15                         | 11                         | * 20                         | 08                     | . 08                   | ** 24                 |
| Tea  | Safety vandalism/theft | ** 29                      | * 18                       | 12                           | 07                     | 13                     | * 17                  |
|      | Tension                | 13                         | 12                         | 01                           | 01                     | 14                     | 02                    |
|      | Fear                   | * 20                       | * 19                       | -13                          | 03                     | 11                     | -02                   |

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| Stud decision<br>participation | Tchr decision<br>participation | Parent decision<br>participation |
|--------------------------------|--------------------------------|----------------------------------|
| 14                             | -03                            | **-29                            |
| 04                             | 12                             | 04                               |
| * 17                           | -03                            | **-28                            |
| -05                            | -07                            | *-18                             |
| 08                             | 12                             | *-18                             |
| 10                             | * 19                           | 05                               |
| 10                             | -02                            | -14                              |
| 04                             | * 20                           | *-18                             |
| 15                             | -10                            | -11                              |
| 03                             | 04                             | 10                               |
| 05                             | . 03                           | -06                              |
| * 18                           | -09                            | 05                               |
| 05                             | -12                            | -05                              |
| 01                             | -09                            | *-17                             |
| 12                             | 13                             | -13                              |
| * 17                           | 07                             | * 21                             |
| * 17                           | 06                             | 10                               |
| 04                             | -05                            | -10                              |
| 07                             | 05                             | **-27                            |
| * 20                           | 13                             | -11                              |
|                                |                                |                                  |

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Elementary Schools (n=27)

|          |                        | Safety/<br>security | Discipline<br>effect'ness | Clarity<br>of rules | Academic<br>performance | Stud. copi <b>n</b> g<br>skills | Student<br>self-esteem |
|----------|------------------------|---------------------|---------------------------|---------------------|-------------------------|---------------------------------|------------------------|
| }        | Student pers. vict'n   | 19                  | 07                        | -07                 | 21                      | 10                              | 14                     |
| S        | Teacher pers. vict'n   | -10                 | -02                       | -09                 | 06                      | *-27                            | -14                    |
| ure      | Student prop. vict'n   | *-31                | -06                       | -13                 | ** 39                   | -24                             | -13                    |
| leas     | Alcohol/drugs          | -24                 | -08                       | 02                  | 16                      | 12                              | 23                     |
| 2i<br>ti | Illegal behaviors      | 11                  | -06                       | 19                  | -21                     | -06                             | -08                    |
| nden     | Disruption             | 06                  | -13                       | **-36               | 23                      | **-35                           | -24                    |
| Str      | Student pers. safety   | *-28                | 11                        | 12                  | 12                      | -00                             | 07                     |
|          | Tension                | 06                  | 00                        | 06                  | -10                     | -00                             | -15                    |
|          | Fear                   | -06                 | -04                       | -20                 | 04                      | 11                              | 19                     |
|          | Student pers. vict'n   | -02                 | 16                        | -04                 | -21                     | -04                             | -08                    |
|          | Teacher pers. vict'n   | -25                 | -21                       | -12                 | - 02                    | **38                            | -18                    |
| (1)      | Student prop. vict'n   | -03                 | **-42                     | *-27                | 01                      | -10                             | -18                    |
| ire      | Teacher prop. vict'n   | *-30                | 07                        | -04                 | 12                      | 14                              | 09                     |
| east     | Teacher car vict'n     | 01                  | *-26                      | 01                  | 08                      | -10                             | -11                    |
| ž        | Illegal behaviors      | -11                 | -11                       | -08                 | 11                      | -13                             | 12                     |
| Che      | Disruption             | -10                 | -13                       | -22                 | 09                      | -09                             | 02                     |
| lea.     | Student pers. safety   | 02                  | * 28                      | 21                  | 18                      | 11                              | 12                     |
| ` '      | Safety vandalism/theft | · -21               | * 30                      | 17                  | ** 34                   | 02                              | 14                     |
|          | Tension                | 01                  | -07                       | 02                  | 15                      | -19                             | -25                    |
|          | Fear                   | 07                  | -16                       | -10                 | 05                      | -08                             | -05                    |

TAMETS-MALTARY CLARKER

F-5

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Meas

| Teacher<br>morale | Stud/tchr<br>relnships | Tchr/parent<br>relnships |
|-------------------|------------------------|--------------------------|
| 15                | 16                     | -1.7                     |
| 11                | **-41                  | -19                      |
| 01                | 06                     | 04                       |
| 05                | 12                     | -10                      |
| * 34              | -19                    | 20                       |
| -05               | *-26                   | -11                      |
| * 58              | 12                     | -22                      |
| * 35              | -11                    | ~11                      |
| * 38              | 20                     | -24                      |
| -05               | *-30                   | -06                      |
| -23               | -16                    | -03                      |
| -09               | 25                     | -20                      |
| -02               | **-32                  | -01                      |
| -18               | -01                    | 11                       |
| 00                | -10                    | 02                       |
| -10               | -18                    | **-34                    |
| 12                | -10                    | 02                       |
| * 33              | -24                    | 02                       |
| 20                | -13                    | 00                       |
| -09               | -11                    | 14                       |

### Elementary Schools (n=27)

|      |                        | Stud human<br>relns skills | Tchr human<br>relns skills | Parent human<br>relns skills | Student<br>involvement | Teacher<br>involvement | Parent<br>involvement |   |
|------|------------------------|----------------------------|----------------------------|------------------------------|------------------------|------------------------|-----------------------|---|
|      | Student pers. vict'n   | 15                         | -16                        | -19                          | 07                     | -17                    | -22                   |   |
| S    | Teacher pers. vict'n   | -07                        | 15                         | 03                           | -11                    | -25                    | -10                   |   |
| L L  | Student prop. vict'n   | -00                        | 02                         | 14                           | ***-54                 | *-26                   | -02                   |   |
| leas | Alcohol/drugs          | -08                        | *-30                       | -20                          | 08                     | -15                    | -01                   | * |
|      | Illegal behaviors      | -10                        | -22                        | -08                          | * 26                   | * 32                   | * 29                  |   |
| lder | Disruption             | 16                         | 19                         | -19                          | **-38                  | *-25                   | -12                   |   |
| ភ្ន  | Student pers. safety   | * 26                       | -06                        | -22                          | -21                    | -17                    | -21                   |   |
|      | Tension                | -10                        | 03                         | -06                          | 14                     | 17                     | 18                    |   |
|      | Fear                   | ** 33                      | * 27                       | **-43                        | -10                    | -22                    | *-29                  |   |
|      | Student pers. vict'n   | -00                        | 17                         | 11                           | 11                     | -01                    | -09                   |   |
|      | Teacher pers. vict'n   | -14                        | 04                         | 12                           | -22                    | -09                    | 04                    |   |
|      | Student prop. vict'n   | 18                         | 15                         | 07                           | -06                    | -23                    | -01                   |   |
| ires | Teacher prop. vict'n   | 10                         | ** 33                      | 13                           | -15                    | -25                    | -21                   |   |
| east | Teacher car vict'n     | *-31                       | -15                        | 18                           | -07                    | -15                    | 13                    |   |
| ž    | Illegal behaviors      | -18                        | -17                        | 09                           | 05                     | -04                    | 09                    |   |
| cher | Disruption             | -03                        | 22                         | 07                           | **-36                  | **-33                  | *-32                  |   |
| leac | Student pers. safety   | 05                         | 17                         | 01                           | 03                     | 05                     | -00                   |   |
|      | Safety vandalism/theft | 19                         | 14                         | 03                           | -01                    | -13                    | -05                   |   |
|      | Tension                | -23                        | 19                         | -07                          | *-30                   | -16                    | -10                   |   |
|      | Fear                   | ***-44                     | -12                        | -12                          | -15                    | -04                    | -03                   |   |
|      |                        |                            |                            |                              |                        |                        |                       |   |

**F**-6

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| Stud decision<br>participation | Tchr decision<br>participation | Parent decisio<br>participation |
|--------------------------------|--------------------------------|---------------------------------|
| * 33                           | -08                            | -24                             |
| -16                            | 18                             | -21                             |
| *-33                           | ** 35                          | 09                              |
| * 47                           | 01                             | -23                             |
| 18                             | 06                             | 05                              |
| *-36                           | 22                             | -10                             |
| -14                            | 13                             | 05                              |
| 13                             | 19                             | -02                             |
| -06                            | 07                             | -14                             |
| 06                             | 12                             | -16                             |
| -03                            | ** 33                          | -03                             |
| -07                            | 11                             | -08                             |
| -11                            | -22                            | *-30                            |
| -08                            | ** 40                          | 14                              |
| 19                             | 22                             | 07                              |
| *-26                           | 10                             | *-27                            |
| 02                             | -00                            | -24                             |
| 02                             | -14                            | *-29                            |
| *-26                           | * 28                           | 02                              |
| 06                             | ** 35                          | 03                              |
|                                |                                |                                 |

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Appendix G

# Correlations: Crime Reduction Targets x Change in Crime Levels



|        | · · · ·                |           |       |                       |                   |     |
|--------|------------------------|-----------|-------|-----------------------|-------------------|-----|
|        |                        | Vandalism | Theft | Attack/<br>Disruption | Alcohol/<br>drugs |     |
|        | Student pers. vict'n   | -06       | -02   | -07                   | -14               |     |
|        | Teacher pers. vict'n   | -00       | -06   | -12                   | -04               | ;   |
| e<br>S | Student prop. vict'n   | 08        | 07    | -06                   | -14               | :   |
| Inst   | Alcohol/drugs          | -06       | 03    | 10                    | 07                |     |
| Me     | Illegal behaviors      | ** 23     | 12    | ** 29                 | -12               | **: |
|        | Disruption             | *-20      | **-26 | -07                   | -16               | -   |
|        | Student pers. safety   | 02        | -12   | 10                    | -11               |     |
| ñ      | Tension                | 12        | -00   | 13                    | -09               | *   |
|        | Fear                   | 11        | -09   | 08                    | -05               |     |
|        | Student pers. vict'n   | 11        | -02   | -09                   | -03               |     |
|        | Teacher pers. vict'n   | * 25      | 14    | 13                    | -10               | *** |
| 5      | Student prop. vict'n   | -03       | -15   | -05                   | *-18              |     |
| ure.   | Teacher prop. vict'n   | ** 24     | * 18  | * 19                  | -14               |     |
| eas    | Teacher car vict'n     | -04       | -04   | 11                    | -16               |     |
| ž<br>H | Illegal behaviors      | 16        | 02    | 14                    | *-18              | *   |
| cne    | Disruption             | 03        | 08    | 09                    | 03                |     |
| Tea    | Student pers. safety   | 16        | 04    | 10                    | 03                |     |
|        | Safety vandalism/theft | 07        | -01   | 03                    | -10               | *   |
|        | Tension                | ** 23     | ** 29 | ** 24                 | 11                | *   |
|        | Fear                   | ** 28     | ** 27 | 05                    | 07                | *** |

High Schools (n=63)

\* p<.10; \*\* p<.05; \*\*\* p<.01; \*\*\*\* p<.001.

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Negative correlations indicate decrease in crime level, positive correlations an increase in crime level. Decimals omitted.

| Vandalism | Theft | Attack/<br>disruption | Alcohol/<br>drugs |
|-----------|-------|-----------------------|-------------------|
| -15       | -10   | 01°                   | **-23             |
| *-17      | -10   | *-17                  | 01                |
| *-16      | -07   | **-23                 | -12               |
| -11       | -03   | *-17                  | 02                |
| ***31     | -05   | -04                   | *-19              |
| *17       | -05   | -04                   | 01                |
| 02        | * 17  | -06                   | 05                |
| **-28     | -09   | 06                    | **-28             |
| *-19      | -05   | -08                   | 15                |
| *-18      | -03   | 11                    | -11               |
| ***-38    | -12   | 13                    | *-18              |
| 04        | 14    | 14                    | 15                |
| *-17      | 10    | 08                    | 03                |
| -08       | -07   | * 17                  | -12               |
| **-28     | -10   | 14                    | **-23             |
| -09       | -02   | 13                    | -09               |
| -02       | 04    | ** 23                 | -01               |
| **-21     | -04   | * 20                  | -10               |
| **-23     | -14   | 14                    | ***-31            |
| ****-37   | -14   | * 16                  | ***-31            |
|           |       |                       |                   |

. Middle Schools (n=64)

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|         |                        | Vandalism | Theft | Attack/<br>disruption | Alcohol/<br>drugs |
|---------|------------------------|-----------|-------|-----------------------|-------------------|
|         | Student pers. vict'n   | 01        | -01   | 02                    | -24               |
|         | Teacher pers. vict'n   | 01        | * 27  | 05                    | 13                |
| es      | Student prop. vict'n   | -17       | -16   | * 28                  | 06                |
| Inst    | Alcohol/drugs          | -04       | 15    | -09                   | -06               |
| Mea     | Illegal behaviors      | * 30      | * 28  | -09                   | * 29              |
| b<br>nt | Disruption             | 23        | ** 34 | 24                    | 18                |
| nde     | Student pers. safety   | -19       | -11   | * 28                  | 14                |
| St      | Tension                | 12        | . 18  | -02                   | * 28              |
|         | Fear                   | -12       | 04    | * 29                  | 14                |
|         | Student pers. vict'n   | -19       | -05   | 13                    | -06               |
|         | Teacher pers. vict'n   | -20       | 16    | 04                    | -02               |
|         | Student prop. vict'n   | -10       | -00   | -07                   | -02               |
| ຮອບ     | Teacher prop. vict'n   | -04       | 10    | * 27                  | 01                |
| Inse    | Teacher car vict'n     | -09       | 05    | -09                   | *-27              |
| Me      | Illegal behaviors      | -02       | 07    | 13                    | -12               |
| ler     | Disruption             | -12       | 21    | 15                    | -04               |
| eact    | Student pers. safety   | -08       | -11   | 13                    | -17               |
| Ĕ,      | Safety vandalism/theft | -14       | -10   | 10                    | -16               |
|         | Tension                | -02       | -02   | <b>*</b> ·27          | 16                |
|         | Fear                   | * 25      | ** 40 | 14                    | 07                |

Elementary Schools (n=30)

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