

The author(s) shown below used Federal funds provided by the U.S. Department of Justice and prepared the following final report:

Document Title: National Study of Delinquency Prevention in Schools, Summary

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Document No.: 194116

Date Received: April 2002

Award Number: 96-MU-MU-0008; 98-JN-FX-0004

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194116

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Box 6000
Rockville, MD 20849-6000

Summary:
National Study of Delinquency Prevention In Schools

Grant No. 96-MU-MU-0008

November 2000

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Acknowledgment

This project was supported by Grant No. 96-MU-MU-0008, awarded by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. NIJ is the primary sponsor of this research, and the research activities from which we report results here was designed and begun under the NIJ grant. As the project progressed, additional support for the work reported was provided by the Office of Juvenile Justice Delinquency Prevention, Office of Justice Programs, U.S. Department of Justice through Grant No. 98-JN-FX-0004. With OJJDP support we expanded data collection activities to include information on juvenile gangs and on activities directed at gangs. The project also depended on the support by the Planning and Evaluation Service, U.S. Department of Education, of a Study on Violence and Prevention through a contract with Westat. Views expressed are those of the authors and do not necessarily represent the official position or policies of the U.S. Department of Justice. Nor do they necessarily represent the position or policies of other sponsors or organizations.

We are grateful for the endorsement of the project by Thomas F. Koerner, Deputy Executive Director of the National Association of Secondary School Principals, and by Ronald J. Areglado, Associate Executive Director for Programs of the National Association of Elementary School Principals. Letters from these association leaders and a letter from Jeremy Travis, Director of the National Institute of Justice, assisted in encouraging school principals to participate in the project.

Availability of Full Report

The full report is available on-line at <http://www.gottfredson.com>. Copies of the 500 page report are available from Gottfredson Associates, Inc.

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National Study of Delinquency Prevention in Schools: Summary

The National Study of Delinquency Prevention in Schools (NSDPS) was undertaken to develop a comprehensive account of the levels of problem behavior in United States schools and of what schools do to prevent problem behavior and to promote a safe and orderly environment. The present report describes the full range of activities schools undertake to reduce or prevent problem behavior – including delinquency, drug use, and violence.

Recent years have seen growth in the development and application of prevention programs – most of these directed at adolescents and based in schools. Continued growth in these programs may be expected. The school is a key locus for intervention not simply because adolescents spend so much time there. It is the primary institution aside from the family that has access over extended periods of time to most of the population of young people.¹ Until school dropout becomes a major problem (mostly after grade 9), this access is almost universal. Despite complaints that the schools cannot be expected to do everything and some persons' views that schools ought not have roles in socializing the young beyond narrow educational bounds, the school offers a realistic opportunity for delivering interventions to reduce delinquency. The reality of programming directed at youths is that the lion's share of money spent by government agencies on children and youths is spent on education – probably upwards of 85% in the states and about 42% of federal spending.²

A great many things can potentially be done in schools to reduce or prevent problem behavior. Some of these things have been the object of scientific study. Others have not. A series of recent reviews and summaries³ attest to the potential of preventive interventions, but they also suggest obstacles to effectiveness that can make the implementation of effective interventions difficult.⁴

Health and mental health researchers refer to the distinction between intervention *efficacy* (whether an intervention can work) and *effectiveness* (how well the intervention does work when applied in typical settings). In this language, some interventions to reduce or prevent problem behavior have been shown to have efficacy, but almost no interventions have been shown to be generally effective. If efficacious interventions are ineffective, it is likely that flawed implementation is a large part of the reason.

Factors Hypothesized to Lead to Successful Program Implementation

The National Study of Delinquency Prevention in Schools (NSDPS) was designed to allow an examination of the following categories of factors as potential explanations of the successful implementation of prevention programs:

1. *Organizational capacity* (morale, staff stability, history of failed or successful programs in the past). Better morale, more stable staff, and a history of successful program implementation in the past is expected to go with better current implementation. In contrast, low morale, high staff or principal turnover, and a history of failed programs is expected to go with poor implementation.

2. *Leadership and staff traits and past accomplishments.* Implementation is expected to be better in schools in which principals display effective leadership and are perceived by others as effective leaders. Schools where principals or program implementers have a record of accomplishment in the past are expected to be more successful in what they currently implement. And programs implemented by more conscientious implementers in schools led by more conscientious principals are expected to be better implemented.
3. *Budget and resources.* Adequate budget and resources is expected to promote quality implementation.
4. *Organizational support (training, supervision, principal support).* Extensive and high quality training is expected to promote high quality and extensive implementation, whereas lack of training and poor training is expected to lead to weak or poor quality implementation. Direct and more extensive supervision is expected to lead to higher quality and more complete implementation, whereas lack of supervision is expected to allow low quality and limited implementation. Principal support for an activity is expected to lead to more extensive implementation and to higher quality implementation.
5. *Program structure – manuals, implementation standards, quality control mechanisms.* Greater structure is expected to lead to higher quality implementation and implementation that more closely follows a plan for what should be implemented. Implementation manuals can provide scaffolding for implementers by providing structure, an organization, and a plan for what to do as well as guidance on how to do it. Prepared materials, such as handouts, overhead masters, and videotapes, can make implementation easier and deviation from intended content less likely. Statements of standards for implementation provide the persons implementing a program with a basis for determining whether what is being done is good enough. And quality control mechanisms such as procedures for monitoring progress, review of progress, and worker supervision are expected to promote better implementation by focusing attention on how well implementation is being done.
6. *Integration into normal school operations, local initiation, and local planning.* Better integration of activities with the regularities of the school is expected to lead to more enthusiastic and widespread adoption of prevention practices within a school. Schools do certain kinds of things as a matter of routine. Preeminently, schools conduct instruction organized in classrooms.

When activities or arrangements are selected, devised, or planned by persons within a school organization, they are expected to be more acceptable to persons within the school; impulses to resist adoption or implementation sometimes triggered by programs imposed upon a school are less likely to be evoked.

When school personnel use information about what and how to implement activities derived from researchers, experts, publications, and other sources, they are expected to incorporate more best practices and to emulate successful models more fully.

7. *Program feasibility (match between program design features and regular activities of schools, few obstacles).* Activities that occur after the end (or before the beginning) of the

regular school day or on weekends will be more difficult to implement because they are outside of regular work hours, and activities that are difficult to carry out with a classroom-sized group of students in a 30 to 50 minute period are unlikely to be sustained.

8. *Level of disorder.* It is expected that high levels of disorder in a school will make everything more difficult to implement. High levels of disorder may provide impetus to the adoption of prevention programs, activities, and arrangements. But other things being equal, the distractions and emergencies of a disorderly environment are expected to undermine the quality of implementation.

Research Design

Five main kinds of information were collected.

1. Examples of prevention and intervention models being used in schools were collected, examined and classified to develop a comprehensive taxonomy of activities. The resulting taxonomy guided the development of other data collection instruments.
2. Principals in a national probability sample of schools were surveyed to identify activities their schools had in place to prevent or reduce delinquency, drug use, or other problem behavior or to promote a safe and orderly school environment. Principals also described features of their schools and reported on past experiences with the implementation of programs and on school staffing.
3. Individuals knowledgeable about prevention activities in each school (called "activity coordinators") were surveyed to obtain detailed descriptions of specific prevention activities and to describe certain features of their school. Activity coordinators also reported about themselves and about school support and supervision for prevention activities.
4. Teachers and students in participating schools were surveyed to obtain their reports of their own participation in prevention activities, about prevention activities in the school, and to obtain reports about victimization, safety, delinquent behavior, school orderliness, and other aspects of school climate. Generally, all teachers in participating schools were sampled, and a sufficient number of students were sampled to produce an estimated 50 respondents per school.
5. Principals were surveyed for a second time. They reported about school wide disciplinary policies and practices, crimes occurring in the school, certain school-wide arrangements such as scheduling, architectural features of the school, and other characteristics of the school. Principals also reported about their own practices, biographical history, and personality style.

The sample of 1279 schools was designed to describe schools in the United States. Participation was obtained from principals in 66% of schools in the initial principal survey and 50% of the schools in the second principal survey. Of 847 secondary schools asked to participate in surveys of students, 37% did so – greater cooperation was obtained from middle schools than from high schools, and rural schools cooperated more often than urban schools. Of 847 secondary schools asked to participate in teacher surveys, 48% did so. A 52% response rate was obtained in the survey of activity coordinators. Weights to take account of the sample design

and survey non-response are applied in making tabulations.

Problem Behavior in Schools

In the spring 1998 survey of principals we asked respondents to tell us how many crimes of various types had been reported to law enforcement representatives during the 1997-98 school year. The percentages of schools reporting at least one incident for each of five crime categories are displayed in Exhibit 1. Nationwide, 6.7% of schools or an estimated 6,451 schools reported at least one incident of physical attack or fight with weapon to law enforcement personnel during the year. Some schools reported more than one such incident, so an estimated 20,285 fights or attacks with a weapon were reported to authorities according to our survey.

We are circumspect about placing too much reliance on principal reports of school crime for four reasons. (1) Principals naturally want to present their schools in a good light and it is only to be expected that many principals will be reluctant to notify the police when a crime – particularly one that they may regard as minor – occurs in their school because of the negative image of the school that this may promote. According to the National Crime Victimization Survey only 9% of violent crimes against teenagers occurring in school were reported to the police compared with 37% of such crimes occurring on the streets.⁵ This same reluctance may influence their reports in a survey. (2) We have observed that some schools report only a small fraction of incidents involving fights or attacks, alarm pulls, thefts, and vandalism to the police. We are confident, therefore, that in a non-trivial proportion of schools, many or most categories of crime are under-reported. (3) The principal reports show only modest convergence with other measures of school disorder.⁶ (4) Principal reports are the reports of a single individual so that individual differences in reporting tendency are confounded with the measurement of crime and error is expected to be greater than if there were several persons reporting about the school. Accordingly, the reports of teachers and of students are of interest.

The percentages of secondary school teachers reporting each of several kinds of victimization in school are shown in Exhibit 2. Many teachers – 42% overall – report having received obscene remarks and gestures from a student; 28% experienced damage to personal property worth less than \$10; 24% had property worth less than \$10 stolen; 21% were threatened by a student; 14% experienced damage to personal property worth more than \$10; 13% had property worth more than \$10 stolen; 3% were physically attacked. Less than 1% of teachers reported having been physically attacked and having to see a doctor or having had a weapon pulled on them.

Victimization rates are higher in middle schools than in high schools for obscene remarks and gestures, minor property damage, minor theft, threats, minor physical attacks, and physical attacks requiring physician attention. Because so many teachers work in the nation's schools, even small percentages translate into a large number of teachers victimized. For example, although we estimate that 7.9 per 1000 teachers were attacked and had to visit a doctor, the number of teachers estimated to have been so victimized is about 12,100 in the 1997-98 school year.

Secondary school teachers were also asked to report about classroom disorder and the

conduct of students in their schools, and 27% reported that student behavior keeps them from teaching a fair amount or a great deal of the time. Misconduct that interferes with teaching is more common in middle schools than in high schools, and it is more common in urban schools than in suburban or rural schools.

In participating secondary schools, students were asked to report about their own participation in a variety of kinds of delinquent behavior and drug use. Interpersonal violence is common in middle schools. Exhibit 3 shows that 32% of high school students and 41% of middle school students reported having hit or threatened to hit other students in the past year. Damaging or destroying school property is also relatively common, with about 16% of students reporting having engaged in this behavior. Whereas middle school students reported interpersonal violence more often than high school students, this pattern was reversed for going to school when drunk or high on drugs: 9% of middle school students and 17% of high school students reported having done so. Only 9% of students report having engaged in theft, and about 5% having hit or threatened to hit a teacher.

Students were also asked to report on their experiences of personal victimization. Almost one in five students reported being threatened with a beating, and this was a more common experience for middle school students (22%) than for high school students (16%). Victimization by physical attack was reported by 19% of middle school students and 10% of high school students. Having things taken by force or threat of force was also more common for middle school students than high school students. About 5% of secondary students report having been threatened with a knife or gun.

The nature of problem behavior in schools can be summarized as follows: Minor forms of problem behavior are common in schools. For example, 27% of teachers report that student behavior keeps them from teaching a fair amount or a great deal. This minor misconduct can be a serious problem because it interferes with efforts by schools to pursue their mission to conduct education. The percentage of teachers per school reporting that student behavior keeps them from teaching at least a fair amount ranges from 0% to 100%. In a quarter of schools 42% or more of teachers report that student behavior keeps them from teaching at least a fair amount.

Serious forms of problem behavior such as physical attacks or fights involving a weapon, robberies, or threats involving a knife or a gun occur less frequently than the more pervasive minor kinds of student misconduct. But they occur frequently enough that they are also clearly major problems. Almost 7% of schools reported at least one incident of physical attack or fight involving a weapon to law enforcement officials, and for middle/junior high schools the percentage was 21%. Being threatened or attacked in school is a relatively common experience among students, with 19% of students reporting threats and 14% reporting attacks. A startling 5% of students report having been threatened with a knife or a gun. Such incidents are far less common among teachers. Although 20% of secondary school teachers (and 31% of urban middle school teachers) report being threatened in remarks by a student, half of one percent report having had a weapon pulled on them and seven tenths of a percent report having been attacked and having to see a doctor.

What Schools Do to Promote Safe and Orderly Environments

To conduct research on what schools do to prevent delinquent and other problem behavior and to promote a safe and orderly environment, we required a useful classification of school activities or programs. A search of existing school-based prevention strategies revealed a wide variety of programs including well-known and widely disseminated programs and practices such as Drug Abuse Resistance Education (DARE). This search also discovered programs involving unusual prevention methods such as lacrosse, clown troupes, or planting trees to combat violence and drug use. Group instruction was far and away the most common feature of marketed prevention programs. The classification of prevention activities is summarized in Exhibit 4.⁷

A survey of principals in a national probability sample of schools provided information about the use of activities in each of the categories listed in Exhibit 4. Remarkably, most schools are engaged in the use of prevention activities in most of the 20 categories in the classification. All schools use rules and policies to prevent problem behavior. Nine of ten schools provide information about tobacco, alcohol, other drugs, violence, accidents, health or mental health, or risky sexual behavior. Four fifths of schools use organizational arrangements such as grouping students differing in conduct or ability together to classes, decreases in class size, or grade-level houses or teams to reduce or prevent problem behavior. Large percentages of schools employ interventions directed at students, and large percentages also use organizational or environmental arrangements. Curriculum and instruction, counseling, behavioral programs, and recreation are among the former. Reorganizing grades or schedules, architectural features, instructional or classroom management practices, and planning processes are among the latter. Overall, just over half of schools (55%) have explicit security or surveillance programs, but such programs are more common in urban middle schools (84%) and high schools (74%).

Among urban elementary schools, 54% use gates, fences, walls or barricades outside the building to promote safety or prevent problem behavior. In contrast, 25% of rural middle schools and 27% of rural high schools use gates, fences, walls, or barricades. Secondary schools, in particular, sometimes close or block off sections of the school building; 21% of middle schools and 28% of high schools engage in this practice. Nearly a third of principals indicate that they decrease class size as a way of reducing problem behavior. This suggests that problem behavior is costly, because small class sizes mean more classrooms and more teachers.

Discipline and Responses to Student Behavior

Desirable behavior. The vast majority of schools use social, activity, and materials reinforcers. Many also reported using token reinforcers, which are coupons, tokens, or scrip that can be redeemed for backup reinforcers. The use of most types of positive reinforcers for desirable behavior is considerably less common at the senior high level than at other levels. For example, 93% of elementary schools report use of activity reinforcers (access to games, free time, library, playground) compared to 83% of middle schools and 64% of high schools.

Undesirable behavior. Schools also employ a variety of responses to *undesirable* student conduct. The most commonly reported responses to misconduct are mild forms of social control such as notifying parents (100%), talking to the student (100%), conference with parents (100%),

oral reprimand (99%), brief exclusion from class (94%), and short-term withdrawal of a privilege (93%). More punitive responses such as suspension from school (reportedly used by 89%), restitution (86%), after-school detention (72%), and work assignments (70%) are also very common. Among the least common responses schools make are corporal punishment (17%) and Saturday detention (25%). In general, more severe responses (e.g., expulsion from school, Saturday detention, and calling the police) are used more often in secondary than elementary schools. Corporal punishment is reported much more often in rural 27% than in suburban (6%) or urban (9%) schools.

Suspension and expulsion. Schools suspend or expel students for misconduct ranging from truancy to possession of a weapon. For each of a range of offenses, principals were asked to indicate if they suspend or expel students automatically, usually after a hearing, or not usually. Results are displayed in Exhibit 5. Schools are very likely to suspend or expel a student for possession of a gun, drugs, alcohol, or a knife. Suspension or expulsion occurs automatically or usually (after a hearing) in 91% or more of schools in response to these offenses. Suspension or expulsion for physical fighting, possession of tobacco, and use of profane or abusive language are also common, but are not usually "automatic."

The large percentage of schools reporting the "automatic" suspension or expulsion of students is surprising. United States Supreme Court decisions in *Wood v. Strickland*⁸ (1975) and *Goss v. Lopez*⁹ imply that some degree of due process is required even for short-term out-of-school suspensions. Hearings for brief suspensions need not be elaborate or formal, but students must be notified of what they are accused of having done, told what evidence or information led the administrator to determine that the student violated a school rule, and be given an opportunity to respond. In the case of suspensions for over 10 days or of expulsions, hearings must be more formal. The evidence suggests that building-level administrators may treat due process requirements casually. In *Goss v. Lopez* the Supreme Court noted. "Students whose presence poses a continuing danger to persons or property or an ongoing threat of disrupting the academic process may be immediately removed from school. In such cases, the necessary notice and rudimentary hearing should follow as soon as practicable." It is hard to understand how possession of tobacco would pose such an ongoing threat that it would require suspension first and hearing later, yet two-thirds of schools indicate that suspension without hearing occurs for this offense.

We sought detailed information from knowledgeable individuals for 14 kinds of activities. Principals were asked to name up to five different program activities of each type that were currently underway and that were aimed at reducing problem behavior or creating a safe and orderly school environment. On average, principals reported 9 of the 14 different types of discretionary prevention activities currently underway in their schools, and named 14 distinct discretionary programs or activities. Middle/junior high schools reported more types of activities than elementary or high schools, and rural schools reported fewer types of activities than suburban or urban schools.

Conclusions About Extent and Nature of Prevention Activity

The typical school uses many activities and many different kinds of activities to prevent or

reduce problem behaviors or promote a safe and orderly environment. Such extensive activity and breadth of coverage may be valuable, because having many different activities is likely to increase the number of risk or protective factors targeted. It is also possible, however, that by attempting so many different activities, schools spread their efforts too thin, diminishing the quality of each effort.

The broad range of different types of prevention policies, practices, arrangements, and activities used by schools to prevent problem behavior and promote a safe and orderly environment contrasts with some common perceptions about the nature of school-based prevention activities. Popular guides and lists of programs are most often dominated by curriculum packages.¹⁰ And guides pertaining to school safety often focus on security arrangements or identifying troublemakers.¹¹ While prevention curricula are widely used in schools, schools are actually using a wide variety of different strategies to try to reduce problem behavior. The degree of effectiveness of most of these activities is unknown.

Despite the availability of multiple evaluations of some instructional packages, there is a shortage of useful evaluations of changes in class size or promotion practices on problem behavior. Useful evaluations are lacking for *most* practices employed by schools to promote a safe and orderly environment and to prevent problem behavior.

Schools make substantial use of architectural and structural arrangements to prevent problem behavior or promote school safety. Urban schools are more likely to use gates, fences, walls, and barricades, and to physically block off sections of the building than are schools in other locations.

Most schools report that they have strict rules about dangerous behaviors and the possession of weapons, communicate those rules, and apply severe consequences when these rules are broken. It is unlikely that extreme school violence (such as the highly publicized recent shootings in schools) occurs because of lax rules about carrying weapons in school.

Schools often fall short in using discipline practices that accord with practices that research has found to be associated with school safety. Principals report that their schools tend to rely on punitive responses to misbehavior more than on positive reinforcement of desirable behavior. They tend to make use of a narrower range of possible reinforcers for both negative and positive student behaviors than is potentially available.

Quality of Prevention Activity Implementation

Practices or programs can be ordered along dimensions of quality. Quality of implementation – the strength of intervention and fidelity to a useful plan for intervention – may be as important as the type of program. One study of the Department of Education's Safe and Drug Free Schools and Communities Program,¹² found that programs implemented by schools are not nearly as comprehensive or extensive as the programs found to be effective in research. That study also found that program delivery at the school level is inconsistent: the amount and content of prevention programming varies greatly from classroom to classroom and school to school – even in districts trying to deliver consistent programs. Teachers often reported that they had not received sufficient training, were not comfortable with the subject matter or the teaching methods recommended in the curriculum materials, and many reported that teaching prevention-

related material was of relatively low priority in an already full school day.

We have only limited understanding of the effectiveness of research-based programs when they are implemented under more natural conditions, but those few studies that have measured the level of implementation show remarkable variation in the strength and integrity of implementation, and show that the strength of implementation is related to program outcomes.¹³

In the present study, data to describe the quality of prevention activities come from the reports of principals in the second principal questionnaire about school-wide activities and from program coordinators in Activity Questionnaires asking about the fourteen different types of "discretionary" program activity.¹⁴

From principals' reports composite measures were formed to measure five aspects of the quality of disciplinary practices. These include Communication of Rules and Policies and Documentation of Disciplinary Actions, Range of Appropriate Responses to Misconduct, Range of Responses to Desirable Conduct, Disciplinary Consistency, and Predictable Disciplinary Decision Making. An overall "Adequacy Composite" was also constructed – the percentage of the foregoing five aspects of discipline that were above a designated cut point. For example, the scale for Communication and Documentation is based on reports that printed copies of the school's discipline policy has been distributed to teachers, parents, and students in the current year, whether the school is engaged in current effort to communicate rules or consequences, current use of printed discipline forms or related mechanisms for identifying and recording rule violations, active maintenance of records or files of individual students' conduct, and use of a specific method for achieving and documenting due process upon suspending a student from school. To be judged adequate, a school would have to engage in 70% or more of these practices. Similar rules were applied for the other four scales. Exhibit 6 summarizes the results. A high percentage of schools (93%) reported practices related to the communication of rules and documentation of disciplinary action that were judged to be adequate, but much smaller percentages of schools met the adequacy criterion for other specific categories of practice. A notably small percentage of schools (20%) make use of an adequate array of responses to desirable student conduct. High schools make use of a particularly restricted range of responses with only 7% meeting our adequacy criterion. The bottom line is that only 10% of the nation's schools report using what we consider to be minimally adequate discipline practices.

Similar criteria were applied to discretionary prevention activities. Although some differences were observed among activities of different types, the average level of intensity and fidelity to good practice of school-based prevention activity is characterized by the descriptions in the following list:

- One or more persons is conducting it *from time to time*;
- It employs 71% of the *content* elements identified as representing best practices;
- It employs 54% of the *methods* elements identified as representing best practices;
- It involves 32 sessions or lessons (although there is a large range across activities of different types);
- It lasts about 25 weeks;
- Both students and staff participate about once per week;

- 41% of the school's students participate or are exposed;
- There are approximately 4 program providers per 100 students in the school; and
- If it is a classroom or a school-wide activity, it operates nearly all year.

The quality of prevention activities in the nation's schools is generally poor: The average prevention activity receives a passing grade on only 57% of the quality criteria examined. In general, individual prevention activities are not being implemented with sufficient strength and fidelity to be expected to produce a measurable difference in the desired outcomes. On the other hand, there is so much prevention activity underway at all levels that it is possible that multiple activities – each with small effects – may cumulate to make a substantial difference. However that may be, the poor quality of most prevention activity underscores the importance of establishing conditions in schools that are conducive to high quality implementation.

Although most of the variability in implementation quality lies within activity category, indicators of program quality do vary by type of prevention activity. In general, activities that aim to alter the school or classroom environment are better implemented than those aimed at altering student behaviors or attitudes. Services or programs operated by schools for family members of students are generally weak. Security and surveillance activities are best implemented.

These differences by program type do not imply that schools should abandon those types of activities that appear more challenging to implement. We reiterate that quality of program implementation varies far more *within* than *between* program categories.

Earlier research has demonstrated that preventive interventions are less likely to produce desirable outcomes when they are implemented poorly. Research by Botvin and his colleagues summarized earlier showed that when less than 60% of Botvin's Life Skills Training (LST) curriculum is delivered, the program has no measurable effect. It appears likely that the typical quality of prevention activity carried out in schools falls short even of the minimum level Botvin identified as necessary. LST is currently the subject of efforts at replication with training and technical assistance being provided to 142 schools in 35 sites as part of the Blueprints project led by Delbert Elliott at the University of Colorado with support from the U.S. Office of Juvenile Justice and Delinquency Prevention. A number of difficulties in achieving the intended levels of implementation have been encountered,¹⁵ including instruction by physical education teachers who are unfamiliar with teaching a curriculum, limited instructor classroom management skills, large classes, distracting settings or settings that are usurped for other activities, teachers who are not prepared for or committed to taking on a new instructional role, teacher turnover and the loss of trained instructors due to illness or job change, deviations from the curriculum, supplementation of or replacement of material with other material, and failure to use the technical assistance (TA) which is available. If all of these difficulties are encountered in sites that have competed for the opportunity to receive TA and training, and been screened and selected on the basis of applications and feasibility visits to receive that training, imagine the difficulties that may occur in a school in which someone decides to teach a social skills module

using whatever curriculum was available and without the TA and training.

A summary of the results on the quality of prevention programs in the nation's schools is provided in the form of a "report card" in Exhibit 7. Each prevention activity can be characterized by the percentage of the quality dimensions examined that were rated "adequate." These percentages are mapped into letter grades using the traditional 90% and above = A, 80% - 89% = B, and so on. Overall, 47% of activities receive a failing mark according to this report card; 18% earn an A. We hesitate to offer this simple report card summary, because of the considerable amount of both complexity and judgment that entered into the calculation of grades, and because we assume that this report card summary may be all that is communicated about the present inquiry in secondary accounts about it. At the same time, none of the decision rules upon which the summary is based is capricious and we believe where there is error it lies on the side of leniency. These grades are lenient because in principle it is possible for a program to fail in the real world (i.e., to be ineffective) if it fails to meet even one quality criterion. Therefore, we assume that some fraction of programs that would earn an A, B, or C by the calculus used to assign the Exhibit 7 grades are weaker than the letter grades suggest. In the final analysis, the grades emphasize that there is much room for improvement in the quality of activity to prevent problem behavior in schools.

Predictors of Quality of Program Implementation

Measures of potential predictors of program quality were developed in each of the areas hypothesized to influence quality. Details about these measures are provided in the full report of the research.¹⁶ Correlations between these hypothesized predictors and the measures of program quality were examined.

We found substantial support for the following hypotheses:

1. Greater levels of conscientiousness and past accomplishments on the part of the program coordinator are associated with better quality of program implementation. The associations are small.
2. Better integration of the activity into normal school operations is associated with higher quality programming. More extensive local planning and involvement in decisions about what to implement, use of regular school staff as implementors (particularly when a larger portion of their regular job is dedicated to the activity), and incorporation of the activity as a regular part of the school's program are associated with higher quality implementation.
3. Greater organizational support is associated with higher quality implementation. More training, higher quality training, more supervision, and higher levels of principal support for the prevention activity should increase the quality of implementation.
4. Greater standardization of program materials and methods is associated with higher

quality implementation.

Support for the importance of perceived school amenability to program implementation, budget control and program feasibility was mixed. The importance of budget control and certainty of continued funding was not supported, and the quality of programming is generally not enhanced by the absence of unusual program requirements. Programs run during the school day or just before school are, however, generally of higher intensity than programs run at other times.

Packaged Programs

Because they may be marketed aggressively to schools, special attention was given to "packaged" or "canned" programs about which information was obtained in the sample. Over a thousand such programs were included among those identified by principals who responded to the request to identify programs in their schools. Of these, many were D.A.R.E or peer mediation programs. The D.A.R.E. program involves a prevention curriculum intended to be delivered by police officers, and peer mediation programs involve youths in regulating the behavior of other students.

Compared with other prevention curricula employed in schools, D.A.R.E. involves about half as many lessons, and exposes a smaller percentage of students to the intervention (21% compared to 48%). The average duration and ratio of providers to students in the school is also lower for D.A.R.E. programs than for other curricular programs. Peer mediation programs are used more regularly by staff and are operated on a more continuous basis throughout the school year than are other programs involving youths in regulating behavior, but they also involve a lower ratio of providers to students in the school.

Compared to other curriculum or instructional programs in the sample, D.A.R.E. programs more often covered violence and drug topics and were less likely to cover other topics such as etiquette, sex, culture or history. D.A.R.E. relies more on lecture and individual seat-work and less on activities such as computerized multi-media features, "active" or "experiential" teaching, and computer-assisted learning (although D.A.R.E. relies on role-playing more than other curricular programs in our sample). The D.A.R.E. programs in our sample were more likely to have as objectives reducing problem behavior, reducing gang participation, and increasing knowledge about the law; and less likely to have as objectives a number of other precursors of problem behavior, including academic performance, job skills, norms, and school organizational capacity for self-management. D.A.R.E. programs are also more standardized than other programs, and the amount and quality of training for D.A.R.E. programs is higher than for other activities.

The results suggest ways to improve D.A.R.E. programs. Lengthening the program and targeting a larger proportion of students would bring it more in line with competing options. D.A.R.E. suffers by comparison to other curricular activities in our sample on two main

dimensions: the high level of lecture and seatwork, and the relatively poor integration into the school in general. One could imagine an improved D.A.R.E. model or a replacement model which would involve a greater level of teacher investment and participation. Such a model might be of benefit to students by encouraging regular teachers to reinforce the lessons in other parts of the curriculum.

School-Level Correlates of Implementation Quality

Three kinds of hypothesized predictors of program quality can be measured only at the school level: organizational capacity (morale, focus, and history of successful or unsuccessful programs), school leadership, and level of school disorder.¹⁷ The correlations of these school measures, and averaged program or activity characteristics hypothesized to predict quality of discretionary program implementation and quality of school-wide discipline practices, were examined at the school level.

Despite differences in the predictors of specific quality indicators, the broad importance of a small number of predictors of the quality of prevention activities in schools are implied by the results. These include the amount and quality of training, supervision, principal support for prevention activities, structure, the use of multiple sources of information (including district or other experts) in selecting activities to implement, integration of prevention as part of the regular school program, and local responsibility for initiating the activity. Exhibit 8 summarizes these broad correlates of prevention activity quality. There is every reason to expect that improving training, supervision, structure, and the availability of information can broadly and substantially improve the quality of school-based prevention of problem behavior. The present results also suggest that prevention interventions are most likely to be well implemented – and therefore have greater prospect of effectiveness – if they are integrated with the regular school program and initiated by school insiders.

Summary of Evidence About Hypothesized Predictors

A summary of the preponderance of the evidence from the study pertaining to the characteristics of schools and activities hypothesized to be associated with the quality and extensiveness of prevention activity is presented in Exhibit 9. Strongest support was found for the hypotheses about organizational support, program structure, and integration with regular school operations. Prevention activities were of higher quality when there was extensive and high quality training, supervision, and support from the principal. Quality was also associated with the use of implementation manuals, standards, and quality control methods. Local initiation, local planning, and extensive local use of information were linked to quality as well (although local *development* of programs was not). Moderate or mixed support was found for the hypotheses about organizational capacity, leadership and staff traits and accomplishments, program feasibility, and school disorder. No support was found for the hypothesis that school control of budget and resources would be associated with program quality.¹⁸

Conclusions and Recommendations

Six broad findings emerge from the research, each suggesting specific recommendations. The research also implies more specific suggestions for schools contemplating programs to prevent problem behavior, for school systems, for state and federal governments, and for research that are contained in a concluding chapter of the larger report.¹⁹

1. Problem behavior is common and more common in some schools than in others.

Finding

Minor forms of problem behavior that interfere with education are common in schools. Serious forms of problem behavior such as fighting, attacks, and carrying weapons occur less frequently, but frequently enough that they are clearly major problems. Schools differ in the level of disorder they experience. Problem behavior is most common in middle schools. There is great variability among urban secondary schools in levels of school crime. Some urban middle schools experience an extraordinary amount of disorder.

Recommendation

Variability in levels of problem behavior across schools suggests that it may be wise to monitor levels of problem behavior in schools through annual surveys of students and teachers – rather than by placing exclusive reliance on reports of school administrators – to identify schools in which disorder poses greatest problems. Focusing resources in the form of training, technical assistance, monitoring, supervision, and the deployment of superior educators to these schools may be appropriate.

2. Schools employ an astoundingly large number and variety of programs or activities to reduce or prevent problem behavior.

Finding

Nearly all schools have formal written rules or policies about weapons, drugs, and the time for student arrival at school. Most schools have written policies related to dress, visitor sign-in, students leaving campus, and hall wandering or class-cutting. Schools also make use of architectural arrangements, student recruitment, selection, scheduling, and grouping to reduce problem behavior. A large amount and wide variety of different types of discretionary prevention activities – ranging from instruction or curriculum, through counseling, recreational activities, mentor arrangements, youth participation in the regulation of behavior, and interventions for faculty or families – are currently underway in their schools.

Recommendation

Although a wide variety of prevention strategies are in use, most research on school-based prevention has been on instructional programs involving social competencies, defining norms, and providing information about consequences of problem behavior. High quality research on the much broader range of activities resembling those now undertaken in schools is required. The large amount of existing activity raises questions about the advisability of initiating new activities in schools where much is already underway.

3. Most schools have rules or prohibitions – and severe consequences – for a range of undesirable student conduct, but many schools fail to use the full range of rewards and sanctions potentially available to regulate student behavior.

Finding

Schools suspend or expel students for misconduct ranging from truancy to possession of a weapon. Schools are very likely to suspend or expel a student for possession of a gun, knife, alcohol, or other drugs. Suspension or expulsion occurs automatically or usually (after a hearing) in 91% or more of schools in response to these offenses. Suspension or expulsion for physical fighting, possession of tobacco, and use of profane or abusive language is also common, but is not usually “automatic.” Some responses to misconduct are used relatively infrequently. For example, community service, peer mediation, and student courts are not much used compared to other responses to misconduct. Even after-school and weekend detention are used less than they might be. And some kinds of rewards for desirable behavior are used surprisingly infrequently – particularly in secondary schools.

Recommendation

School administrators should use a broader range of rewards and sanctions – and de-emphasize practices such as the automatic use of removal of students from school. Suggestions to impose stricter sanctions appear to miss the mark: improving day-to-day responsiveness of school discipline systems is a more appropriate response to concerns about student behavior. The apparent widespread use of expulsion or suspension without hearings may be illegal, demoralizing, and produce negative consequences (such as increased dropout or community dissatisfaction), and it should be discouraged.

4. About half of school-based prevention activities are of such poor quality that they cannot reasonably be expected to make a difference in levels of problem behavior.

Finding

Only 44% of our nation’s schools report using what we consider to be minimally adequate discipline practices. The remainder fail to employ available and acceptable methods to

promote desired behavior or to diminish misconduct, or they fail to apply consistent and predictable disciplinary responses. The quality of discretionary prevention activities in the nation's schools is also generally poor: 47% of activities receive a failing grade according to the quality criteria employed in the present research. Many individual prevention activities are implemented with insufficient strength and fidelity to be expected to produce a measurable difference in the desired outcomes.

Recommendation

Although it is possible that a very large number of poorly implemented or poor quality activities may add up to a big difference in school orderliness, this is an empirical matter that has not been studied. In view of efficacy research showing that identifiable activities of sufficient quality can by themselves make a measurable difference in problem behavior, emphasizing the high quality implementation of such activities in schools should be given priority. In view of research implying that activities that may be efficacious do not work when poorly implemented, emphasis should be given to quality of implementation.

5. Organizational support for implementation and integration with school operations broadly predict the quality of prevention activities in schools.

Finding

The amount and quality of training, the level of supervision of personnel, monitoring of implementation, and review of implementer performance are features of organizational support that are linked to the quality of school-wide discipline, and the quality and extensiveness of discretionary prevention activity. Local planning and local responsibility for *initiating* activities is also associated with the extensiveness of application and the technical quality of prevention activities. And the quality of discretionary programs is greater for activities that are a regular part of the school program. Quality is greater when those initiating programs in schools use a greater variety of information, and have input from district personnel or experts. Programs *developed* externally to the school have higher technical quality and are used more extensively than are locally developed programs.

Recommendation

Improving the amount and quality of training and supervision of principals and other school personnel, and improving the monitoring of their activities has great potential to improve school programs. Implementation of high quality prevention activity may be thwarted when there is no principal support for the activity. Therefore, introducing such activities when principal support is lacking may be contraindicated. Because local planning and greater use of information are linked with quality programming, assistance to schools in implementing more local planning and making more extensive use of valid information about the effectiveness of programs developed elsewhere may also help to improve the quality of school-based prevention

activity.

6. School organizational capacity predicts the extensiveness of use and of student exposure to prevention activities.

Finding

Aspects of school climate – faculty morale, organizational focus on clear goals, perceived amenability to program implementation, open identification of problems, and open teacher-principal communication – are associated with more extensive use of and greater student exposure to prevention activities. Faculty assessment that the principal is a good educational leader is similarly predictive of the level of use of prevention activities and student exposure to activities.

Recommendation

Because enthusiasm for implementing prevention activities may be low in schools with low morale, little focus, and poor communication, and where the principal is held in low regard by the faculty, implementation will be more difficult in such schools. If school climate is poor, or when arrangements for organizational support discussed in the previous finding are lacking, the top priority for intervention may be the organization itself. That is, it may be important to address infrastructure problems in the school as a whole rather than to emphasize specific prevention programs. Organization development should be regarded as a necessary first step in the process of developing more effective prevention programming in some schools. Capacity for innovation should be assessed before initiating programs in schools, and assessment results should be used to apply appropriate levels of organization development, training, or other support.

Notes

1. Gottfredson, G. D., "Schooling and Delinquency," in *New Directions in the Rehabilitation of Criminal Offenders*, ed. S. E. Martin, L. B. Sechrest, and R. Redner, Washington, DC: National Academy Press, 1981, 424-469; and Gottfredson, G. D. "American Education – American Delinquency," *Today's Delinquent*, 6 (1987): 5-70.
2. Holmes, A. B., III, Gottfredson, G. D., & Miller, J. Y., "Resources and Strategies for Funding, in *Communities That Care: Action for Drug Abuse Prevention*, ed J. D. Hawkins and R. F. Catalano, San Francisco, CA: Jossey-Bass, 1992, 191-200.
3. E.g., Gottfredson, D. C., "*Delinquency and Schools*," New York: Cambridge University Press, in press; Hansen, W. B. and O'Malley, P. M., "Drug Use," in *Handbook of Adolescent Health Risk Behavior*, ed. R. J. DiClemente, W. B. Hansen, & L. E. Ponton, New York, NY: Plenum Press, 1996, 161-192; Institute of Medicine, *Reducing Risks for Mental Disorders: Frontiers for Preventive Intervention Research*, Washington, DC: National Academy Press, 1994; and

Weissberg, R. P., and Greenberg, M. T., "School and Community Competence-enhancement and Prevention Programs," in *Handbook of Child Psychology: Child Psychology in Practice, vol. 4*, ed. W. Damon, I. E. Sigel, and K. A. Renninger, New York, NY: Wiley, 1997.

4. Elias, M. J., Weissberg, R. P., Hawkins, J. D., Perry, C. A., Zins, J. E., Dodge, K. C., Kendall, P. C., Gottfredson, D. C., Rotheram-Borus, M., Jason, L. A., and Wilson-Brewer, R., "The School-based Promotion of Social Competence: Theory, Practice and Policy," in *Risk and Resilience in Children: Developmental Approaches*, ed. R. J. Haggerty, N. Garnezy, M. Rutter, and L. Sherrod, Cambridge, England: University of Cambridge Press, 1994. See also Gottfredson, D. C., G. D. Gottfredson, G. D., and S. Skroban, S., "Can Prevention Work Where it Is Needed Most?" *Evaluation Review*, 22 (1998): 315-340.

5. Whitaker, C. J., & Bastian, L. D., *Teenage Victims: a National Crime Survey Report*, Washington, DC: Bureau of Justice Statistics, 1991, NCJ 128129.

6. See Appendix G in the full report of this study, Gottfredson, G. D., D. C. Gottfredson, E. R. Czeh, D. Cantor, S. B. Crosse, and I. Hantman, *National Study of Delinquency Prevention in Schools*, Ellicott City, MD: Gottfredson Associates, 2000; and Gottfredson, G. D., & D. C. Gottfredson, *Victimization in Schools*. New York, NY: Plenum.

7. The table shows an adaptation of the full classification used to structure data collection. Three categories about which principals were not asked direct questions are omitted (training unrelated to any of the categories listed in the table, physical methods for excluding weapons or contraband, and referral to other agencies for services).

8. *Wood v. Strickland*, 420 U.S. 308, 95 S.Ct.992, 43 L.Ed.2d 214 (1975).

9. *Goss v. Lopez*, 419 U.S. 565, 95 S.Ct. 729, 42 L.Ed.2d 725 (1975).

10. E.g., Drug Strategies, *Making the Grade: A Guide to School Drug Prevention Programs* (Updated and expanded ed.), Washington, DC: Author, 1999.

11. E.g., National School Safety Center, *Checklist of Characteristics of Youth Who Have Caused School-associated Violent Deaths*. Westlake Village, CA: Author, 1998; and Stephens, R. D., *Safe Schools: a Handbook for Violence Prevention*, Bloomington, IN: National Educational Service, 1995.

12. Silvia, E. S. and J. Thorne, *School-Based Drug Prevention Programs: A Longitudinal Study in Selected School Districts*. Research Triangle, NC: Research Triangle Institute, 1997.

13. See Botvin, G. J., E. Baker, L. Dusenbury, S. Tortu, and E. M. Botvin, E. M., "Preventing Adolescent Drug Abuse Through a Multi-modal Cognitive-behavioral Approach: Results of a 3-year Study," *Journal of Counseling and Clinical Psychology* 58 (1990): 437-446. See also Gottfredson et al., "Can Prevention Work Where it Is Needed Most?"

14. A total of 17,110 prevention activities were listed by principals who responded to our inquiries. Because some schools listed a large number of activities, we randomly sampled from these activities in order to reduce the response burden on schools.

15. Center for the Study and Prevention of Violence, "Lessons Learned," *Blueprints News*, 1 (2), 1-2.

16. Gottfredson, G. D., D. C. Gottfredson, E. R. Czeh, D. Cantor, S. B. Crosse, & I. Hantman, *National Study of Delinquency Prevention in Schools* (Grant No. 96-MU-MU-0008), Ellicott City, MD: Gottfredson Associates, Inc. This report may be downloaded from <http://www.gottfredson.com>.

17. See the full report for details of the measurement of school characteristics: Gottfredson et al., *National Study of Delinquency Prevention in Schools*.

18. We had also expected to find weaker programs in schools serving communities characterized by concentrated poverty and social disorganization. The evidence was opposite this expectation.

19. Gottfredson et al., *National Study of Delinquency Prevention in Schools*.

Exhibit 1. Percentage of Schools In Which One or More Incidents of Crime Were Reported to Law Enforcement – 1997-98 School Year

| Group | Physical attack or fight with a weapon | | Robbery | | Physical attack or fight without a weapon | | Theft or larceny | | Vandalism | |
|---------------------|--|--------------|---------|-----|---|-----|------------------|-----|-----------|-----|
| | % | SE | % | SE | % | SE | % | SE | % | SE |
| All schools | 6.7 | .9 | 5.9 | .9 | 44.2 | 2.4 | 44.4 | 2.4 | 49.2 | 2.4 |
| Level | | | | | | | | | | |
| Elementary | 2.2 | 1.0 | 2.8 | 1.0 | 34.2 | 3.3 | 34.7 | 3.3 | 39.3 | 3.4 |
| Middle/Junior | 21.0 | 2.8 | 16.7 | 2.4 | 71.8 | 3.4 | 67.0 | 3.5 | 67.8 | 3.5 |
| High | 10.6 | 2.2 | 8.5 | 2.1 | 55.5 | 4.1 | 57.7 | 4.1 | 65.1 | 4.0 |
| Location | | | | | | | | | | |
| Rural | 4.7 | 1.2 | 3.1 | 1.0 | 40.1 | 3.6 | 44.1 | 3.7 | 46.8 | 3.7 |
| Suburban | 7.4 | 1.6 | 9.8 | 2.5 | 44.8 | 4.4 | 42.6 | 4.2 | 53.3 | 4.4 |
| Urban | 9.4 | 2.1 | 7.4 | 1.6 | 50.9 | 4.7 | 46.7 | 4.6 | 49.6 | 4.7 |
| Auspices | | | | | | | | | | |
| Public | 8.5 | 1.2 | 7.3 | 1.1 | 50.3 | 2.7 | 50.0 | 2.6 | 56.1 | 2.6 |
| Private or Catholic | .0 | ^a | 1.0 | .7 | 20.6 | 4.8 | 23.9 | 4.9 | 24.1 | 4.9 |

Note. SE = standard error of the percentage.

^a No incident of physical attack or fight with a weapon was observed in the small ($n = 94$) number of private or Catholic schools in the sample.

Exhibit 2. Percentage of Teachers Reporting Personal Victimization This Year in School, Secondary Schools – 1997-98 School Year

| Type of victimization | % | 95% CI | N |
|--|-----|-----------|-------|
| Received obscene remarks or gestures from a student | 42 | 40-44 | 13294 |
| Damage to personal property worth less than \$10.00 | 28 | 26-29 | 13294 |
| Theft of personal property worth less than \$10.00 | 24 | 23-25 | 13279 |
| Was threatened in remarks by a student | 21 | 20-23 | 13295 |
| Damage to personal property worth more than \$10.00 | 14 | 13-15 | 13303 |
| Theft of personal property worth more than \$10.00 | 13 | 12-14 | 13295 |
| Was physically attacked but not seriously enough to see a doctor | 2.9 | 2.52-3.31 | 13292 |
| Was physically attacked and had to see a doctor | .8 | .63- .97 | 13298 |
| Had a weapon pulled on me | .6 | .40- .73 | 13300 |

Note. 95% CI = 95% confidence interval. N = unweighted number of respondents.

Exhibit 3. Percentage of Students Reporting Personal Participation in School Delinquency and Drug Use in Past Year, by School Level and Location – 1997-98 School Year

| Self-reported behavior and location | Middle/Junior | | | High | | |
|---|---------------|-----------|------|------|-----------|------|
| | % | 95% CI | n | % | 95% CI | n |
| Purposely damaged or destroyed property belonging to a school | 16.2 | 15.0-17.4 | 9224 | 15.5 | 13.8-17.2 | 6739 |
| Hit or threatened to hit a <u>teacher</u> or other adult in school | 5.6 | 4.8-6.4 | 9240 | 4.6 | 3.6-5.5 | 6744 |
| Hit or threatened to hit other <u>students</u> | 41.0 | 39.1-42.8 | 9214 | 32.3 | 29.9-34.7 | 6737 |
| Stolen or tried to steal something at school, such as someone's coat from a classroom, locker, or cafeteria, or a book from the library | 9.2 | 8.4-10.0 | 9234 | 8.8 | 7.9- 9.8 | 6738 |
| Gone to school when drunk or high on some drugs | 9.4 | 8.3-10.5 | 9223 | 17.2 | 15.2-19.3 | 6738 |

Exhibit 4. A Classification of Prevention Activity and Percentage of Schools Using Each Type of Activity to Reduce Problem Behavior or Promote School Safety

| Category | % |
|--|-----|
| Direct services to students, families, or staff | |
| Provision of isolated information | 90 |
| Prevention curriculum, instruction, or training | 76 |
| Counseling/social work/psychological/therapeutic interventions | 75 |
| Behavioral or behavior modification interventions | 64 |
| Recreational, enrichment and leisure activities | 64 |
| Individual attention/mentoring/tutoring/coaching | 58 |
| Services to families | 55 |
| Treatment or prevention interventions for administration, faculty, or staff | 49 |
| Organizational or environmental arrangements | |
| Reorganization of grades, classes, or school schedules | 81 |
| Architectural features of the school | 76 |
| Use of external personnel resources in classrooms | 72 |
| Distinctive culture or climate for interpersonal exchanges | 66 |
| Improved instructional methods or practices | 62 |
| Improved classroom organization and management methods or practices | 57 |
| School planning structure or process – or management of change | 57 |
| Improvements to intergroup relations or interaction between school and community | 57 |
| Alter school composition | 32 |
| Discipline or safety management activities | |
| Rules, policies, regulations, laws, or enforcement | 100 |
| Security and surveillance | 55 |
| Youth roles in regulating and responding to student conduct | 40 |

Note. Unweighted number of schools ranges from 830 to 842, except for rules, policies, regulations, and law enforcement, where $N = 627$. All estimates except that for rules etc. are from the phase 1 principal survey; estimate for rules is from the phase 2 principal questionnaire. Except for rules and policies, of which every school in the sample made use, standard errors for the percentages reported are approximately 2 percentage points.

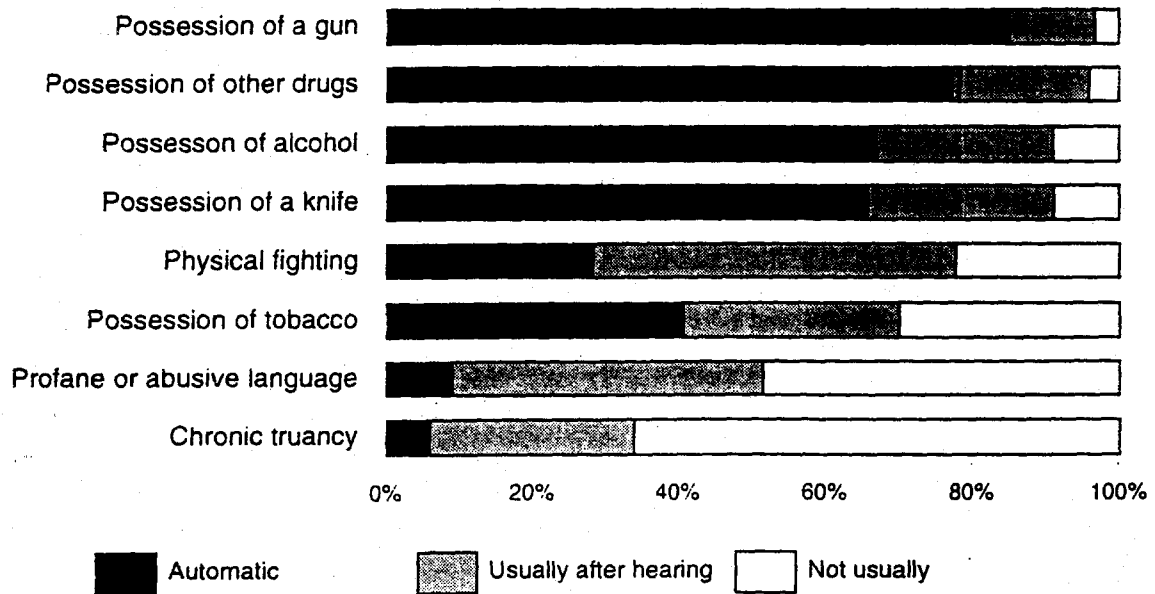


Exhibit 5. School Use of Suspension or Expulsion in Response to Specific Behaviors

Exhibit 6. *Percentage of Schools with School-Wide Disciplinary Practices Judged Adequate According to Several Criteria*

| Criterion | % |
|--|----|
| Specific category of practice | |
| Communication and documentation | 93 |
| Disciplinarian consistency | 48 |
| Predictable disciplinary decision making | 31 |
| Range of appropriate responses to misconduct | 27 |
| Range of responses to desirable conduct | 20 |
| Adequacy composite | 10 |

Note. Percentage shown for adequacy composite is the percentage of schools above the "adequacy" cut-point for 70% or more of the five specific categories of practice. Standard errors for percentages range from 1.4 to 2.5.

Exhibit 7. *Percentage Distribution of Overall Activity Grades, by Location*

| Grade | Percentage of quality dimensions rated "adequate" | Location | | | |
|-------|---|----------|----------|-------|---------------|
| | | Urban | Suburban | Rural | All locations |
| A | 90% - 100% | 20 | 18 | 15 | 18 |
| B | 80% - 89% | 12 | 10 | 11 | 11 |
| C | 70% - 79% | 13 | 11 | 10 | 11 |
| D | 60% - 69% | 15 | 13 | 12 | 13 |
| F | < 60% | 40 | 48 | 52 | 47 |
| Total | | 100 | 100 | 100 | 100 |

Exhibit 8. *The Most Important Predictors of Quality and Extensiveness of Prevention Activity*

Extensiveness and quality of training

Supervision of the activity

Principal support for the activity

The degree of structure or scriptedness of the activity

Local responsibility for initiating the activity

Use of multiple sources of information, including district personnel and "experts"

Activity is a part of the regular school program

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Exhibit 9. Summary of Evidence About Hypothesized Predictors of Quality and Extensiveness of Prevention Activity

| Hypothesized predictor | Evidence |
|---|---|
| Organizational capacity (morale, few failed programs in past, staffing stability) | Moderate support |
| Leadership and staff traits, past accomplishments | Moderate support |
| Budget and resources – school control | No support |
| Organizational support (training, supervision, principal support) | Strong support |
| Program structure (manuals, implementation standards, quality control mechanisms) | Strong support |
| Integration with normal school operations, local initiation, local planning, local information use | Strong support (except for local <i>development</i>) |
| Program feasibility (match between program design features and regular activities of the implementing school) | Mixed |
| Little disorder | Mixed |

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