



**Archived Information**  
**PLANNING AND EVALUATION SERVICE**

---

WIDE SCOPE, QUESTIONABLE QUALITY:  
DRUG AND VIOLENCE PREVENTION EFFORTS  
IN AMERICAN SCHOOLS

REPORT ON THE STUDY ON SCHOOL  
VIOLENCE AND PREVENTION

---

U.S. DEPARTMENT OF EDUCATION  
Doc #2001-35





**WIDE SCOPE, QUESTIONABLE QUALITY:  
DRUG AND VIOLENCE PREVENTION EFFORTS  
IN AMERICAN SCHOOLS**

**REPORT ON THE STUDY ON SCHOOL VIOLENCE AND PREVENTION**

Prepared for:

U.S. Department of Education  
Contract No. EA96055001

Prepared by:

Scott Crosse  
Michele Burr  
David Cantor  
Carol A. Hagen  
Irene Hantman

Westat  
1650 Research Boulevard  
Rockville, MD 20850

In affiliation with:

Gottfredson Associates, Inc.  
3239B Corporate Court  
Ellicott City, MD 21042

This report was prepared for the U.S. Department of Education under Contract No. EA96055001. The project monitor was Joanne Wiggins in the Planning and Evaluation Service. The views expressed herein are those of the contractor. No official endorsement by the U.S. Department of Education is intended or should be inferred.

**U.S. Department of Education**

Rod Paige  
*Secretary*

**Planning and Evaluation Service**

Alan L. Ginsburg  
*Director*

**Elementary and Secondary Education Division**

Ricky Takai  
*Director*

August 2002

This report is in the public domain. Authorization to produce it in whole or in part is granted. While permission to reprint this publication is not necessary, the citation should be the following: Crosse, S., Burr, M., Cantor, D., Hagen, C.A. and Hantman, I. (2001). *Wide Scope, Questionable Quality: Drug and Violence Prevention Efforts in American Schools. Report on the Study on School Violence and Prevention*. Washington, DC: U.S. Department of Education, Planning and Evaluation Service.

To order copies of this report, write

ED Pubs  
Editorial Publications Center  
U.S. Department of Education  
P.O. Box 1398  
Jessup, MD 20794-1398;

via fax, dial (301) 470-1244;

or via electronic mail, send your request to [edpubs@inet.ed.gov](mailto:edpubs@inet.ed.gov).

You may also call toll-free 1-877-433-7827 (1-877-4-ED-PUBS). If 877 service is not yet available in your area, call 1-800-872-5327 (1-800-USA-LEARN); Those who use a telecommunications device for the deaf (TDD) or a teletypewriter (TTY), should call 8-800-437-0833.

To order online, point your Internet browser to [www.ed.gov/pubs/edpubs.html](http://www.ed.gov/pubs/edpubs.html).

This report is also available on the Department's web site at [www.ed.gov/offices/OESE/SDFS/publications.html](http://www.ed.gov/offices/OESE/SDFS/publications.html).

On request, this publication is available in alternate formats, such as Braille, large print, audiotape, or computer diskette. For more information, please contact the Department's Alternate Format Center at (202) 260-9895 or (202) 205-8113.

## **EXECUTIVE SUMMARY**

Results from the Study on School Violence and Prevention indicate that, while schools nationally experienced relatively low levels of serious violent crime, some schools did experience serious violence and disorder. In many schools, high levels of less serious violent crime and property crime were common, particularly in middle schools. To prevent such problem behavior and make schools more conducive to learning, schools implemented many and diverse prevention activities. However, on the whole, the quality of those prevention activities is poor. These findings, which are for the 1997-98 school year, suggest that schools need to improve the quality of prevention programming through attention to needs assessment, planning, increased use of research-based approaches, and monitoring of implementation.

### **STUDY BACKGROUND**

The study on which these findings are based, the Study on School Violence and Prevention, was funded by the U.S. Department of Education (and conducted in collaboration with the National Institute of Justice, U.S. Department of Justice) to investigate the extent of problem behavior in schools nationally and several aspects of delinquency prevention efforts in schools, such as types and quality of prevention efforts, how schools plan and use information about prevention options to improve their own efforts and school management, and sources of funding for school prevention activities.

During spring 1997, 886 elementary and secondary (i.e., both middle school and high school) principals provided information about prevention activities in their schools. During spring 1998, principals and prevention program providers in many of these same schools provided information on prevention efforts, their schools' discipline practices, and Safe and Drug-Free Schools and Communities Act (SDFSCA) funding for prevention activities. In addition, students and teachers in many of the participating secondary schools responded to surveys on their experiences with school disorder and with prevention activities; school district officials associated with these secondary schools also provided information on SDFSCA and non-SDFSCA programs and funding. The patterns of problem behavior found by the current study are generally consistent with those found by other recent studies.

Although this study has many strengths, including the use of multiple information sources to collect detailed information on characteristics of school prevention programming and adequacy of program implementation, it also has limitations, primarily with regard to response rates. Methodological issues are discussed in detail in the report's introduction and appendices.

In the remainder of this summary, we highlight main findings from the study.

## **PROBLEM BEHAVIOR IN SCHOOLS**

During the 1997-98 school year, serious violent crime in schools was relatively infrequent. However, schools did experience high levels of less serious violent crime and property crime that compromised instruction in many classrooms. Middle schools experienced more problem behavior than other schools. On the whole, students and teachers felt safe at schools, although about one-quarter had concerns about safety and disorder.

### **Schools Reporting Incidents to Police**

One measure of school safety and disorder is the number of crimes and disciplinary incidents that come to the attention of school administrators. The study asked principals about the number of crimes that they reported to law enforcement officials. In general, elementary schools tend to experience the lowest rates of serious incidents and middle schools the highest rates.

- According to principal reports, 66 percent of schools experienced one or more incidents of less serious violent crime or property crime (i.e., fighting without a weapon, vandalism, or theft) and 10 percent experienced at least one serious violent crime (i.e., fighting with a weapon or robbery).
- Compared with elementary and high schools, middle schools had higher levels of many types of problem behavior. According to principal reports, 21 percent of middle schools had one or more incidents of physical attack or fight with a weapon, compared to 2 percent of elementary schools and 11 percent of high schools. Principals also reported that 72 percent of middle schools experienced fights without a weapon, compared to 34 percent of elementary schools and 56 percent of high schools.
- Schools with high levels of serious violent crime—"problem schools"—were similar to all other schools on characteristics such as urbanicity (percent urban, suburban, and rural), free and reduced-price school lunch, and enrollment. Problem high schools also did not differ from the other high schools in terms of the percentage of minority students. However, problem middle schools had a higher percentage of minority students than all other middle schools.

## **Victimization of Students and Teachers**

Another measure of school safety and disorder is the amount of victimization experienced by students and teachers while at school. This measure provides an important complement to data obtained from principals about incidents reported to police, since administrators are not always aware of all the incidents that occur in schools. The study asked students and teachers in secondary schools (middle and high schools) about their experiences with various types of crimes and disorderly conduct. Middle school students and teachers were in many cases more likely to be victimized than their high school counterparts.

- Approximately 18 percent of students in secondary schools were threatened with a beating, and 13 percent of students were attacked without a weapon. In terms of serious violent crime, 11 percent of students experienced at least one serious violent incident (robbery or threatened with a weapon) at school.
- A slightly higher percentage of middle school students than high school students were the victims of robbery. For example, 8 percent of middle school students were robbed of \$1 or more in school, compared with 4 percent of high school students. Additionally, for all types of less serious violent crime and property crime, a higher percentage of middle schools students than high school students reported being victimized. For example, 19 percent of middle school students were physically attacked in school, compared with 10 percent of high school students.
- Approximately 62 percent of teachers experienced one or more incidents of less serious violent crime or property crime (i.e., threatened in remarks by a student, received obscene remarks or gestures from a student, damage to property, or theft). Forty percent of teachers received obscene remarks or gestures from a student. Serious crime aimed at teachers was relatively rare. Only 3 percent of teachers were attacked and received minor injuries, while even fewer (1%) were either confronted with weapons at school or were attacked and received injuries serious enough to require a doctor.
- A higher percentage of middle school teachers than high school teachers received obscene remarks or gestures from a student (46% of middle school teachers versus 40% of high school teachers) and middle school teachers were more likely (24%) than high school teachers (20%) to be threatened by a student.
- Although students and teachers in problem high schools and in other high schools reported similar levels of victimization, students and teachers in problem middle schools reported significantly higher levels of victimization for many specific types of crime than those in other middle schools.

## **Effects of Disorder on Teachers and Students**

Members of the school community provide different perspectives on how the level of school safety and orderliness affects them.

- While most students and teachers reported feeling safe in their schools, about one-fourth said they would avoid a specific place at school out of fear that someone might hurt or bother them.
- More than one-quarter (27%) of teachers in middle and high schools reported that the behavior of some students kept them from teaching a fair amount or a great deal.

## **EFFORTS TO PREVENT PROBLEM BEHAVIOR IN SCHOOLS**

Schools are implementing a wide range of prevention and disciplinary activities to address problem behavior. Unfortunately, the overall quality of many of these activities is inadequate when assessed against criteria established by the study for judging the quality of practices.

### **Wide Scope of Prevention Efforts**

To reduce problem behavior, schools implemented many and diverse prevention activities.

- On average, each school used 9 out of 14 general types (e.g., counseling and behavior modification) of prevention efforts. Although a few principals reported using no activities at all, many reported using a large number of separate, specific activities—one school reported using 61. The median number of specific prevention activities per school was 14. Approximately 20 percent of schools used at least 25 unique activities and 6 percent reported using at least 40 unique activities.
- The most common type of activity aimed at changing individual behavior was prevention curriculum, instruction, or training (76%), followed by counseling, social work, psychological, or therapeutic services (74%). The most common type of school-wide prevention activity was simply providing students with information. More than 80 percent of schools provided isolated information about alcohol, tobacco, and other drugs.
- Compared with other middle schools, problem middle schools (those with high levels of serious violent crime) used fewer of the different types of activities available to reduce negative behavior. Each problem middle school used approximately six different types of efforts, while each of the other middle schools uses, on average, eight different types of efforts. Problem high schools and other high schools were similar on the number of different prevention efforts implemented.

## **Low Quality of Prevention Efforts**

Judging the quality of prevention activities was a multi-step process that entailed defining dimensions of quality and setting standards of adequacy. The standards of adequacy established for these dimensions were appropriate for the various types of activities. The dimensions and standards were based on expert judgment and a review of the literature on the effectiveness of prevention activities, including optimal planning practices, content, methods, and frequency and duration of activities. (For more detail, see Appendix B.)

While a large quantity of prevention activities were implemented in schools, the quality of those activities needs improvement. In general, activities designed to change the school or classroom environment were higher quality than those directed at altering student behavior or attitudes.

- Prevention activities designed to change the school or classroom environment were generally of higher quality than programs aimed at changing individual student behaviors or attitudes. On one summary measure of quality (average percentage of quality measures judged adequate), scores for different types of activities designed to change the school or classroom environment ranged from 73 percent adequate (for security and surveillance) to 51 percent adequate, while scores for programs aimed at changing individual student behaviors or attitudes ranged from 51 percent adequate to 42 percent adequate (for services and programs for family members).
- Compared to programs aimed at changing individual student behaviors or attitudes, activities designed to change the school or classroom environment tended to achieve higher ratings on several dimensions of quality, including level of use by school personnel, best practices for content, best practices for methods, duration, and frequency of operation.
- The quality of prevention programs is lowest in rural areas and highest in urban areas, though the difference is modest. Approximately 55 percent of the prevention activities in rural areas were judged adequate, compared to 60 percent of the activities in urban areas.
- For almost every type of program and each dimension examined, the quality of implementation was similar between the problem schools and other schools (at both the middle and high school levels).

## **Mixed Quality of Disciplinary Practices**

Schools successfully communicated rules to students and monitored and recorded violations of those rules. However, schools need improvement on the range of responses that they make to student conduct and on the predictability and consistency of their disciplinary practices.

- Most schools communicated rules to students and monitored and recorded violations of rules. More than 95 percent of schools provided teachers, students, and parents with a copy of the school rules. Some 93 percent of schools were following best practices for communication and documentation of school rules and for keeping track of student behavior.
- Overall, schools used a variety of responses to desirable and undesirable student behavior. However, relatively few individual schools merited a “best practices” rating for the range of appropriate responses to misconduct (27%) and range of appropriate responses to desirable behavior (20%).

## **QUALITY OF PLANNING AND USE OF RESEARCH FOR PREVENTION ACTIVITIES**

### **Mixed Picture on Quality of Planning**

Sound planning (including identifying goals, selecting activities, and making decisions about how to target prevention efforts) is important, in part, because it was associated with high quality prevention activities. The planning that underlies prevention activities in schools was frequently influenced by school districts. Planning to meet school-wide prevention objectives tended to be of higher quality than the planning of individual-level prevention activities.

- The planning of prevention efforts was often influenced or shaped by the school district. Districts for almost one-half of middle and high schools required the schools to participate in needs assessments or an evaluation by administering district-sponsored surveys. Districts for 60 percent of these schools also required the schools to pick prevention activities from a list or at least offer this type of list. The majority of districts provided support for school planning of prevention activities in the form of assistance with conducting needs assessments, training on program planning and development, and training on program implementation. District involvement in school-level planning is important, in part, because districts often have greater expertise and resources to support planning than individual schools.
- Planning for many of the individual level prevention activities was weak. Although many individual-level prevention activities meet some criteria of sound planning, less than two-thirds of these activities met all of the criteria. However, planning for school-wide prevention efforts appeared to be considerably stronger than the planning for individual level activities.
- Problem schools (those with high levels of serious violent crime) and other schools tended to be similar on many aspects of program planning. However, problem middle schools were more often required to receive direction and assistance from their school districts, and are more often required to conduct some type of needs assessment or evaluation. Compared with other middle schools, problem middle schools are also more often required to prepare plans specifying how prevention resources will be

used. For high schools, a higher percentage of problem schools than other schools receive training on program implementation.

### **Insufficient Use of Research**

Although schools generally consulted a number of sources in selecting their activities, they typically placed a lower priority on research-based sources.

- On average, schools used two resources to select a given prevention activity. The resources most often used to select a prevention activity were other program providers (57% of activities) and meetings within the school district (51% of activities).
- Research-based information was among the less frequently used sources for activity selection. Formal outcome evaluations and publications summarizing research were used in the selection of 28 percent and 38 percent of activities, respectively.
- Perhaps as a result of the limited use of research-based information, only one-third of the prevention activities used methods or approaches found to be effective in the research literature, while 61 percent of the activities used content whose effectiveness was supported by research.

### **SDFSCA IMPORTANT TO FUNDING FOR SCHOOL PREVENTION EFFORTS**

The Safe and Drug-Free Schools and Communities Act (SDFSCA) Program was the most common funding source for prevention activities in schools, though districts and schools also drew on a variety of other funding sources. Districts used SDFSCA funds to support diverse prevention activities. This funding was very important to district prevention programming.

- Districts for approximately 98 percent of schools nationally, public and private, provided prevention activities that were funded at least in part by SDFSCA. Many districts also drew on a wide variety of other federal, state, and local funding sources to support their prevention efforts.
- Districts used their SDFSCA funds for diverse prevention activities, including direct activities for students and indirect activities such as staff training. Activities that received a high degree of SDFSCA support include prevention instruction or training, counseling, and prevention activities to improve instructional practices in the classrooms.
- In the schools for which principals reported using SDFSCA funds, almost one-half of the principals stated that these funds were very important to improving or maintaining the safety and orderliness of their school, or in preventing problem behavior.

## CONCLUSIONS

Several conclusions follow from the study's findings. Although schools in general were relatively safe, certain schools had significant problems that affected instruction and made some teachers and students feel unsafe. Clearly, approaches to preventing problem behavior in schools need improvement, particularly in light of the central findings that schools nationally were implementing a large number of prevention efforts but the quality of those efforts was low overall.

The findings of relatively higher rates of discipline problems in middle schools suggest that greater attention to prevention efforts in middle school may be warranted. Attention to middle school problems may also aid in preventing discipline problems in high school.

Schools also should consider focusing on improving the quality of their activities. Schools might start by strengthening efforts to adopt, retain, or discard prevention efforts based on research evidence on program effectiveness. In general, schools need to be more consistent in consulting the research literature and using that information to guide their prevention efforts. Given limited resources for prevention, focusing resources on strengthening promising, research-based activities—even at the expense of discontinuing weaker activities—may help schools and districts to better achieve their prevention goals.

Another area where improvement could be addressed is in the area of program planning, monitoring, and evaluation. Strengthening needs assessments, including collecting information on the prevalence of problem behavior, would assist schools and districts in identifying problem areas to allow for better targeting of prevention efforts. Greater emphasis on monitoring the implementation of prevention activities would help to ensure that they remain consistent with program models. Collecting information on the results of activities is critical to gauging which activities are proving effective and which need to be strengthened or discontinued.

Schools and districts can also focus on the predictors of program quality. In their report on this study, Gottfredson, Gottfredson, Czeh, Cantor, Crosse, and Hantman (2000) identified several predictors, including extensiveness and quality of training of the staff that implement the activities and supervision of the activities. The increased costs associated with these and other factors could be offset, in part, by decisions to fund fewer but stronger activities.

Ideally, along with a greater focus on research, schools will adopt a “continuous improvement” process, whereby quality of implementation, results of activities, and incidents of problem behavior are tracked to serve as a basis for modifying activities and developing future plans.

### **Resources for Improving Quality**

Districts and schools have a variety of sources available to them to assist in identifying effective programs and activities. For example, the 1999 Annual Report on School Safety, a joint publication of the U.S. Departments of Justice and Education, provides descriptions of model programs designated as promising or of demonstrated effectiveness, along with resource lists of agencies, organizations, and websites for further information. (See [www.ed.gov/PDFDocs/InterimAR.pdf](http://www.ed.gov/PDFDocs/InterimAR.pdf).) The U.S. Department of Education’s Safe and Drug-Free Schools program used an expert panel process to identify exemplary and promising drug and violence prevention programs based on evidence of effectiveness. (See [www.ed.gov/offices/OERI/ORAD/KAD/expert\\_panel/2001exemplary\\_sddfs.html](http://www.ed.gov/offices/OERI/ORAD/KAD/expert_panel/2001exemplary_sddfs.html) and [www.ed.gov/offices/OERI/ORAD/KAD/expert\\_panel/2001promising\\_sddfs.html](http://www.ed.gov/offices/OERI/ORAD/KAD/expert_panel/2001promising_sddfs.html).) Additional information on developing high-quality school-based prevention programs is available from the Safe and Drug-Free Schools program website. (See [www.ed.gov/offices/OESE/SDFS/](http://www.ed.gov/offices/OESE/SDFS/).)

## ACKNOWLEDGMENTS

In preparing this report, we relied heavily on work completed by Gary and Denise Gottfredson, which is reported in Gottfredson, G., Gottfredson, D. C., Czeh, E. R., Cantor, D., Crosse, S. B., & Hantman, I. (2000). *National study of delinquency prevention in schools*. Final report for the National Institute of Justice, U. S. Department of Justice, Grant # 96-MN-MV-008. Ellicott City, MD: Gottfredson Associates, Inc.

Without the help of many people, this study would have been impossible. School recruitment could not have been completed without assistance from Katie Andrew, Julie Anderson, Betty Barclay-Hurley, Kristen Heavener, Robin Hill, Galen McKeever, Pat McClure, Sheri Nicewarner, Parvis Omidpanah, Jeff Roussos, and Fran Winter. The recruiters, along with Liv Aujla, Kevin Jay, Steve Linz, Kim Standing, and Diane Steele, made data collection happen. We received invaluable statistical and programming support from Al Bishop, John Brown, Jason Grim, Ying Long, Lana Ryaboy, and Gary Shapiro.

We also wish to thank our federal Project Officer, Joanne Wiggins, and the members of our Working Group, which include Mark Lipsey, Jennifer O'Day, Cyril Wantland, and Mary Weaver. They have all been extremely supportive and helpful in developing and implementing this study.

Finally, we wish to thank the hundreds of schools and thousands of school staff and students who, by participating in the study, helped to make it a success.

## TABLE OF CONTENTS

<u>Chapter</u>	<u>Page</u>
<b>EXECUTIVE SUMMARY .....</b>	<b>i</b>
<b>ACKNOWLEDGMENTS .....</b>	<b>x</b>
<b>1. INTRODUCTION AND BACKGROUND.....</b>	<b>1</b>
Introduction.....	1
Study Objectives .....	3
Method .....	3
Strengths and Limitations .....	5
Report Organization.....	7
<b>2. PROBLEM BEHAVIOR IN SCHOOLS .....</b>	<b>8</b>
Although Schools Experience High Levels of Less Serious Violent Crime and Property Crime, Serious Violent Crime Is Infrequent .....	8
Middle Schools Experience More Problem Behavior than Other Schools .....	10
Students and Teachers Generally Feel Safe at School .....	13
Problem Schools: Characteristics and Problem Behavior.....	15
<b>3. EFFORTS TO PREVENT PROBLEM BEHAVIOR IN SCHOOLS.....</b>	<b>26</b>
Schools Are Implementing a Wide Variety of Prevention Activities .....	26
Schools Are Using Many Prevention Activities .....	31
Most Schools Communicate Rules to Students and Monitor and Record Violations of Rules .....	32
Schools Use a Variety of Responses to Desirable and Undesirable Student Behavior.....	32
Schools Are Following Best Practices and Policies on School Rules and on Tracking Student Behavior but Need Improvement on the Range of Responses to Student Conduct and on Predictable and Consistent Discipline .....	33
Problem Schools: Efforts to Prevent Problem Behavior.....	35
<b>4. QUALITY OF EFFORTS TO PREVENT PROBLEM BEHAVIOR IN SCHOOLS.....</b>	<b>39</b>
Quality of Prevention Programming in Schools Is Low .....	39
Activities Designed to Change the School or Classroom Environment Are Higher Quality Than Those Aimed at Altering Student Behaviors or Attitudes.....	41
Security and Surveillance Efforts Are Implemented with the Highest Quality and Services to Family Members Are Implemented with the Lowest Quality .....	43
Problem Schools: Implementation of Efforts to Prevent Problem Behavior .....	45
<b>5. PLANNING AND INFORMATION.....</b>	<b>48</b>
Many School Districts Influence the Planning of Prevention Activities at Schools.....	48
Prevention Planning Is Weak for Many Individual Activities .....	50
Sound Planning Is Related to High-quality Prevention Activities .....	51
Problem Schools: Planning and Information .....	52
<b>6. FUNDING FOR PREVENTION EFFORTS IN SCHOOLS.....</b>	<b>57</b>
SDFSCA is the Most Widely Used Source of Funding for Prevention Activities, though the Districts for Many Schools Also Receive Funding from Other Sources .....	56
Districts Use SDFSCA Funds to Support a Wide Variety of Prevention Activities.....	57
SDFSCA Funding is Very Important to District Prevention Programming.....	58

## TABLE OF CONTENTS (continued)

<b>7. CONCLUSIONS .....</b>	<b>59</b>
Shift Resources to Emphasize Quality over Quantity .....	59
Improve Program Planning and Monitoring .....	59
Strengthen Factors Associated with Quality of Programming.....	60

## LIST OF APPENDIXES

<u>Appendix</u>	<u>Page</u>
<b>A. STUDY METHODS.....</b>	<b>62</b>
<b>B. METHODS AND CRITERIA FOR JUDGING THE ADEQUACY OF PREVENTION PROGRAMS OR ACTIVITIES.....</b>	<b>77</b>

### List of Tables

#### Table

3-1 Prevention activity categories and definitions .....	28
3-2 School-wide arrangements and definitions .....	29
A-1 School-level response rates for the first phase of data collection .....	69
A-2 School-level participation rates for the second phase of data collection .....	69
A-3 Principal response rate .....	70
A-4 Provider response rate.....	70
A-5 Teacher response rate.....	70
A-6 Student response rate .....	71
B-1 Measures of program quality .....	78
B-2 Criteria used to assess adequacy or best practices for quality measures that have similar criteria across program or activity types .....	81
B-3 Criteria used to assess adequacy or best practices for quality measures that have different criteria across program or activity types .....	82
B-4 Measures of quality for school-wide discipline practices and cut points for assessing adequacy .....	84

## TABLE OF CONTENTS (continued)

### List of Figures

<u>Figure</u>		<u>Page</u>
2-1	Percentage of schools in which one or more incidents of crime were reported to law enforcement – 1997-98 school year.....	9
2-2	Percentage of students reporting one or more incidents of personal victimization this year in school – 1997-98 school year.....	11
2-3	Percentage of teachers reporting one or more incidents of personal victimization this year in school – 1997-98 school year.....	12
2-4	Percentage of teachers reporting on the extent to which student behavior prevents them from teaching – 1997-98 school year.....	14
2-5	Characteristics of problem schools and other schools – 1997-98 school year.....	16
2-6	Characteristics of students in problem schools and other schools – 1997-98 school year.....	17
2-7	Percentage of problem middle schools and other middle schools in which one or more incidents of crime were reported to law enforcement – 1997-98 school year .....	19
2-8	Percentage of problem high schools and other high schools in which one or more incidents of crime were reported to law enforcement – 1997-98 school year .....	20
2-9	Percentage of students in problem middle schools and other middle schools reporting personal victimization this year in school – 1997-98 school year .....	21
2-10	Percentage of students in problem high schools and other high schools reporting personal victimization this year in school – 1997-98 school year .....	22
2-11	Percentage of teachers in problem middle schools and other middle schools reporting personal victimization this year in school – 1997-98 school year .....	24
2-12	Percentage of teachers in problem high schools and other high schools reporting personal victimization this year in school – 1997-98 school year .....	25
3-1	Percentage of schools using each type of prevention activity – 1997-98 school year.....	30
3-2	Percentage of schools using specific responses to desirable student conduct – 1997-98 school year .....	34
3-3	Percentage of problem middle schools and other middle schools using each type of prevention activity – 1997-98 school year.....	36

**TABLE OF CONTENTS (continued)**

<u>Figure</u>	<u>Page</u>
3-4 Percentage of problem high schools and other high schools using each type of prevention activity – 1997-98 school year .....	37
4-1 Percentage of programs or activities judged adequate for each quality measure – 1997-98 school year .....	40
4-2 Average percentage of quality measures judged adequate for each type of prevention activity – 1997-98 school year .....	44
4-3 Average percentage of quality measures judged adequate for selected prevention activities for problem middle schools and other middle schools – 1997-98 school year .....	46
4-4 Average percentage of quality measures judged adequate for selected prevention activity for problem high schools and other high schools – 1997-98 school year .....	47
5-1 Percentage of problem schools and other schools in districts reporting mandated school planning of prevention activities – 1997-98 school year .....	53
5-2 Percentage of problem schools and other schools in districts providing support for school planning of prevention activities – 1997-98 .....	55

**WIDE SCOPE, QUESTIONABLE QUALITY:  
DRUG AND VIOLENCE PREVENTION EFFORTS IN AMERICAN SCHOOLS**

**Report on the Study on School Violence and Prevention**

**1. INTRODUCTION AND BACKGROUND**

Concern about youth violence has increased dramatically across the country. This has been especially true for violence that occurs in schools. Schools should provide disciplined and orderly environments that are conducive to learning and provide safe havens from violence. This report examines the status of school safety nationally and what schools are doing to promote safety and prevent problem behavior.

**Introduction**

The Safe and Drug-Free Schools and Communities Act (SDFSCA) Program, administered by the U.S. Department of Education (ED), is the largest school-based federal program directed at preventing student drug use and promoting school safety. As part of the 1994 reauthorization of SDFSCA, Congress mandated that ED collect information on efforts to prevent violence in schools nationally. ED initiated the Study on School Violence and Prevention to describe the level of problem behavior, including violence, in schools; to learn about the measures that schools are taking to prevent problem behavior and promote school safety; and to examine the use of funds allocated through SDFSCA.

In the last decade, several studies have investigated the prevalence of problem behavior at schools and some of the factors associated with it. For example, Katchur and colleagues (1996) reported on the number of school-associated deaths that occurred from July 1992 through June 1994. Other studies that have investigated problem behavior in schools (e.g., possession of weapons) include Violence and Discipline Problems in U.S. Public Schools: 1996-97 (Heaviside, Rowand, Williams & Farris, 1998), Violence-Related Attitudes and Behaviors of High School Students—New York City, 1992 (Centers for Disease Control and Prevention, 1993); Youth Risk Behavior Survey (Centers for Disease Control and Prevention, 1999); Monitoring the Future Survey (Johnston, O'Malley, and Bachman, 1998); and School

Crime Supplement to the National Crime Victimization Survey (Chandler, Chapman, Rand, and Taylor, 1998).

However, very few studies have examined the types of prevention efforts that schools are using and how well the schools are implementing these efforts. One of the more comprehensive studies was conducted by the Minnesota Department of Education (1992). This study defined and described 26 promising prevention strategies and reported on the utilization and perceived impact of these strategies in Minnesota public schools. While useful, the study did not describe program implementation. Moreover, the study had a state rather than a national focus and was conducted more nearly ten years ago. More recently, the International Association of Chiefs of Police (1995) reported on a nationwide search to find effective efforts to reduce school violence, particularly gun violence. Although this study investigated efforts nationwide, it focused solely on promising prevention strategies. An intensive national effort undertaken by the National School Board Association (1993) lists more than 750 prevention programs organized into 30 different categories. This effort and others (e.g., National School Safety Center, 1995; Center for the Study and Prevention of Violence, 1995) identified a multitude of prevention strategies, but they neither provided national estimates of the types of prevention strategies schools are implementing nor assessed how the programs are being implemented.

The Study on School Violence and Prevention is the first study in more than 20 years to examine in detail what schools nationally are doing to promote school safety, as well as describe the level of problem behavior in schools. Although its title implies that we focused exclusively on violence, the study also encompasses other types of undesirable behavior (e.g., drug abuse and property crime) in schools. We refer to all of these types of illegal or prohibited behavior in schools, violent and nonviolent, as “problem behavior.”

The Study on School Violence and Prevention was a cooperative effort between ED and the National Institute of Justice (NIJ), U.S. Department of Justice. Mandated by Congress to investigate the extent of violence in schools, as well as efforts to prevent violence, ED commissioned the Study on School Violence and Prevention. At the same time, NIJ awarded a grant to conduct the National Study of Delinquency Prevention in Schools. To maximize resources and minimize the burden to schools, the agencies and external researchers and evaluators agreed to merge many of the study activities. In this report, we refer to the project as the Study on School Violence and Prevention; in NIJ and other publications, the project is called the National Study of Delinquency Prevention in Schools.

## **Study Objectives**

We know that some schools are safer than others and that some schools appear to be more successful than others in implementing efforts to prevent problem behavior. Understanding the factors and processes that contribute to school safety and the conditions under which prevention programs are well implemented is critical to policymakers and school officials. Hence, the study has focused on the extent and nature of problem behavior in schools according to students, teachers, and principals; and on the types of prevention efforts that are underway in schools and how well schools are implementing these efforts. The study has also investigated how prevention activities are funded and the role of SDFSCA in these efforts. The following study questions have guided the study.

- What is the incidence of problem behavior in schools nationally?
- What types of efforts are underway in schools to prevent problem behavior?
- How well are efforts to prevent problem behavior implemented?
- To what extent do schools use sound planning processes and information on school prevention options to improve school management?
- What sources of funding (including SDFSCA funds) do schools use to support prevention efforts?
- What are the policy-relevant characteristics and processes that distinguish safe and unsafe schools?

Although this study did seek to assess the implementation of prevention activities and to identify factors that may contribute to school safety, rigorously evaluating the effectiveness of these activities and factors was beyond its scope.

## **Method**

The Study on School Violence and Prevention is based on three separate data collection and analysis efforts.

- For the national level of the study, we conducted secondary analyses of the data collected for the Principal/School Disciplinarian Survey on School Violence, which was sponsored by the National Center on Education Statistics (Heaviside et. al., 1998); this survey collected information on school crime and violence prevention

efforts from administrators in a probability sample of public elementary and secondary schools.

- The intermediate level of the study collected information on school crime and efforts intended to prevent problem behavior from multiple sources (e.g., school district administrators, principals, and program providers) in a probability sample of public and private elementary and secondary schools.
- The intensive level of the study drew on detailed quantitative and qualitative information collected from multiple sources in a purposive sample of 40 public secondary schools that participated in the intermediate level.

This report presents what we have learned from the data collected for the intermediate level of the study. We report on the national level and intensive level of the study separately.

**Sample.** From all public and private (sectarian and nonsectarian) schools in the United States, this study sampled 1,287 elementary schools, middle schools, and high schools to participate in the study. We stratified the sample by instructional level (elementary, middle, and senior high school) and metropolitan status (rural, suburban, and urban), because we hypothesized that both school problem behavior and prevention activities were likely to differ greatly on both of these factors. Using an equal probability of selection sampling method, we selected 143 schools from each of the nine strata. We recruited schools for the study through an extensive mail and telephone campaign.

**Data Collection.** We conducted the first phase of intermediate level data collection, the principal screener survey, by means of mail survey with telephone followup. For this phase, we asked principals to report on the number and types of prevention activities in place at their schools. Their reports were guided by a comprehensive taxonomy of prevention efforts that classified activities into 19 different groups ranging from individual-level prevention instruction or training to school-level activities intended to change or maintain the culture or climate of the school. (See Chapter 3 for more detailed information on these activities.) Gottfredson Associates, Inc. developed the taxonomy after conducting an extensive review of the types of prevention activities implemented in schools nationally.

The second phase of the intermediate level data collection entailed a second principal survey and surveys of individuals coordinating prevention activities (program providers) in the same schools that participated in the initial principal survey. The principal survey collected information on principal leadership, organizational capacity, discipline policy and management of student behavior, incidents of problem behavior reported to police, and funding sources for programs. The program provider survey collected information on provider background and training, program selection and program

implementation, including type of students served and amount of services delivered, as well as the use of best practices.<sup>1</sup> For schools that reported more than one prevention activity in a given category (i.e., prevention curriculum, instruction, or training; security and surveillance), we used probability sampling to select one of these activities, and collected information on only the selected activity at the school.

At middle schools and high schools (secondary schools), in addition to surveying principals and program providers, the second phase of data collection included surveying all teachers and a probability sample of students. (Student participation was voluntary; participating students were anonymous, and parents had the opportunity to refuse participation for their children.) The teacher questionnaire focused on school safety, victimization, school climate, and level of implementation of prevention programming. The student survey collected information on school safety, victimization, problem behavior, and school climate.

The second phase of data collection also included a survey of officials (primarily SDFSCA coordinators) in the districts associated with the middle and high schools participating in the study. This survey covered SDFSCA and non-SDFSCA programs and funding, as well as interactions between the district and school personnel that operate prevention programs.

**Analysis.** In this report, we present weighted estimates. That is, the results reflect the probabilities of selection and nonresponse, making it more likely that the results presented are representative of schools nationally.

Where appropriate, we conducted tests of statistical significance to check whether or not observed differences among groups are simply due to chance. Except where noted, we highlight in the text only differences that are statistically significant at a probability of less than or equal to five percent.

## **Strengths and Limitations**

The main strengths of the Study on School Violence and Prevention are that it used multiple sources of information on problem behavior in schools and collected detailed information on the types and implementation of prevention efforts. This is the first study in more than 20 years to obtain

---

<sup>1</sup> Best practices were based on expert judgement and a review of the literature on the effectiveness of prevention activities. (See Gottfredson et al., 2000.)

information nationally on problem behavior in schools from multiple sources (i.e., students, teachers, and principals). It is also the first study to collect detailed information on how schools seek to prevent problem behavior and to promote safe and orderly environments nationally.

Another strength is the extensive data collected on the implementation of prevention efforts and analyses designed to evaluate the adequacy of implementation. Additionally, the types of activities covered go beyond what are typically considered prevention programs (e.g., prevention instruction and training), to include all activities undertaken by schools to prevent problem behavior and promote school safety (e.g., improvements to instructional practices).

The chief limitations of the study are the response rates achieved and level of detail available. The study encountered much greater difficulty than anticipated in obtaining the cooperation of schools. We obtained a 69 percent response rate in the screening phase of data collection, and 53 percent of the schools originally sampled participated in one or more of the different data collection efforts during the detailed phase. Forty-nine percent of schools participated in the principal survey; 50 percent of the secondary schools participated in the teacher survey; and 38 percent of the secondary schools participated in the student survey. Nonresponse tended to be higher for schools predominantly located in urban areas and for non-Catholic private schools. Hence, these types of schools are underrepresented in the responding schools. We sought to correct for the under-representation through nonresponse adjustments to weights. However, to the extent that the nonresponding schools differed from other schools on the variables of interest, their absence may still influence the study results. (See Appendix A for a detailed discussion of response rates and weighting.)

Additionally, although a great deal of information was collected from program providers and other sources for the intermediate level, surveys necessarily limit the extent to which we can learn about the processes and reasons underlying some of the phenomena observed. With the in-person interviews that we conducted for the intensive level of the study (reported on separately), we were able to explore some issues in greater depth, although for a much smaller number of schools.

## **Report Organization**

This report is organized around the topics covered by the study questions. The chapters are as follows.

- **Chapter 1**, above, provides an introduction to and background about problem behavior in schools.
- **Chapter 2** describes the extent of problem behavior in schools, including the types of victimization experienced by students and teachers, and how students and teachers perceive the safety of their schools.
- **Chapter 3** discusses efforts used by schools to prevent problem behavior, including the number of efforts in place by instructional level and the number of different types of efforts in place.
- **Chapter 4** covers the implementation of efforts to prevent problem behavior and assesses differences in quality of implementation by type of effort and type of school.
- **Chapter 5** describes how schools and districts plan prevention activities and how they use information (i.e., on effectiveness) in doing so.
- **Chapter 6** presents information on how districts and schools fund prevention programs and on the importance of SDFSCA funds to prevention activities.
- **Chapter 7** discusses our conclusions and their implications for policy and practice.

In Chapters 2 to 5, we also contrast schools with high levels of serious violent behavior with other schools on some of the topics covered in the chapters. These results allow us to consider the characteristics and processes that distinguish safe and unsafe schools.

In Appendix A, we provide additional information on our methodology. We provide additional information on definitions and measures of program quality in Appendix B.

## **2. PROBLEM BEHAVIOR IN SCHOOLS**

Despite the publicity about school violence, elementary and secondary schools nationally are relatively safe. Serious violent crime is rare, relative to less serious violent crime and property crime. Middle schools have higher levels of many types of problem behavior than other schools. Although students and teachers generally perceive their schools as safe, teachers report that problem behavior often interferes with teaching.

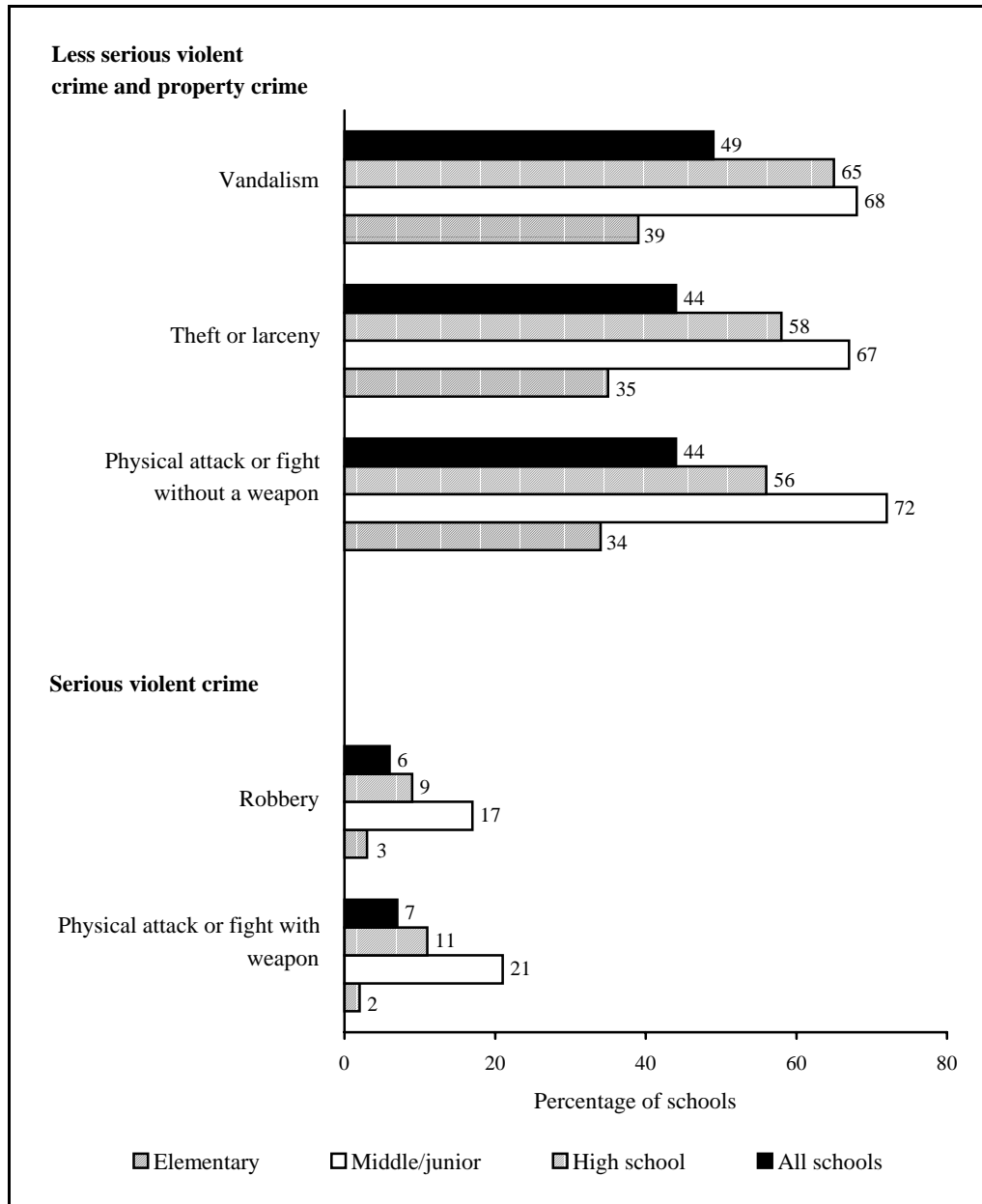
This chapter is based on the results of surveys of principals, students, and teachers in our national probability sample of schools. Elementary school, middle school, and high school principals reported on the number of incidents of problem behavior for their schools, during and after regular school hours; we report the results in terms of the percentage of schools nationally that experienced at least one incident of different types of problem behavior. A probability sample of middle school and high school students at the schools reported on whether or not they were the victims of different types of crimes in school and on whether or not they avoided certain locations, in and out of school, because of safety concerns; we report the results in terms of the percentage of students nationally. Middle school and high school teachers at the schools reported on whether or not they were the victims of different types of crimes in school, whether or not they avoided certain locations in school because of safety concerns, and the extent to which problem behavior interfered with their teaching; we report the results in terms of the percentage of teachers nationally. The results are for the 1997-98 school year.

### **Although Schools Experience High Levels of Less Serious Violent Crime and Property Crime, Serious Violent Crime Is Relatively Infrequent**

Elementary, middle, and senior high schools experience high levels of less serious violent crime and property crime. This problem behavior is noteworthy because it can potentially interfere with learning. However, serious violent crime, which can raise a high level of concern for the safety of students and school personnel, is relatively rare in schools.

**Less serious violent crime and property crime.** Approximately two-thirds of schools (66%) and students (66%) experienced one or more incidents of any type of less serious violent crime and property crime during the 1997-98 school year. Forty-four percent of schools reported to police one or more incidents of fighting without a weapon. (See Figure 2-1.) A similar percentage of schools reported

**Figure 2-1. Percentage of schools reporting one or more incidents of crime to law enforcement -- 1997-98 school year**



to police at least one incident of theft or larceny (44%), or vandalism (49%) during the 1997-98 school year. Proportionally, fewer elementary schools reported one or more of these types of problem behavior (58%) than middle schools (85%) or high schools (77%).

During the 1997-98 school year, approximately 18 percent of students in middle or senior high schools were threatened with a beating, and 13 percent of students were physically attacked. (See Figure 2-2.) Forty-seven percent of students in middle and senior high schools experienced theft of property worth less than \$1; 45 percent of students experienced theft of property worth \$1 or more.

Approximately 62 percent of teachers experienced one or more incidents of any type of less serious violent crime and property crime. (See Figure 2-3.) Forty-two percent of teachers in middle and senior high schools received obscene remarks or gestures from a student during the past school year. A smaller number of teachers experienced damage to personal property worth less than \$10 (28%), theft of property worth less than \$10 (24%), and theft of property worth more than \$10 (12%).

**Serious Violent Crime.** During the 1997-98 school year, approximately 10 percent of schools and 11 percent of students experienced one or more incidents of any type of serious violent crime. These levels of crime are about one-sixth the levels of less serious violent crime and property crime. Seven percent of schools reported to police one or more incidents of physical attack or fight with a weapon; 6 percent of schools reported one or more incidents of robbery.<sup>2</sup>

Four percent of students were robbed of less than \$1, and 6 percent were robbed of more than \$1. Approximately 5 percent were threatened with a gun or knife.

Approximately four percent of middle and senior high school teachers experienced one or more incidents of any type of serious violent crime during the 1997-98 school year. These teachers were attacked and received minor injuries (3%), attacked and received injuries that required a doctor (0.7%), and confronted by weapons at school (0.5%).

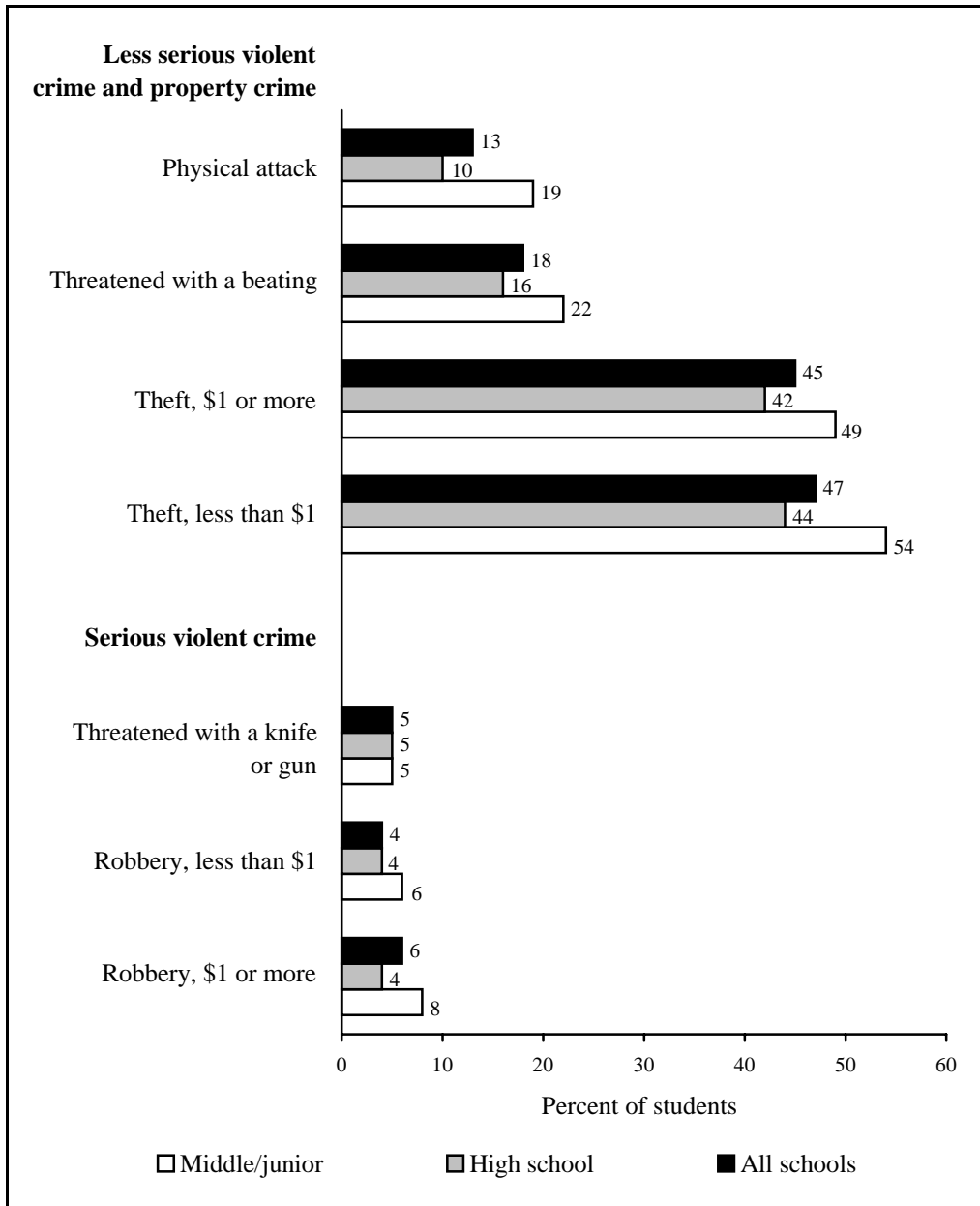
### **Middle Schools Experience More Problem Behavior than Other Schools**

Middle schools experienced higher levels of some types of problem behavior than elementary schools or high schools. Compared with elementary schools and high schools, a higher percentage of middle schools reported to police one or more incidents of physical attack or fight with a

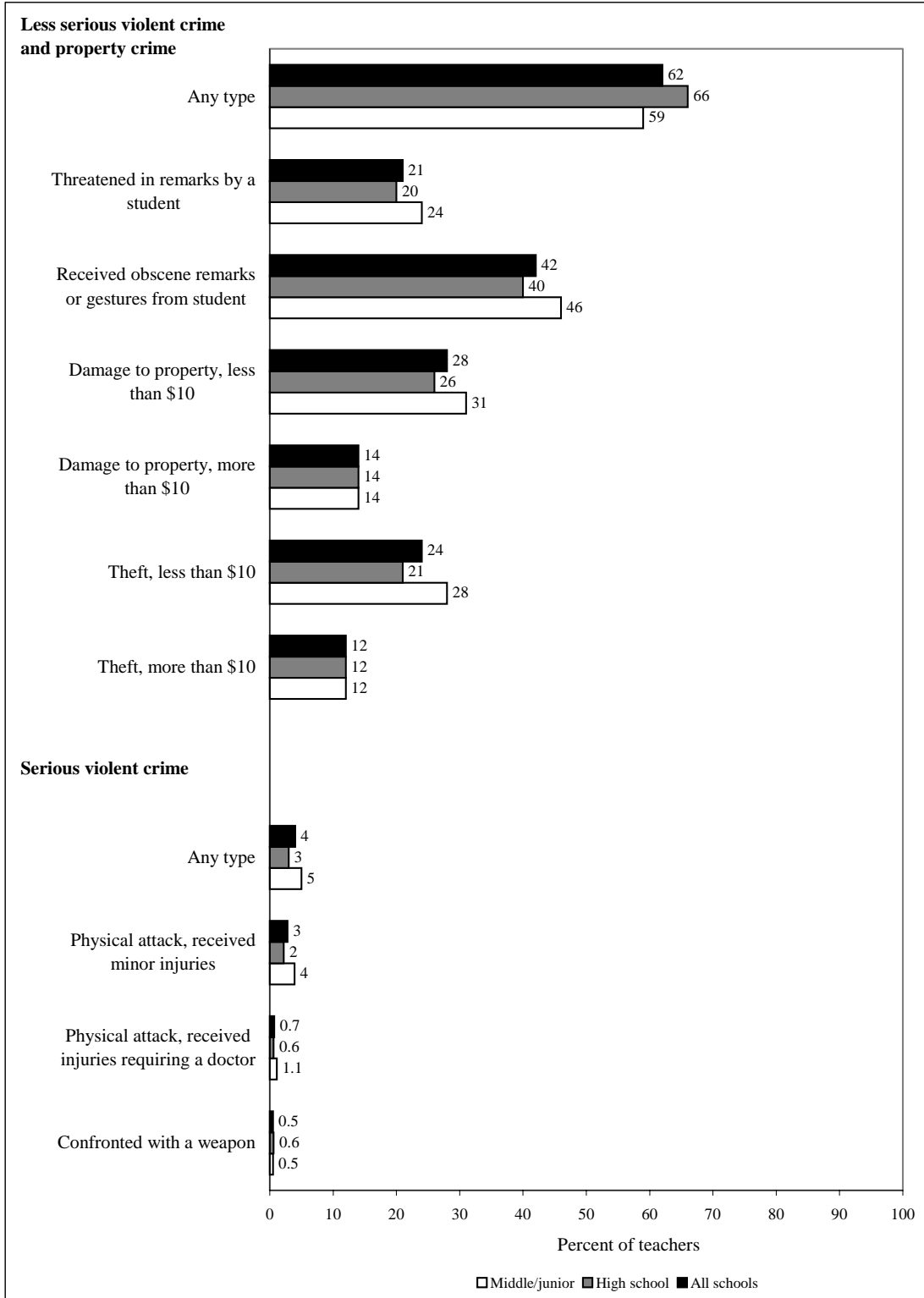
---

<sup>2</sup> Robbery differs from theft in that it entails the use or threat of violence or force.

**Figure 2-2. Percentage of students reporting one or more incidents of personal victimization this year in school – 1997-98 school year**



**Figure 2-3. Percentage of teachers reporting one or more incidents of personal victimization this year in school -- 1997-98 school year**



weapon (21% of middle schools versus 2% of elementary schools and 11% of high schools).<sup>3</sup> A higher percentage of middle schools also reported one or more incidents of fighting without a weapon (72% of middle schools versus 56% of high schools and 34% of elementary schools).

A slightly higher percentage of middle school students than high school students were the victims of robbery during the 1997-98 school year. For example, 8 percent of middle school students were robbed of \$1 or more in school, compared with 4 percent of high school students. Additionally, for all types of less serious violent crime and property crime, a higher percentage of middle school students than high school students reported being victimized. For example, 19 percent of middle school students were physically attacked in school, compared with 10 percent of high school students.

For some types of less serious violent crime and property crime, the percentage of teachers that were victimized during the 1997-98 school year was higher for middle schools than high schools. A higher percentage of middle school teachers than high school teachers received obscene remarks or gestures from a student (46% of middle school teachers versus 40% of high school teachers) and experienced damage to personal property worth less than \$10 (31% of middle school teachers versus 26% of high school teachers). Middle school teachers also were more likely than high school teachers to be threatened by a student (24% of middle school teachers and 20% of high school teachers).

### **Students and Teachers Generally Feel Safe at School**

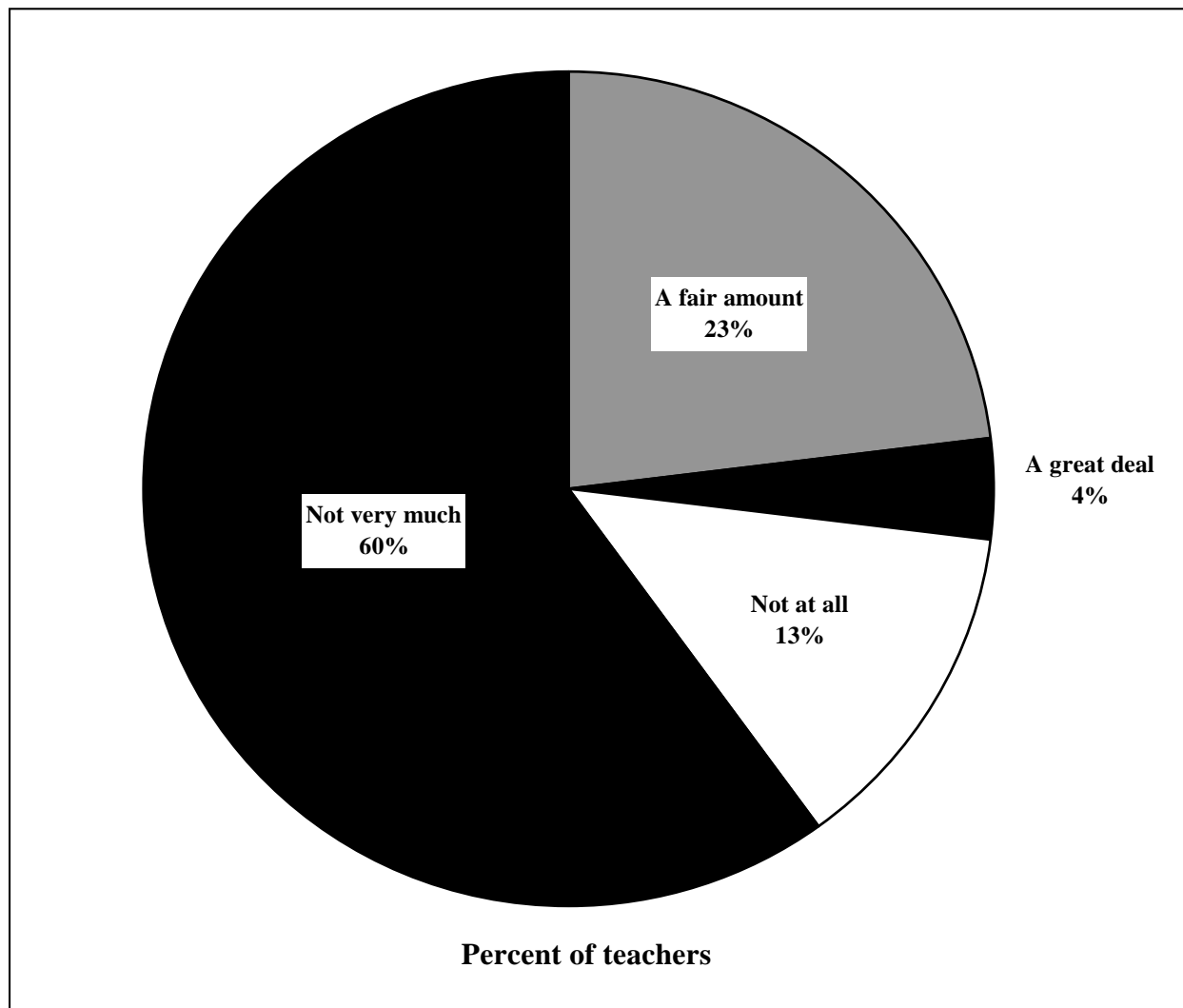
Approximately 24 percent of students and teachers in middle and senior high schools would avoid one or more places at school out of fear that someone might bother or hurt them there. As many as 12 percent of students would avoid a specific place at school (e.g., locker room). By way of comparison, 16 percent of students would avoid a place in their neighborhood other than the street where they live.

Approximately 27 percent of teachers in middle and senior high schools rated one or more places at school other than their classrooms (especially locker rooms or gym, and rest rooms) as relatively unsafe. They did feel that their classrooms were quite safe. Perceptions of safety, however, appear to be unrelated to student misbehavior in classrooms: 27 percent of teachers in middle and senior high schools

---

<sup>3</sup> Findings based on principal reports indicating that middle schools have higher levels of some types of school crime than high schools are inconsistent with results from the NCES Principal/School Disciplinarian Survey on School Violence (Heaviside, Rowand, Williams & Farris, 1998), which is also based on principal reports. These inconsistencies could be due to several methodological differences between the studies, including the universe of schools selected and the response rates achieved.

**Figure 2-4. Percentage of teachers reporting on the extent to which student behavior prevents them from teaching -- 1997-1998 school year**



reported that the behavior of some students keeps them from teaching a fair amount or great deal of the time. (See Figure 2-4.)

### **Problem Schools: Characteristics and Problem Behavior**

To increase understanding of the characteristics and dynamics of schools with the greatest safety concerns, we identified the middle schools and high schools that had the highest levels of serious violent crime (robbery and physical attack or fight with a weapon) among schools in our national probability sample. We selected a school for this analysis if its principal indicated that incidents of serious violent crime reported to the police exceeded 2 per 1,000 students.<sup>4</sup> This level of crime in schools is substantially higher than we found nationally (on average, 1.5 incidents per 1,000 students for middle schools and 0.9 incidents per 1000 students for high schools); it also is approximately twice the level of serious violent crime detected in the study of Violence and Discipline Problems in U.S. Public Schools: 1996-97 (Heaviside et. al., 1998). The middle schools in the analysis account for approximately 16 percent of middle schools nationally; the high schools account for approximately 8 percent of high schools nationally.

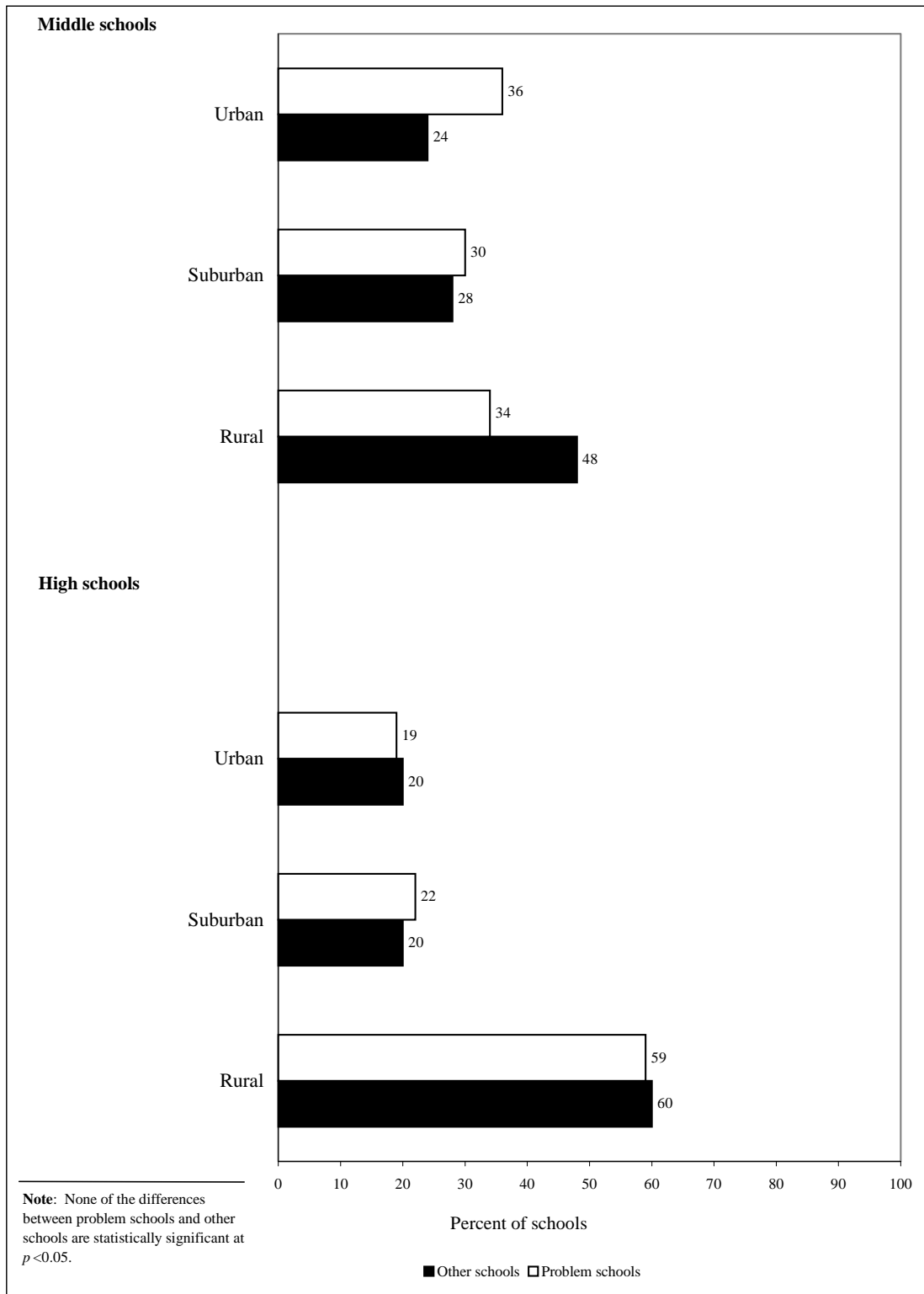
In this section and in each of the remaining chapters, we contrast the problem schools with all of the other schools at the same instructional level on their characteristics, problem behavior, types of prevention activities in operation, quality of prevention programming, and prevention planning. For these comparisons, we conducted tests of statistical significance of the observed differences between the problem schools and other schools. First, we examine the characteristics of the problem schools and the patterns of problem behavior that we found.

**Characteristics.** Problem schools identified based on the principal reports were very similar to other schools on several characteristics. These characteristics include the percentage of schools that were in urban, suburban and rural locations, and the number of students enrolled. (See Figure 2-5.) The problem schools and other schools also were similar on the percentage of students who were eligible for free or reduced-price lunch. (See Figure 2-6.) Although the problem high schools were similar to (i.e.,

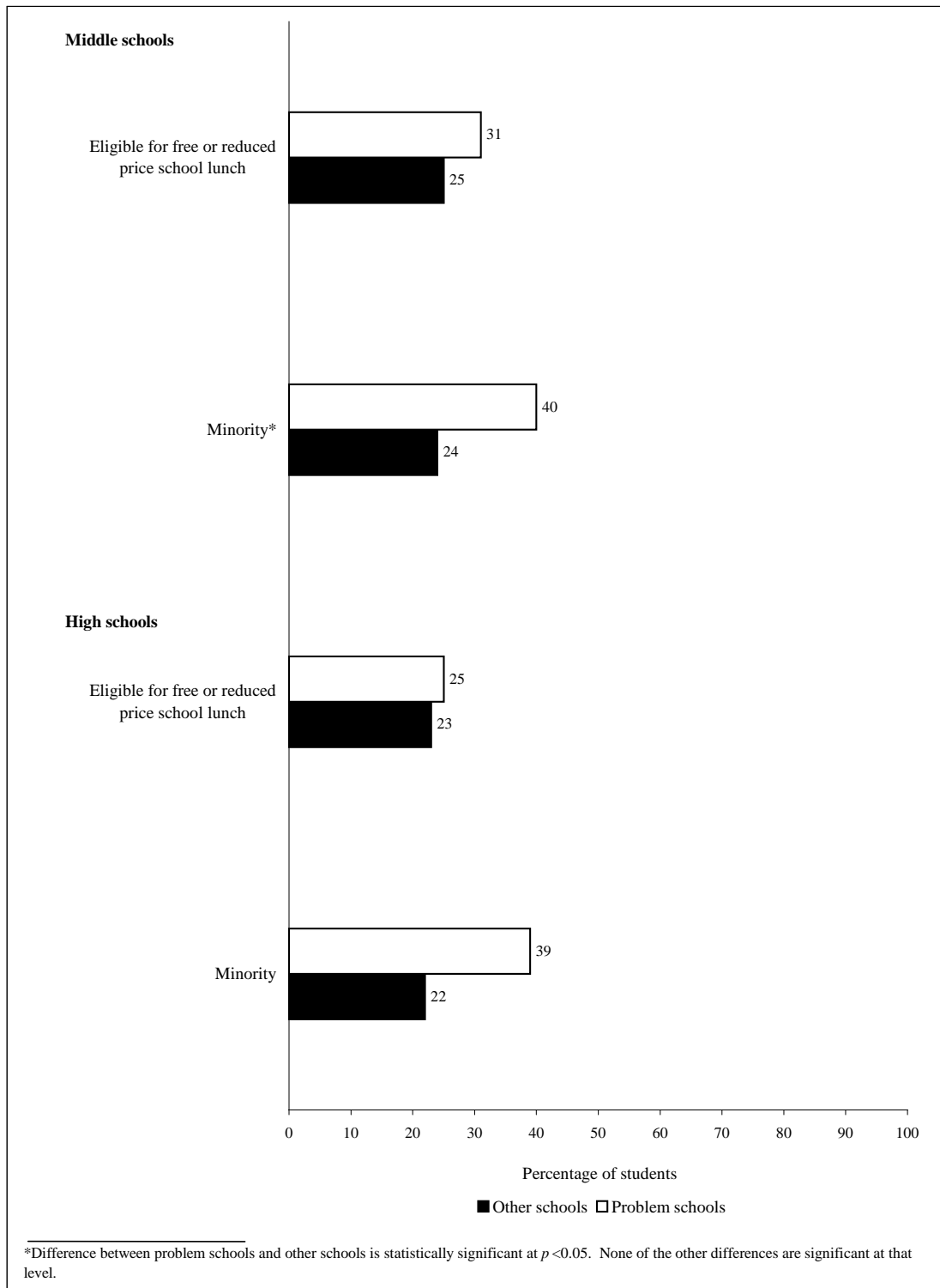
---

<sup>4</sup> We had considered identifying the problem schools using combinations of principal, student, and teacher reports. However, those different types of reports were only weakly associated with one another. While they are imperfect, we chose to use the principal reports because they were more likely to capture incidents of serious violent crime than the other types of reports.

**Figure 2-5. Characteristics of problem schools and other schools -- 1997-98 school year**



**Figure 2-6. Characteristics of students in problem schools and other schools -- 1997-98 school year**



not statistically different from) the other high schools on the percentage of minority students, the problem middle schools had a higher percentage of minority students (40%) than other middle schools (24%).<sup>5</sup>

**Problem Behavior.** For practically all types of crime reported by the principal to the police, the problem schools had higher levels of crime than other schools. This is true for middle schools and high schools. (See Figure 2-7 and Figure 2-8.) The differences are greatest on serious violent crime by definition. (We identified the problem schools using principal reports of violent crime.) For example, 100 percent of problem middle schools experienced one or more incidents of any type of serious violent crime compared with 15 percent of other schools. However, we also found higher levels of less serious violent crime and property crime for the problem schools than for other schools. For example, 98 percent of problem middle schools experienced one or more incidents of any type of less serious violent crime and property crime compared with 82 percent of other schools. The only exception is that problem middle schools and other middle schools were similar (statistically) on vandalism.

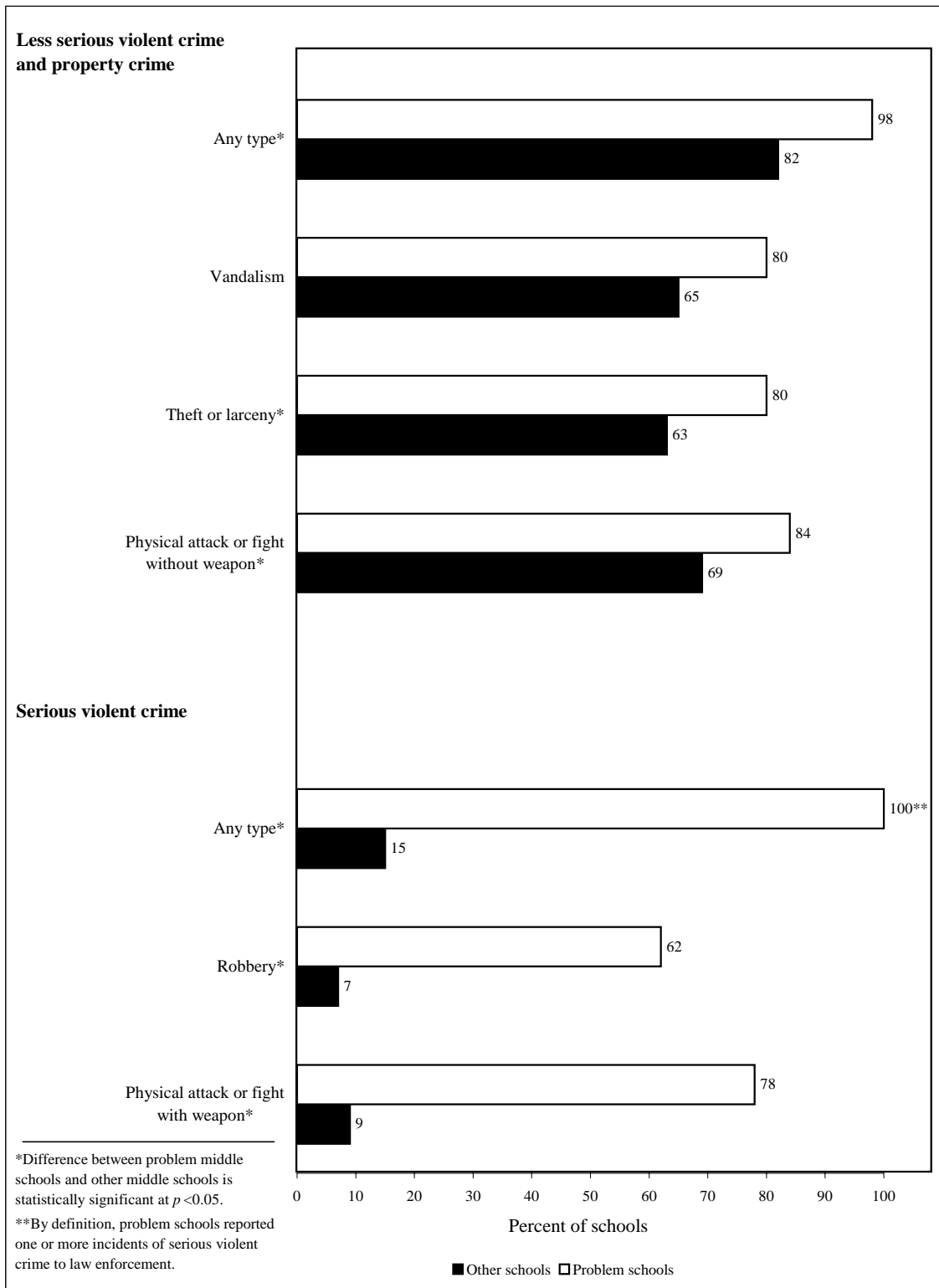
The problem high schools were similar overall to the other high schools on the percentage of students who experienced crimes at school. For the problem middle schools, the exceptions are that higher percentages of students experienced one or more incidents of any type of serious violent crime (16% for problem schools versus 13% for other schools) and of robbery of \$1 or more (10% for problem schools versus 7% for other schools). (See Figure 2-9.) We found no differences between the problem high schools and other schools on less serious violent crime and property crime. (See Figure 2-10.) However, the pattern, especially for serious violent crime, suggests that students in problem schools may experience higher levels of crime.

Students attending problem high schools were similar to students attending other high schools in terms of feeling unsafe in one or more school locations, on the street where they live, and in other parts of their neighborhoods. However, more students attending problem middle schools than other middle schools reported feeling unsafe in one or more school locations and in parts of their neighborhoods.

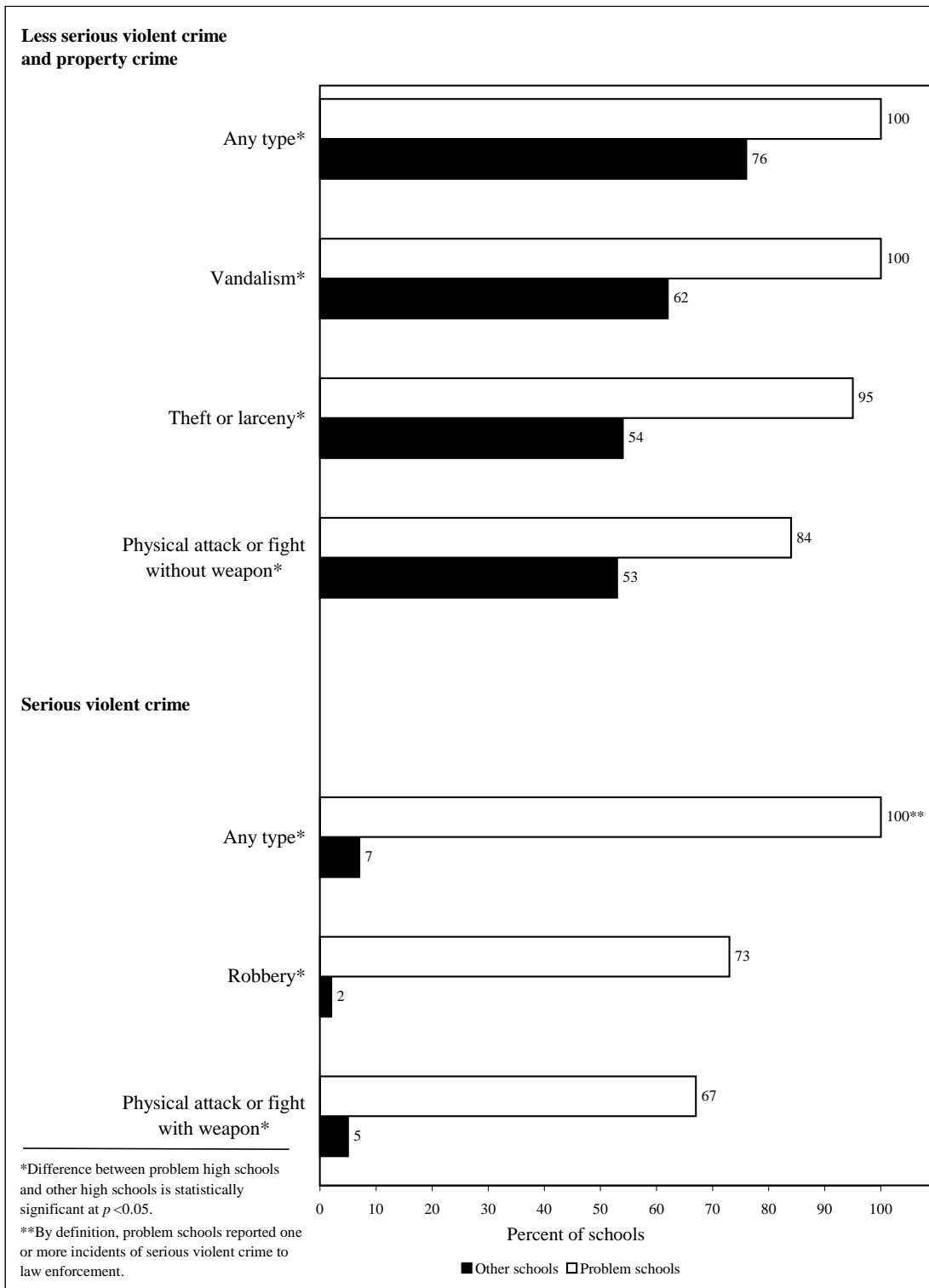
---

<sup>5</sup>While the percentage-point difference on the percentage of minorities between the problem high schools and other high schools is very close to the difference between the problem middle schools and other high schools, only the latter difference is statistically significant at  $p < 0.05$ . This occurred because the variability among high schools on percentage of minorities was substantially higher for the high schools than for the middle schools. The small number of schools in the problem school analysis contributed to the variability.

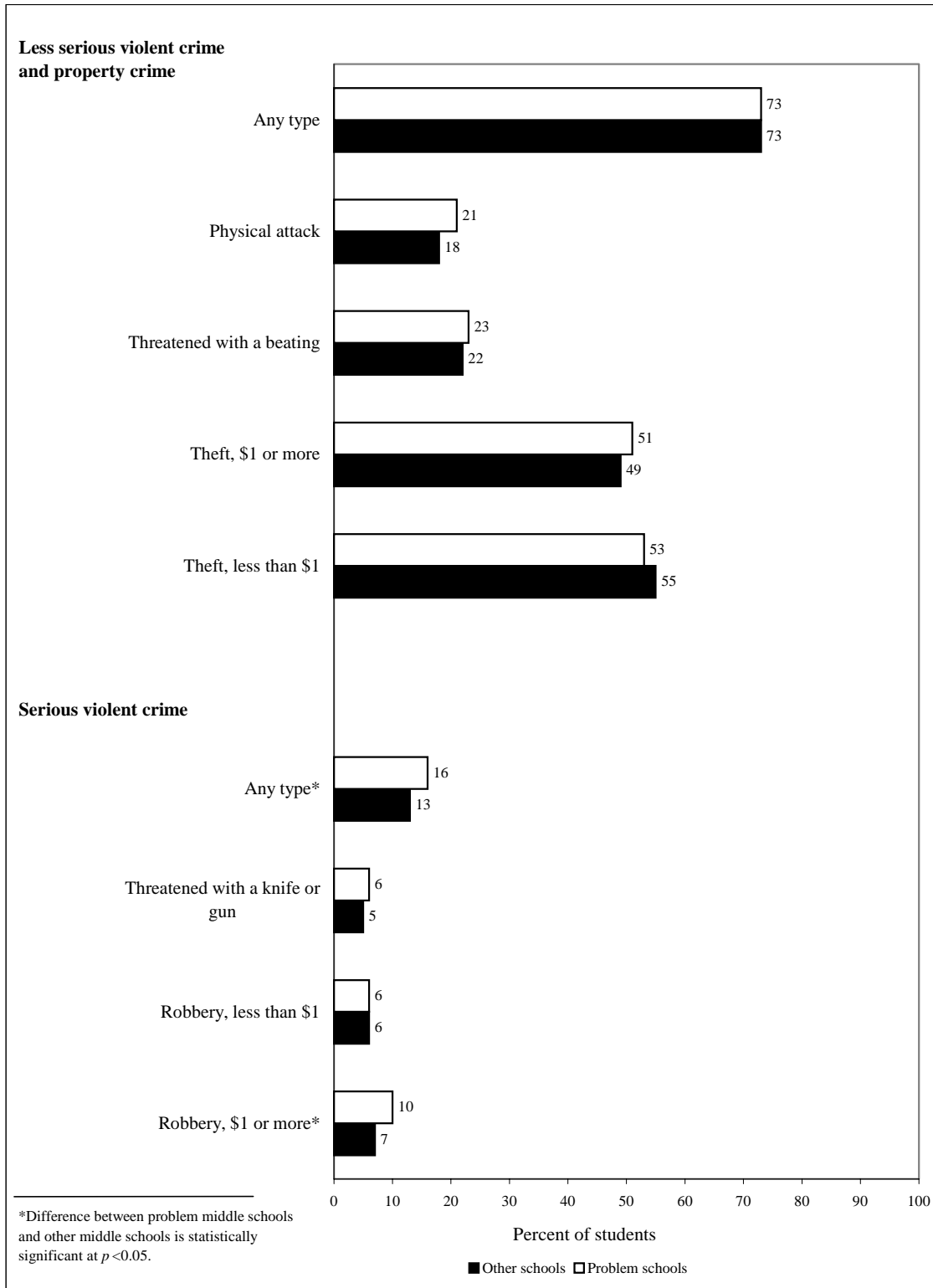
**Figure 2-7. Percentage of problem middle schools and other middle schools reporting one or more incidents of crime to law enforcement -- 1997-98 school year**



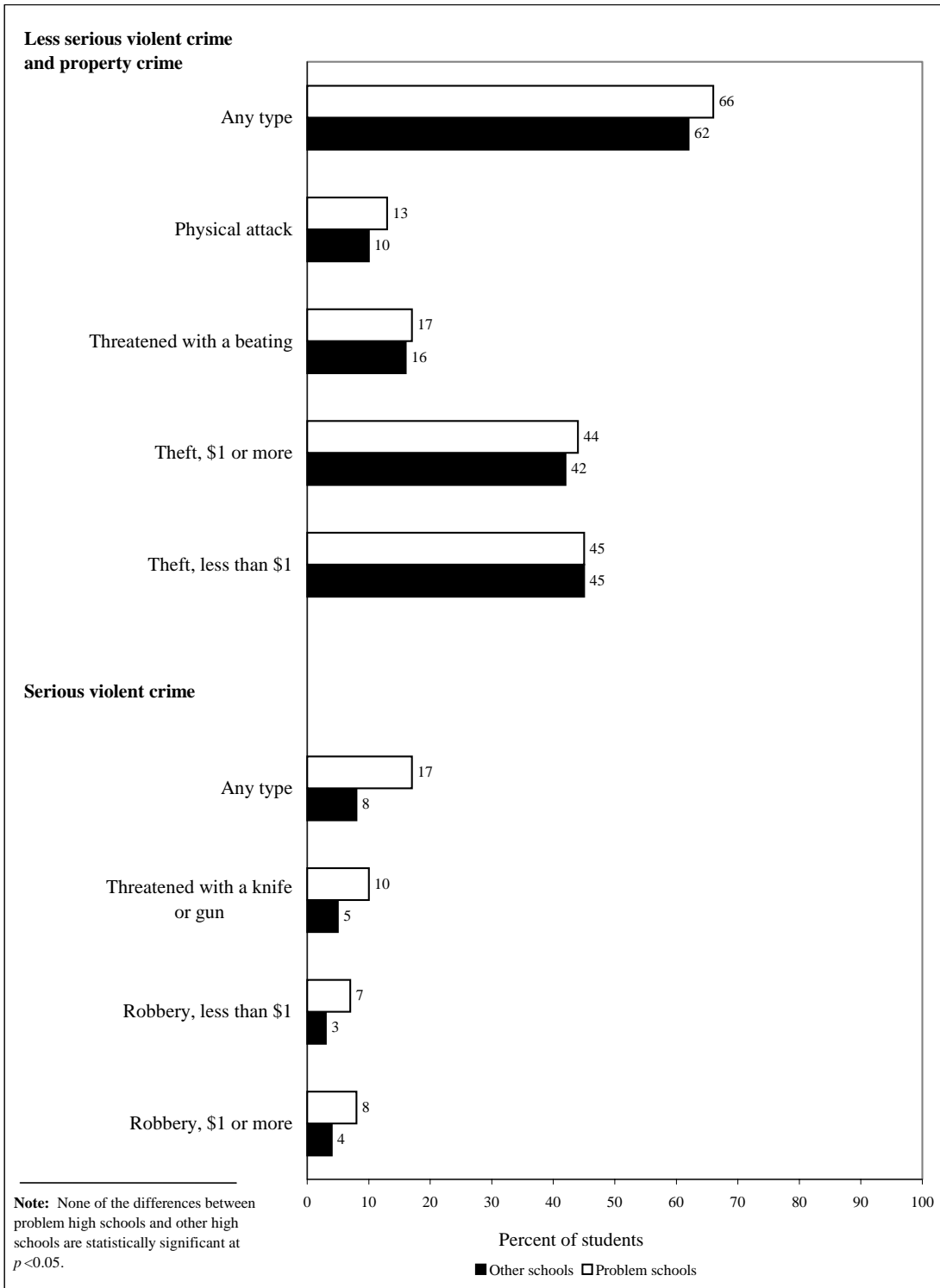
**Figure 2-8. Percentage of problem high schools and other high schools reporting one or more incidents of crime to law enforcement -- 1997-98 school year**



**Figure 2-9. Percentage of students in problem middle schools and other middle schools reporting personal victimization this year in school -- 1997-98 school year**

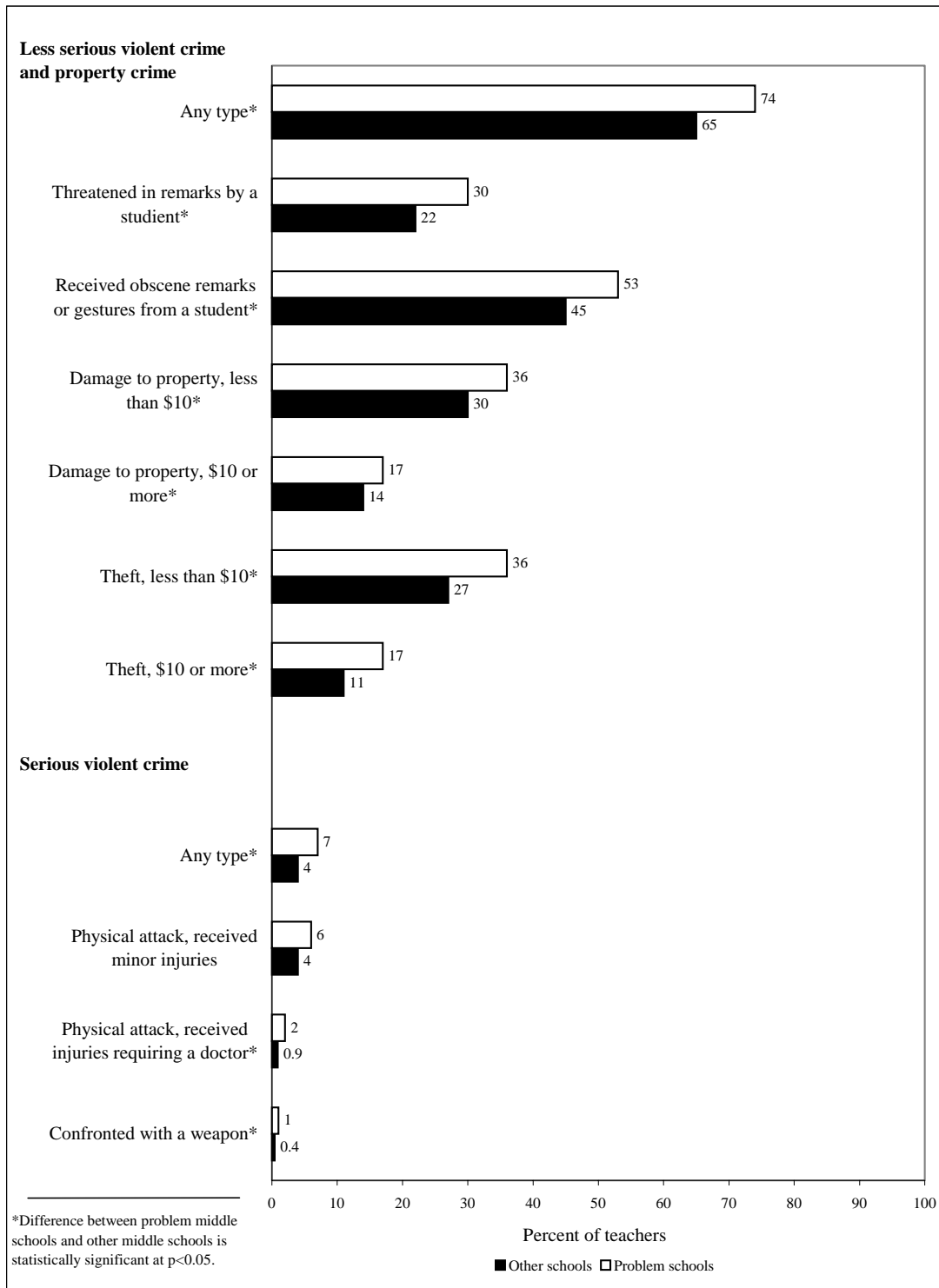


**Figure 2-10. Percentage of students in problem high schools and other high schools reporting personal victimization this year in school -- 1997-98 school year**

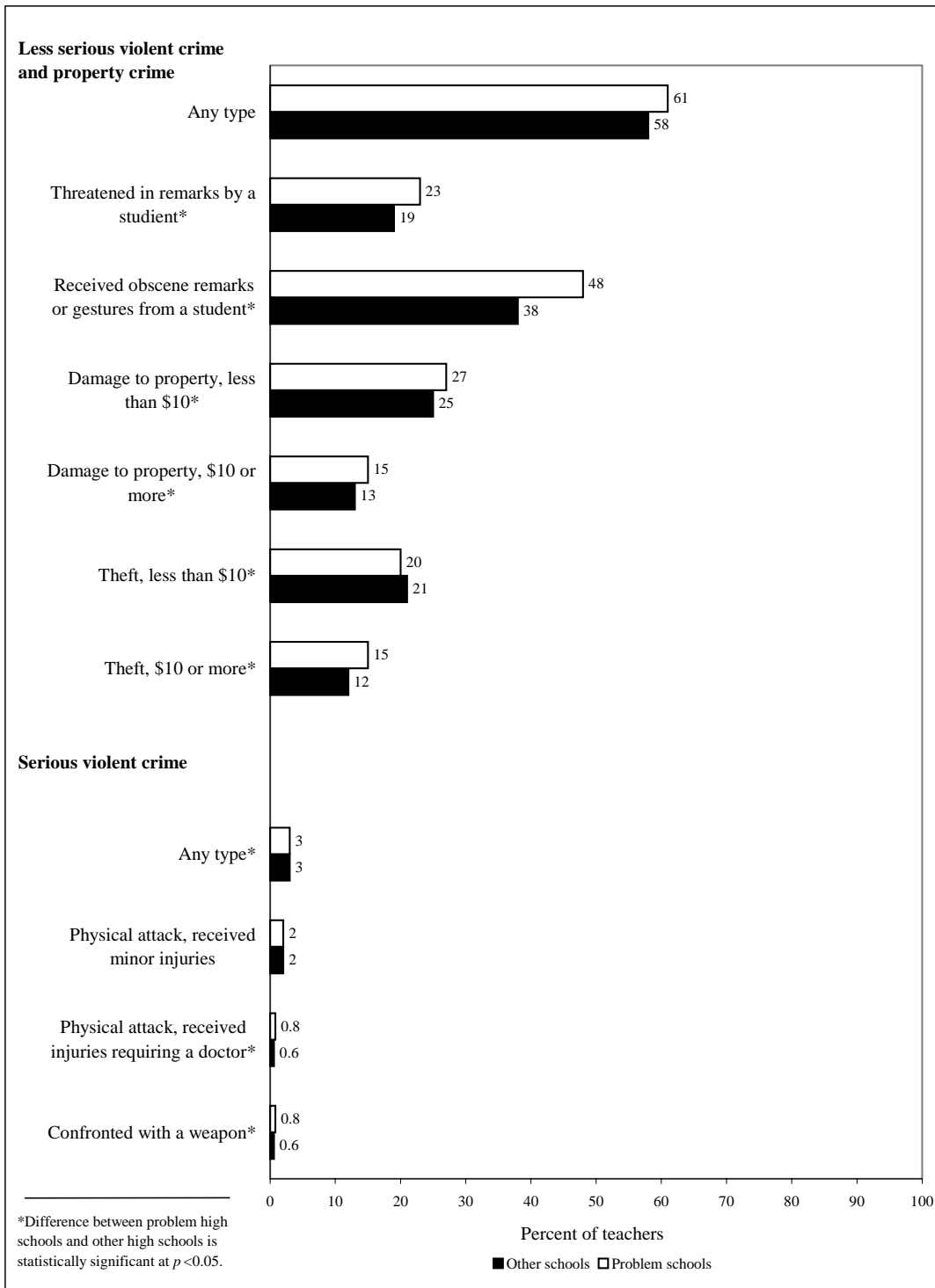


Teachers in problem middle schools experience more crime and feel more unsafe than teachers in other middle schools. (See Figure 2-11.) For example, a higher percentage of teachers in problem middle schools than other middle schools experienced damage to and theft of their personal property. Teachers in problem middle schools were also more likely to receive obscene remarks or gestures or be threatened by a student. In addition, a higher percentage of teachers in problem middle schools compared with other middle schools reported having a weapon pulled on them and experiencing one or more incidents of serious violent crime. Finally, middle schools teachers in problem schools more often reported feeling unsafe in one or more places in their school, and a higher percentage indicated that the amount of problem behavior in their class prevented them from teaching. The problem high schools were similar overall to the other high schools on the percentage of teachers who experienced crimes at school. (See Figure 2-12.)

**Figure 2-11. Percentage of teachers in problem middle schools and other middle schools reporting personal victimization this year in school -- 1997-98 school year**



**Figure 2-12. Percentage of teachers in problem high schools and other high schools reporting personal victimization this year in school -- 1997-98 school year**



### **3. EFFORTS TO PREVENT PROBLEM BEHAVIOR IN SCHOOLS**

Schools are implementing a great number and variety of prevention activities. In addition, most schools are communicating school rules to students, and schools are monitoring and recording violations of school rules. Schools also use a variety of responses to desirable and undesirable student behavior. Schools perform best on communication and documentation of school rules and on tracking student behavior. They need the most improvement on the range of responses that they make to student conduct and on maintaining predictable and consistent discipline.

This chapter is based on the results of the screener survey of principals in our national probability sample of schools. Middle school and high school principals reported on whether or not they were implementing in their schools any of 14 types of school prevention activities. (See Table 3-1.) They also reported on whether or not they were using any of five types of school-wide arrangements, such as activities that influence the composition of their schools. (See Table 3-2.) Finally, the principals provided information on the approaches they adopted to communicating and enforcing school rules and to monitoring and tracking student behavior. We report the results in terms of the percentage of schools nationally that implement different types of prevention activities and that adopt certain other practices; we also report findings on the numbers of activities that schools implement nationally.

#### **Schools Are Implementing a Wide Variety of Prevention Activities**

Principals reported using highly diverse prevention activities within the 14 types of activities. However, schools used some types of activities much more frequently than they did other types.

**Categories of School Activities.** The most commonly used category of school activities according to principals is prevention curriculum, instruction, or training. Nationally, 76 percent of schools report using activities in this category to prevent problem behavior and/or promote orderliness in school. (See Figure 3-1.) This prevention activity is followed in frequency of use by counseling, social work, psychological or therapeutic services (74%) and use of external personnel resources in classrooms (76%). More than 60 percent of schools also report using culture, climate, or norm change; behavior programming or behavior modification; recreation, enrichment, or leisure activities; and improvements to instructional practices.

**Table 3-1. Prevention activity categories and definitions**

<b>Prevention activity category</b>	<b>Definition</b>
Prevention curriculum, instruction, or training	Training or instruction in which the content involves knowledge, skills, attitudes, or values intended to prevent problem behavior. Instruction or training may be brief (less than an hour) or of an extended duration.
Counseling, social work, or psychological and therapeutic interventions	Provision of advice or guidance to remedy or prevent problems using identifiable techniques of psychology, counseling, or social work.
Use of external personnel resources in classrooms	Includes the use of parent or community volunteers, authority figures (e.g., police officers), classroom consultants, aides, or older students.
Culture or climate change, norm change	Includes efforts to establish, encourage, or sustain a special school climate or culture through symbols, ceremonies, or systematic procedures; communication of expectations; and use of social influence or attitude change techniques to obtain commitment to norms.
Behavioral or behavior modification interventions	Tracking student behavior, setting behavior goals, and feedback or punishment to decrease undesired behavior or rewards to increase desired behavior.
Recreational, enrichment, and leisure activities	Provision of, or access to, activities, play, amusement, or diversions; exploration outside the school; for fun or relaxation.
Improvements to classroom organization and management	Activities applied to entire classes to establish and enforce classroom rules, use rewards and punishments, improve the use or management of time, or change the way in which students are grouped for instruction by ability, achievement, or effort within the classroom.
Services to families	Outreach or service to families to improve their child management and supervision practices or to provide other family services.
Mentoring, tutoring, coaching, or apprenticeships	Provision of one-on-one attention to students other than counseling or behavioral programming.

**Table 3-1. Prevention activity categories and definitions (continued)**

Prevention activity category	Definition
Improvements to instructional practices	Activities applied to entire classes that involve the adoption or expansion of improved instructional techniques or practices. Includes training, supervision, or assistance to improve instructional methods. Not included are curriculum changes.
Intergroup relations, interaction between school and community	Activities to promote interaction among members of diverse groups and celebrate diversity, to promote relations between the school and the community, and improve intergroup relations or resolve or reduce conflict.
Youth roles in regulating and responding to student conduct	Student participation in making school rules, in resolving disputes, or in responding to problem behavior (e.g., student court, peer mediation, or student conflict resolution).
Planning structure or process	Structured or facilitated planning activities, as well as activity to coordinate or manage change in the school. Includes the use of methods or processes for planning or program development, inclusion of a broad range of individuals or perspectives in planning, or the use of consultants to advise on school practices or solve problems.
Security and surveillance	Application of procedures to make it difficult for intruders to enter the school; watching entrances, hallways and school grounds; making it easier to report problem behavior; searching for weapons or drugs; removing barriers to observation or inspection; action to avert potential unsafe events.

A higher percentage of middle schools than high schools used each one of the following nine prevention categories: (1) prevention curriculum, instruction, or training; (2) counseling, social work, psychological and therapeutic interventions; (3) culture or climate change, norm change; (4) behavioral or behavior modification interventions; (5) improvements to classroom organization and management; (6) services to families; (7) intergroup relations, interaction between school and community; (8) youth roles in regulating and responding to student conduct; and (9) planning structure or process.

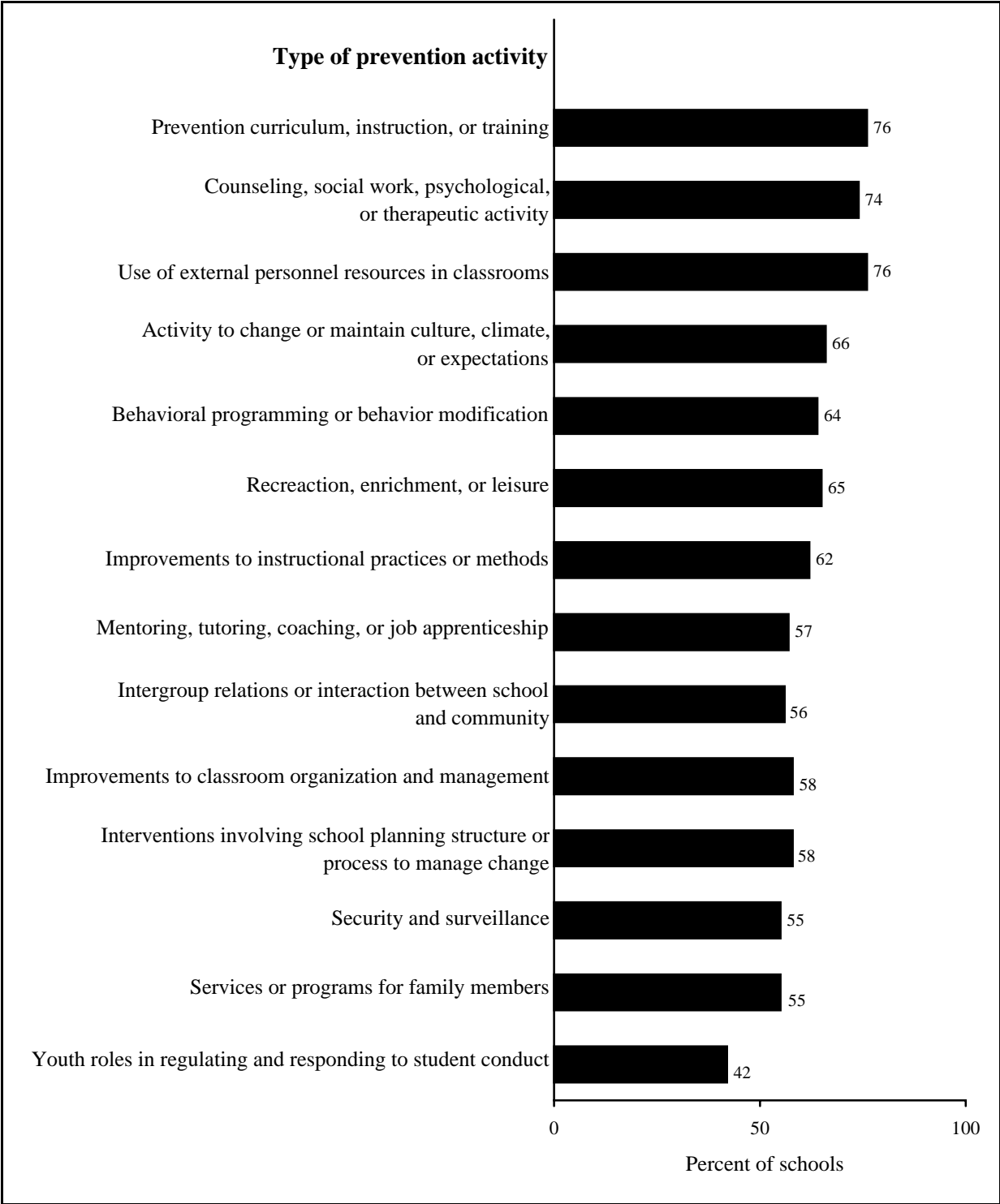
**Table 3-2. School-wide arrangements and definitions**

School-wide arrangement	Definitions
Simple provision of information regarding the harmfulness of violence, drug use, or risky sexual behavior, or about the availability of services	Information may be provided by using posters, newsletters, brochures, announcements, handouts, videos, slide shows, lectures, presentations, readings, or other methods. Information may be directed at students, parents, educators, or community members. Does not include instruction or training. Does not include information conveyed as part of any activity listed above.
Reorganization of grades, classes, or school schedules	Include use of specially arranged school schedules, group of students, formation of within-school units, or small class size to prevent problem behavior or promote school order. May also include within-school units such as “houses” or teams or special grade-to-grade promotion criteria.
Activities that influence the composition of the school’s population	Include special student recruitment efforts, school specialization in attractive educational programs, selective admissions criteria, scholarships, assignment of students with educational or behavior problems to other schools, or a requirement of tuition or fees.
Treatment or prevention interventions for administration, faculty, or staff	Include prevention or treatment of alcohol, tobacco, or other drug use, anger or self-control problems, or other health or mental health problems.
Architectural design or structural features of the school	Include the use of fences, space, facilities, barricades, physical arrangements, or artwork.

**School-wide Arrangements.** The most common type of school-wide prevention activity is simple provision of information. (A figure with details on the frequency of school-wide arrangement is not shown.) More than 80 percent of schools in the nation provide isolated information about alcohol, tobacco, and other drugs as one of their prevention activities. More than 75 percent of middle school principals and 71 percent of high school principals also report providing isolated information on violence, compared with only 56 percent of elementary school principals.

For middle and high schools, the most common organizational strategy was mixing students of differing conduct or abilities (67% overall). This strategy was followed by decreasing class sizes (32%), grouping students by ability or achievement (30%), using stringent criteria for grade-to-grade promotion (30%), and by assigning them to grade-level “houses” or teams (25%). Although equivalent proportions of middle schools and high schools used the other categories, middle schools adopted the use

**Figure 3-1. Percentage of schools using each type of prevention activity – 1997-98 school year**



of houses or teams much more often than high schools or elementary schools (66% compared with 15% and 21%, respectively).

Altering the composition of a school is another way to avoid problem behavior or promote orderliness in schools. This approach can mean either that the school is selective in its recruitment or admission, or that the school is a repository for problem children. Middle schools in all urbanicity categories were equivalent on the extent to which schools were the repository of students with problem behavior. However, suburban and urban high schools are much more selective in admitting students to their schools than rural high schools. For example, private schools and public magnet schools can be selective by actively recruiting students or establishing admissions criteria (e.g., good conduct, high test scores or high grades).

Providing treatment or prevention interventions for administration, faculty, or staff is another way schools try to prevent problem behavior and promote orderliness in schools. Forty percent of schools provided drug treatment and prevention services, 27 percent provided anger management or self-control training, and 39 percent provided other health or mental health services. More urban and suburban schools than rural schools use this strategy to prevent problem behavior.

The architectural (design or structural) feature most often used by both middle (68%) and high schools (56%) to prevent problem behavior is cafeteria arrangements. One example of a cafeteria arrangement is using multiple lunch lines to make lines move faster, which may avoid conflicts in line.

### **Schools Are Using Many Prevention Activities**

Schools nationally use an average of 9 prevention **categories** (out of 14). On average, middle schools implement 8 different categories of prevention activities, while high schools use 10 different categories.

Within the 14 prevention categories, the number of separate or **unique activities** or programs within a school reported by principals ranged from 0 to 61. The median number of activities used by schools nationally is 14, with middle schools reporting more activities than high schools. Urban schools also used more activities than suburban or rural schools (although this difference is not statistically significant). Approximately 20 percent of schools used at least 25 unique activities, and 6 percent reported using at least 40 unique activities.

## **Most Schools Communicate Rules to Students and Monitor and Record Violations of Rules**

Establishing and communicating rules is another way that schools attempt to prevent problem behavior. More than 95 percent of schools provide teachers, students, and parents with a copy of the school rules. In addition, 90 percent of all schools communicate rules or consequences via handbooks or posters. More than 90 percent of all schools have written rules regarding time for student arrival at school, drugs, and weapons; more than 80 percent of schools have formal written rules about students leaving the campus, visitor sign-in and registration, and student dress code. More middle schools than high schools (62% compared with 42%) have written rules on carrying items or wearing clothing in which drugs or weapons could be concealed. Only about one-quarter of all schools (public and private schools combined) have rules regarding uniforms; rural schools are least likely to have such a policy.

Monitoring and recording violations of school rules may be as important as having and communicating such rules. Most schools (92%) have records or files on individual students (paper or computer), and 89 percent currently use printed discipline forms, a referral system, or other methods for identifying and recording rule violations when they occur. Eighty percent of schools also have a system for investigating a student's history, performance, or circumstances to help decide what disciplinary action (if any) to impose.

## **Schools Use a Variety of Responses to Desirable and Undesirable Student Behavior**

To promote orderliness, schools use a variety of responses to desirable and undesirable conduct. The most common response to desirable behavior (96%) across all schools is informal recognition or praise (e.g., oral praise), followed by formal recognition or praise (95%), and job or privilege reinforcers (87%) (e.g., allowing students to help the teacher). (See Figure 3-2.) For many of the other responses (e.g., activity reinforcers, social rewards, material rewards, redeemable token reinforcers), fewer high schools than other schools report using these responses to positive behavior.

To prevent problem behavior, schools use many different types of responses to undesirable behavior, but some types are much more common than others are. Several of the responses to negative or undesirable behavior are used by virtually all of the schools in the sample, including notifying parents

about student behavior, holding a conference with the student, and holding a conference with parents. Ninety-four percent of schools use brief exclusion of students from attendance in regular classes (e.g., in-school suspension or “cooling off” room), and 93 percent use short-term withdrawal of a privilege (e.g., riding the bus, playground access, participation in athletics, or use of the library). The least common responses are corporal punishment (16%) and Saturday detention (16%).<sup>6</sup> Responses involving the legal system (e.g., charging a student with a crime and court action against student or parent) are more often used in middle schools, perhaps because problem behavior is more prevalent at the middle-school level. The use of various practices varies little by urbanicity. However, compared with urban and suburban locations, corporal punishment is more likely to be used in rural areas.

Nearly all schools suspend or expel students, though schools differ on the types of offenses that warrant this extreme disciplinary response to problem behavior. The majority of schools suspend or expel students for possession of a gun (97%), drugs (96%), alcohol (91%), or a knife (91%). Less common but still prevalent are suspensions or expulsions for physical fighting (78%), possession of tobacco (70%), and use of profane or abusive language (52%). It is more common in middle schools than in high schools to suspend or expel students for fighting or possession of tobacco.

### **Schools Are Following Best Practices and Policies on School Rules and on Tracking Student Behavior but Need Improvement on the Range of Responses to Student Conduct and on Predictable and Consistent Discipline**

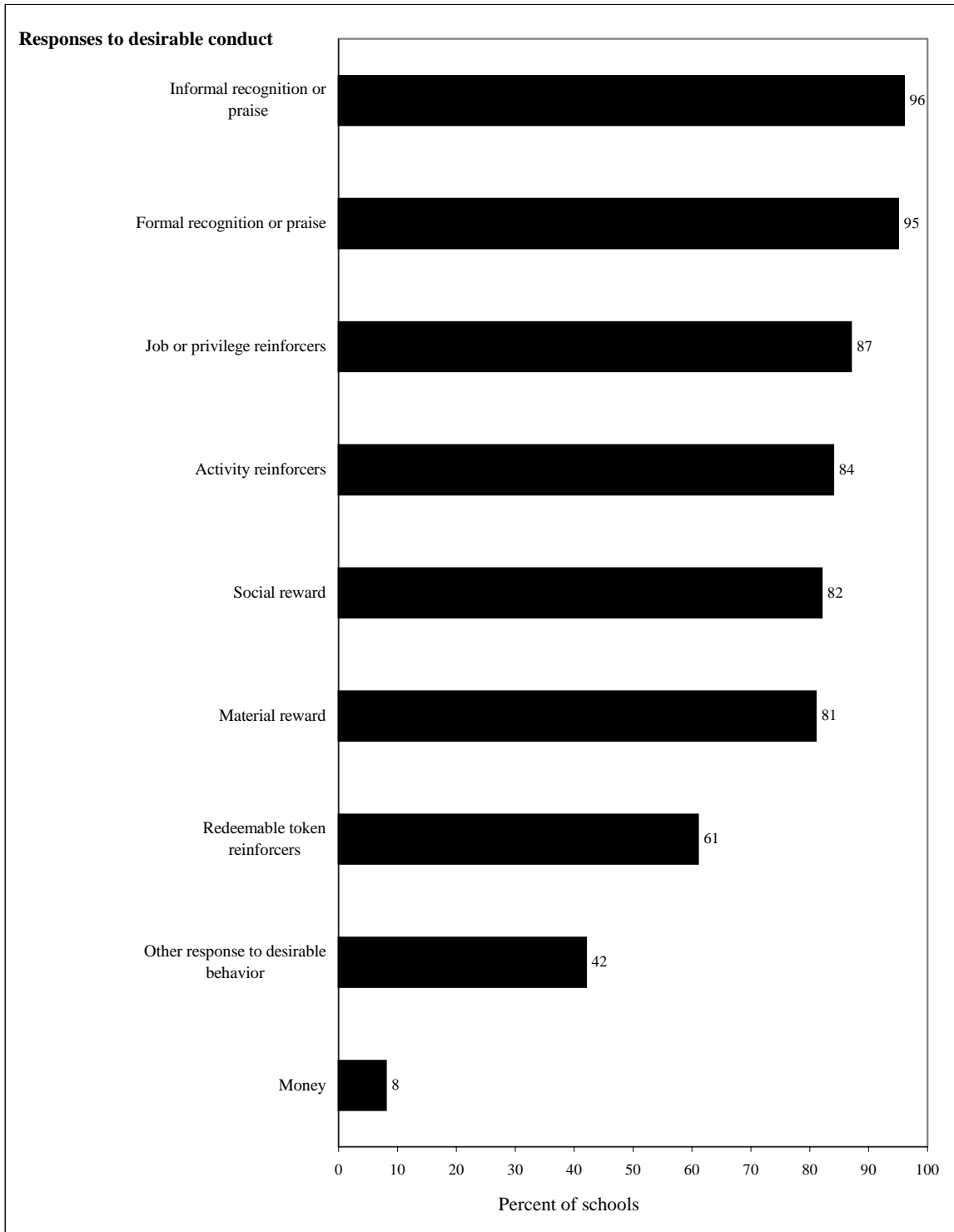
Based on ratings of school practices in five areas (i.e., communication and documentation, range of appropriate responses to misconduct, range of responses to desirable conduct, disciplinarian consistency, and disciplinary decisionmaking), we found that 93 percent of all schools are following best practices for communication and documentation of school rules and for keeping track of student behavior. (For an explanation of best practices ratings for the five measures of school-wide discipline practices, see Appendix B.)

However, few schools received a rating of following best practices under the other four categories. For the range of appropriate responses to misconduct and range of appropriate responses to

---

<sup>6</sup> According to the Center for Effective Discipline, approximately one-third of students nationally are enrolled in public schools that permit corporal punishment (Corporal Punishment, 2000).

**Figure 3-2. Percentage of schools using specific responses to desirable student conduct -- 1997-98 school year**



desirable conduct, only 27 percent and 20 percent of schools, respectively, are following best practices. This means schools are using only a small percentage of the possible responses available for undesirable and desirable conduct. Only 31 percent of schools in the nation received a rating of following best practices for predictable disciplinary decision making and only 48 percent for consistent discipline.

### **Problem Schools: Efforts to Prevent Problem Behavior**

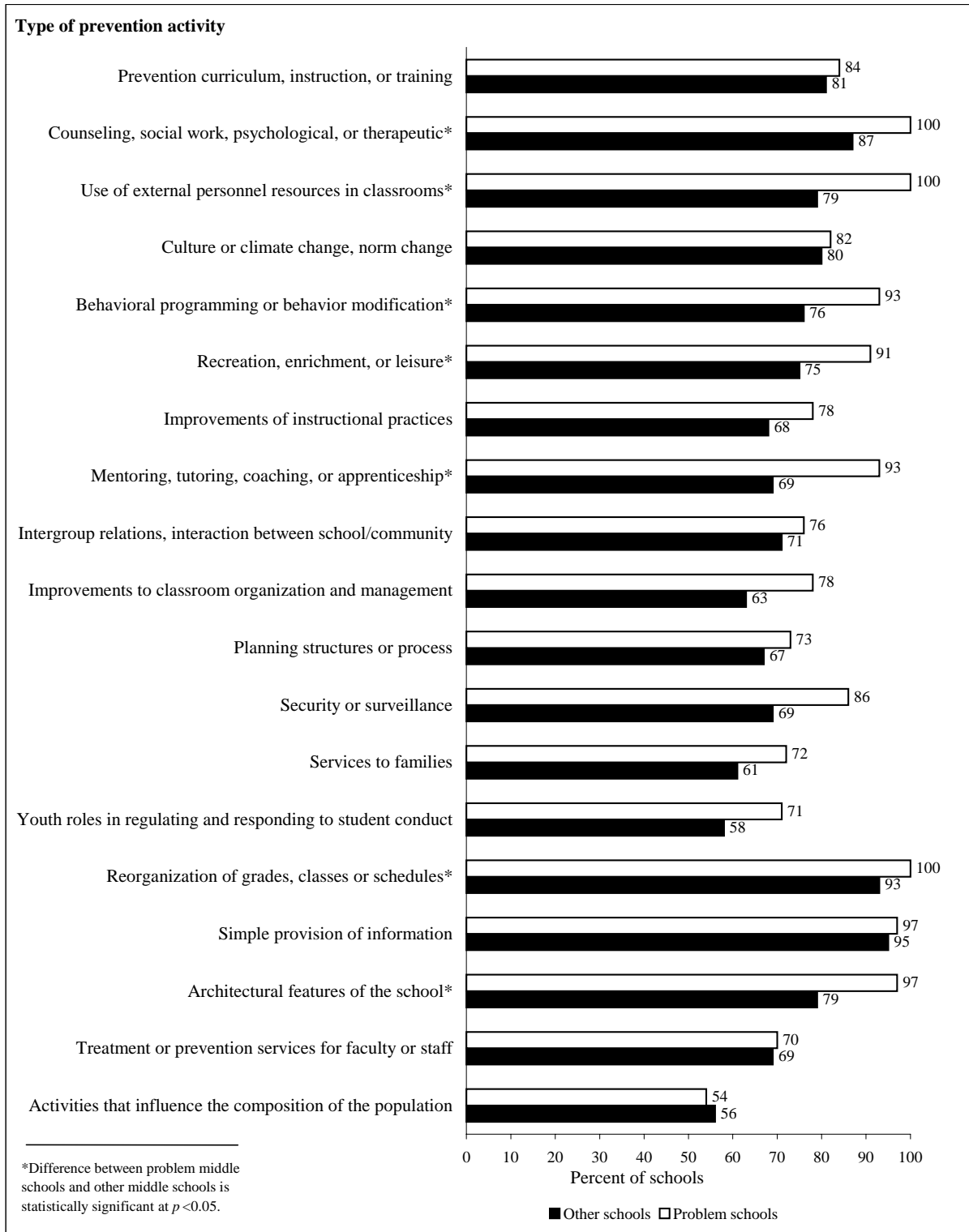
Higher percentages of problem schools (i.e., schools with high levels of serious violent crime as described in Chapter 2) than other schools tended to use several specific types of prevention activities than other schools. Other middle schools tended to use a wider variety of prevention activities than problem middle schools. Overall, problem schools were more likely than other schools to have several different types of school rules.

**Type and Amount of Prevention Activity.** Although a higher proportion of the problem middle schools use several of the different types of prevention categories, the other middle schools use a significantly higher number of the prevention categories. In other words, other middle schools use a wider variety of activities to reduce negative behavior, while a higher proportion of problem schools use specific types of violence prevention efforts.

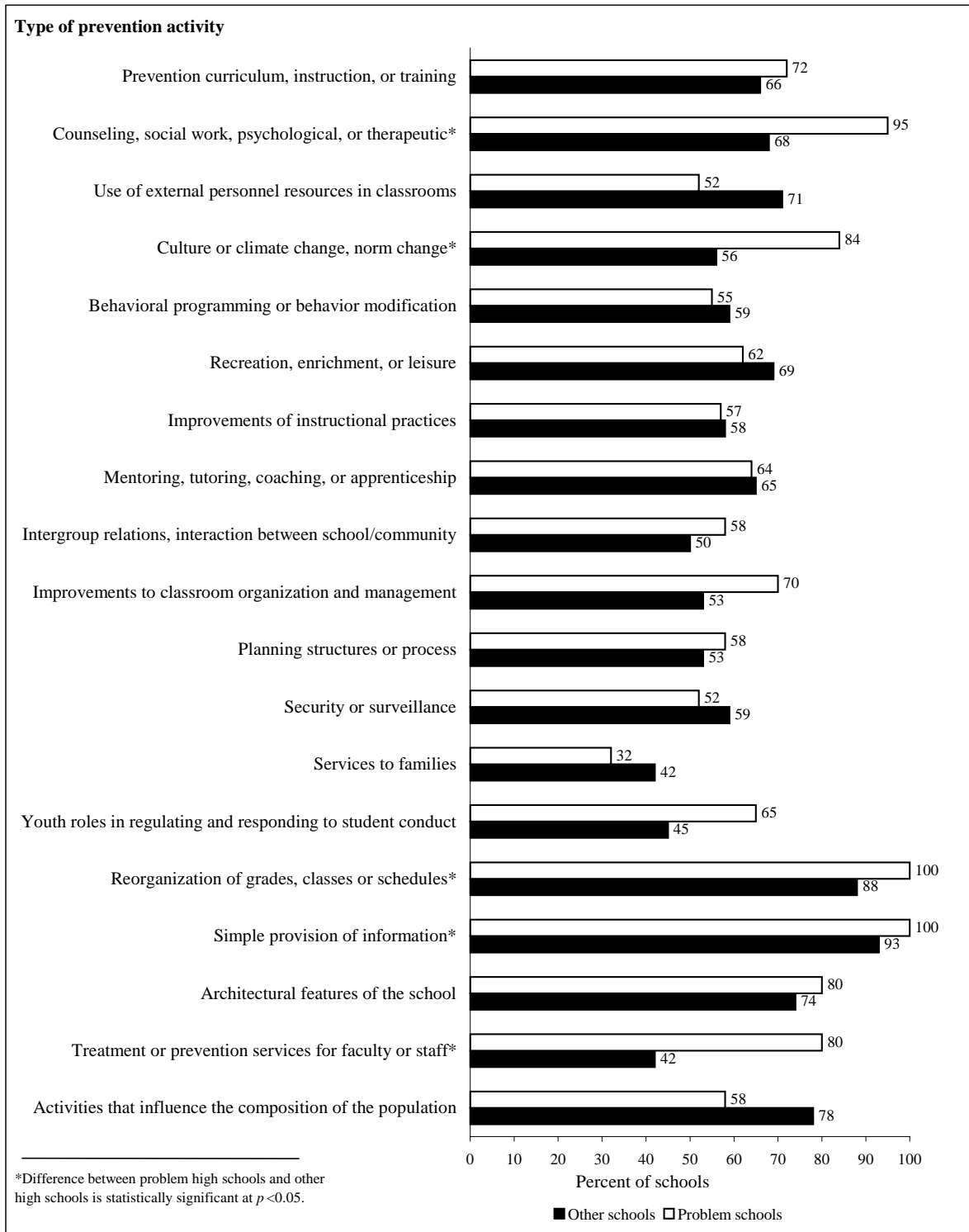
A higher percentage of problem middle schools than other middle schools use each of the following types of activities to prevent problem behavior: (1) behavior modification, (2) counseling, social work, or therapeutic activities, (3) mentoring, tutoring, coaching, (4) recreational and enrichment, and (5) use of external personnel resources (such as police officers or other authority figures). (See Figure 3-3.) A similar percentage of problem middle schools and other middle schools use prevention curriculums (84% compared with 81%) and provide simple provision of information (97% compared with 95%). However, a higher percentage of problem middle schools reorganize grades, classes, or school schedules and use architectural features to try to reduce problem behavior. On average, problem middle schools use about six different types of prevention efforts, while other middle schools use approximately eight different types of efforts.

Compared with all other high schools, problem schools were much more likely to have counseling programs for the students (95% compared with 68%) and treatment or prevention services for the faculty and staff (80% compared with 42%). (See Figure 3-4.) Problem schools were also more likely to implement school-wide programs, such as activities targeting culture or climate of the school;

**Figure 3-3. Percentage of problem middle schools and other middle schools using each type of prevention activity -- 1997-98 school year**



**Figure 3-4. Percentage of problem high schools and other high schools using each type of prevention activity -- 1997-98 school year**



reorganization of grades, classes or schools schedules; and simple provision of information. Both types of high schools were similar on the number of different categories of prevention efforts implemented and on most individual-level programs, including behavior modification, mentoring, and recreation.

**School Rules.** We found a higher proportion of problem middle schools compared with other middle schools had written rules about dress code and about items (e.g., bags or clothes) in which drugs or weapons can be concealed. At the middle school level, rules about uniforms are more likely to be present in the problem schools than in other schools (27% compared with 17%, although the difference is not statistically significant). Close to 100 percent of all middle schools have rules about drugs. Hence, the problem schools and other schools are very similar on this measure. Problem middle schools and other middle schools also are similar on whether or not they have rules about students leaving campus during school hours, rules about hall wandering or class cutting, or rules about visitor sign-in and registration.

All of the problem high schools in our sample have written rules about bringing weapons to school, while a lower proportion of other high schools have such rules (100% compared with 92%). Compared with other high schools, problem high schools are also more likely to have written rules about time for student arrival at school. Similar to the middle school findings, problem high schools and other high schools are similar with regard to students leaving campus, wandering the halls or cutting class, or visitor sign-in and registration. However, contrary to the middle school results, at the high school level rules about school uniforms are more likely to be present in other schools than in problem schools—20 percent compared with 13 percent (but again, this difference is not statistically significant).

#### **4. QUALITY OF EFFORTS TO PREVENT PROBLEM BEHAVIOR IN SCHOOLS**

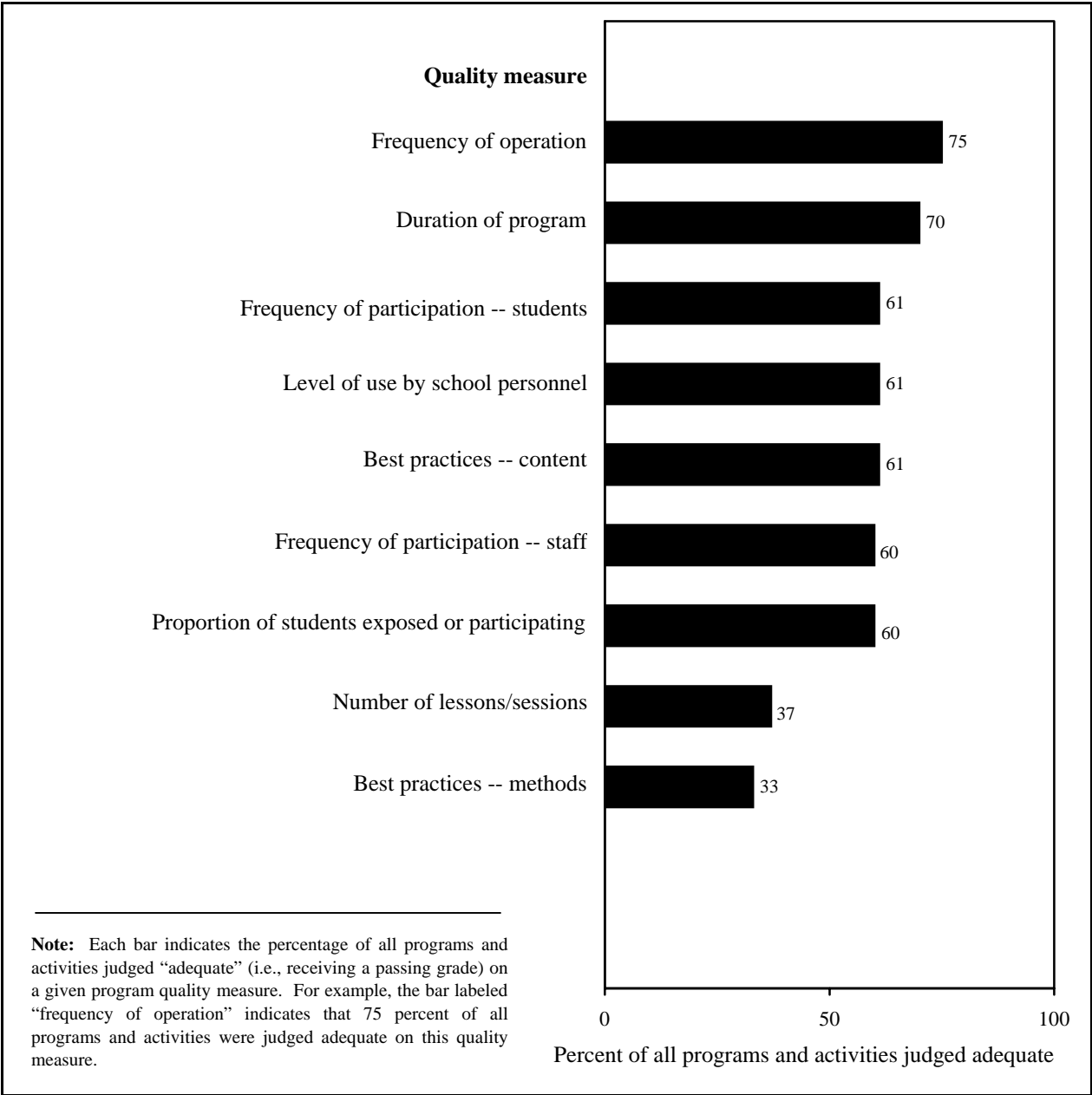
Although the quantity of prevention programming in schools nationally is high, the quality of this programming overall is low. Our analysis of prevention activities revealed that activities designed to change the school or classroom environment are generally of higher quality than those directly aimed at altering student behaviors or attitudes. Security and surveillance efforts are implemented with the highest quality, and services to family members are implemented with the lowest quality. The quality of programming is lowest in rural areas and highest in urban areas. While we would expect higher quality programs to be more effective, we did not directly examine program effectiveness.

This chapter is based on the results of surveys of program providers and principals in our national probability sample of middle schools and high schools. Program providers and principals reported on many different aspects of the 14 categories of activities or programs described in Chapter 3. For each type of activity, we used the data to develop the following 10 measures of program quality: (1) level of use by school personnel, (2) best practices for content, (3) best practices for methods, (4) number of lessons or sessions, (5) duration, (6) frequency of participation by students, (7) frequency of participation by staff, (8) proportion of students exposed or participating; (9) ratio of program or activity providers to students in the school, and (10) frequency of program operation (i.e., how often the program is used or operated.) For nine of the measures of quality, we also judged whether or not the level of quality observed could reasonably be expected to achieve a reduction in problem behavior or an increase in school safety. Activities that achieved at least a minimum standard of quality were designated as "adequate." (See Appendix B for a description of the minimum standards of quality required to achieve a rating of adequate.) We report the results in terms of the percentage of activities nationally.

##### **Quality of Prevention Programming in Schools Is Low**

We rated each program as either adequate or not adequate on up to nine measures of program quality. (Note that not all of the quality measures were applicable to each of the 14 program types.) This can be thought of as giving up to nine pass/fail grades (pass is for adequate and fail is for not adequate) for each program studied. Across all programs, the percentage of activities judged adequate on the different quality dimensions ranged from a low of 33 percent for use of best practices for methods to a high of 75 percent for frequency of operation. (See Figure 4-1.) This means, for example, that only 33 percent of all programs and activities, across all of the 14 program types, used best practices for methods.

**Figure 4-1. Percentage of programs or activities judged adequate for each quality measure – 1997-98 school year**



Only 37 percent of activities across all 14 program types provided a sufficient number of sessions and lessons to meet the adequacy criteria and only 61 percent of activities used research-based content (best practices for content). About 60 percent of activities across all program types have adequate levels of staff and student participation. On the more positive side, 70 percent of all activities meet the duration criteria, and 75 percent are considered adequate on how often the activity or program is used or operated (frequency of operation). As explained in Appendix B, this means that most programs last for 1 month or longer (duration criterion to be considered adequate), and most are operated continually throughout the year (frequency of operation criterion to be considered adequate).

Adequacy ratings vary by location. These ratings tend to be highest in urban areas and lowest in rural areas. Overall, 60 percent of the activities in urban schools were judged adequate, compared with 55 percent in rural schools.

### **Activities Designed to Change the School or Classroom Environment Are Higher Quality Than Those Aimed at Altering Student Behaviors or Attitudes**

In general, activities designed to change the school or classroom environment are higher quality than those aimed at altering student behaviors or attitudes. For example, classroom organization and management practices are more likely than many other categories of activities (e.g., prevention curriculum, behavior modification, counseling, and recreation programs) to be used by one or more school personnel on a regular basis. Interventions involving improvements to instructional practices and school planning are also used regularly by one or more school personnel. (A program or activity that is used regularly by one or more school personnel is considered adequate using the criteria for the level of use by school personnel quality measure).

Seventy-six percent of prevention curricula have high levels of research-based content, but the methods for nearly three-fourths (73%) of these activities have tenuous standing in the research literature (meaning that 27% of prevention curricula have achieved adequacy for best practices for methods). Counseling and mentoring programs are particularly weak on the use of best practices for methods. Only 8 percent of counseling, social work, and psychological or therapeutic activities and 18 percent of mentoring, tutoring, coaching, and job apprenticeship and placement programs use methods that are research based and considered best practices. (For the former type of activity, examples of those methods include written diagnosis or problem statement prepared for each participant; for the latter

activity, they include tutors, mentors, or coaches helping students with social or interpersonal situations or skills such as manners, self-control, or grooming.) In comparison, a higher proportion of classroom organization and management practices, a type of activity designed to change the classroom, have high levels of research-based content and research-based methods (60% and 63%, respectively).

Programs targeting individual behavior change are often implemented with low levels of quality. For example, use of external personnel resources for classroom management and instruction almost never (2%) meet the lessons and sessions criteria for adequate program quality (which is greater than or equal to 25 sessions), and only 8 percent of counseling programs meet the best practices for methods criteria. While mentoring, tutoring, coaching, and job apprenticeship and placement programs have some positive aspects, they fall short in terms of the proportion of programs with adequate sessions and lessons (25%) and use of best practices for methods (18%). Similarly, only 23 percent of behavior modification programs use best practices for methods.

The number of sessions also varies by the focus of the prevention effort (changing the classroom or school versus changing the individual). Mentoring programs have an average of 47 sessions, per school year compared with improvements to classroom instructional methods, which have an average of 101 sessions. For mentoring programs to be considered adequate, at least 52 sessions must take place; for improvements to instructional methods, 30 sessions is considered adequate. This example indicates that, on average, mentoring programs fall short in terms of the number of sessions per school year needed to be considered adequate; and improvements to classroom instructional methods, on average, far exceed the adequate number of sessions.

On the duration quality measure, school or classroom programs also outperformed programs aimed at altering student behaviors. As an example, only 47 percent of programs for families met the adequacy criteria for the duration quality measure compared with 84 percent for programs involving a school planning structure or process to manage change.

Another way to view the quality of programming is in terms of the **average percentage of quality measures judged adequate** for each of the 14 program types. To calculate this percentage, we first calculate the **percentage of quality measures judged adequate** for each program or activity. For example, programs in the prevention curriculum, instruction, or training category use 6 of the 10 measures of quality. (In other words, only 6 quality measures are applicable to the prevention curriculum, instruction, or training category.) For a specific program, we might find that the program is

judged adequate on three of the six quality measures. This means that the **percentage of quality measures judged adequate** for the program is 50 percent.

To calculate the *average percentage of quality measures judged adequate* for the category curriculum instruction, prevention, or training, we added the percentages of all the programs or activities judged adequate within this category and divided by the number of programs or activities. In other words, we obtained the average.<sup>7</sup> The higher the percentage, the higher quality the program category is considered.

Based on this approach, we found that improvements to classroom organization and management and interventions involving school planning structure or process to manage change are the two classroom- and school-level categories (or types of programs) with the highest *average percentage of quality measures judged adequate* (71% for both types of programs). (See Figure 4-2.) In comparison, the *average percentage of quality measures judged adequate* is only 51 percent for recreation, enrichment and leisure activities; 47 percent for behavioral programming or behavior modification; 45 percent for counseling, social work, psychological or therapeutic activities; and 42 percent for services or programs for families.

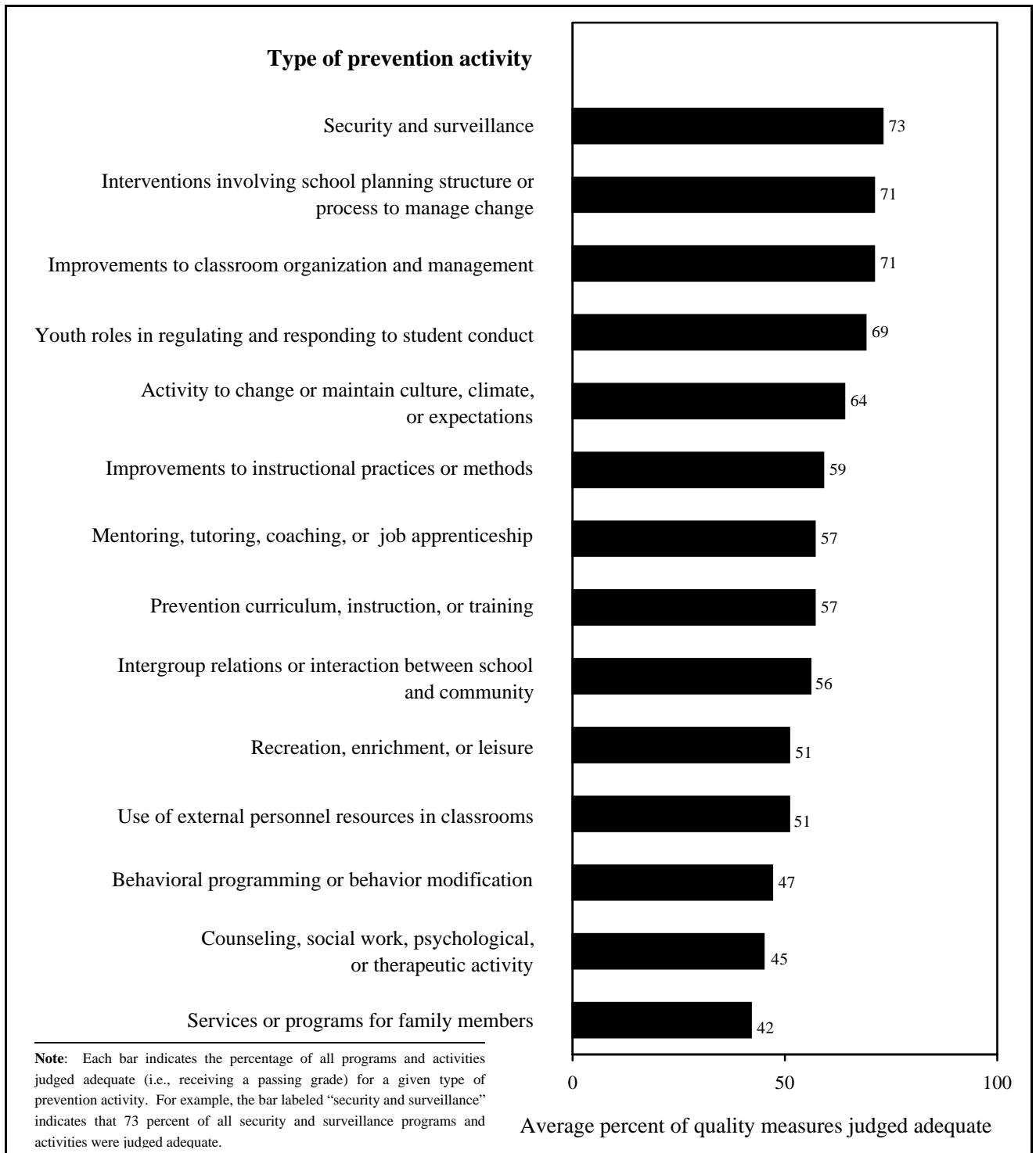
### **Security and Surveillance Efforts Are Implemented with the Highest Quality and Services to Family Members Are Implemented with the Lowest Quality**

The best-implemented activity is security and surveillance. Ninety percent of these activities meet the adequacy criteria for duration, and 95 percent meet the adequacy criteria for how often the program is used or operated. More than 70 percent of security and surveillance programs used best practices for methods and were rated as adequate on frequency of participation by staff. The security and

---

<sup>7</sup> For example, if we had examined only three programs or activities in the prevention curriculum, instruction, or training category (instead of the hundreds of programs that we actually studied), we would have calculated the **percentage of quality measures judged adequate** for each of these programs, such as 50 percent, 70 percent, and 90 percent. To calculate the *average percentage of quality measures judged adequate*, (for our example) we would have summed the percentages for the programs (210%) and divide by the number of programs (three) to obtain 70 percent.

**Figure 4-2. Average percentage of quality measures judged adequate for each type of prevention activity – 1997-98 school year**



surveillance category also had the highest **average percentage of quality measures judged adequate** (73%).

In contrast, only 31 percent of the services or programs for family members met the adequacy criteria for student frequency of participation and only 45 percent met the adequacy criteria for level of use by school personnel. The services or programs for family members also had the lowest percentage of programs meeting the duration criteria (47%) and had the **lowest average percentage of quality measures judged adequate** (42%).

### **Problem Schools: Implementation of Efforts to Prevent Problem Behavior**

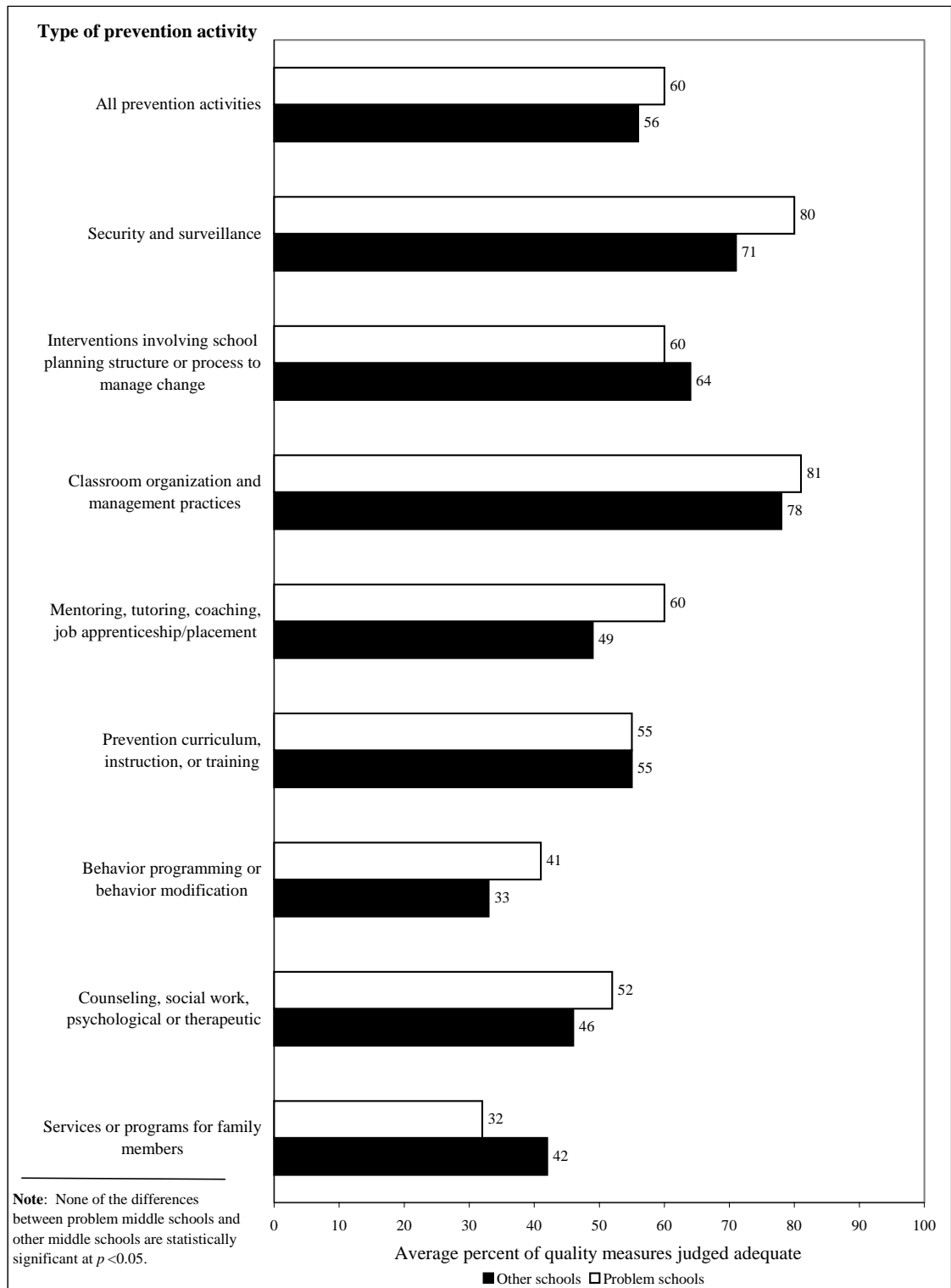
We examined the quality of implementation for all programs combined and for each of 8 types of prevention programs operating in problem middle schools,<sup>8</sup> other middle schools, problem high schools, and other high schools. The eight specific types of prevention activities included (1) prevention curriculum, instruction, or training; (2) behavioral programming or behavior modification; (3) counseling, social work, and psychological, or therapeutic activities; (4) mentoring, tutoring, coaching, or job apprenticeships and placements; (5) improvements to classroom organization and management; (6) interventions involving school planning structures or process to manage change; (7) security and surveillance; and (8) services or programs for family members.

We assessed overall program quality by examining the **average percentage of quality measures judged adequate** across programs in both problem and other schools. At the middle-school level, the results indicate that problem schools and other schools are similar on quality of programming for these eight program types (categories) and for all programs combined (i.e., we found no statistically significant differences between these two types of schools). (See Figure 4-3.) At the high school level, problem schools implemented programs categorized as prevention, curriculum, or instructional training with greater overall quality than other high schools (83% compared with 60%). (See Figure 4-4.) However, problem high schools and other high schools were similar on the **average percentage of quality measures judged adequate** across all program categories (55% compared with 53%).

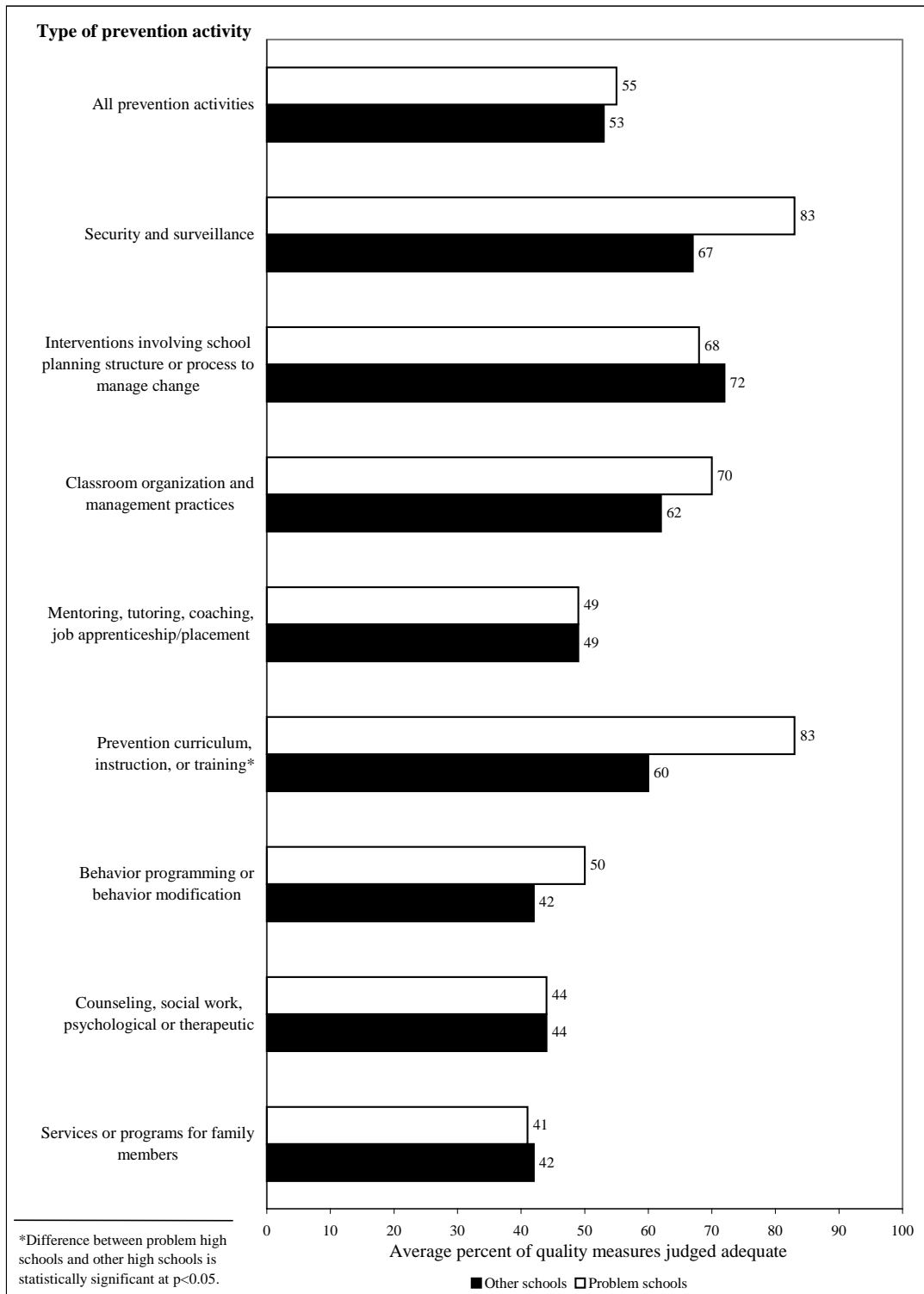
---

<sup>8</sup> Problem schools were defined as those with high levels of serious violent crime, as described in Chapter 2. Only eight of the 14 types of prevention programs were common to the problem middle schools, other middle schools, problem high schools, and other high schools.

**Figure 4-3. Average percentage of quality measures judged adequate for selected prevention activities for problem middle schools and other middle schools -- 1997-98 school year\***



**Figure 4-4. Average percentage of quality measures judged adequate for selected prevention activities for problem high schools and other high schools -- 1997-98 school year**



## 5. PLANNING AND INFORMATION

Comprehensive planning of prevention activities in schools entails assessing needs, setting objectives, selecting activities that can achieve the objectives, and assessing progress toward the objectives. At the school level, these planning elements are often influenced or shaped by school districts. Planning for many individual prevention activities is weak; school-level planning activities appear to be considerably stronger. Sound planning is associated with several measures of high-quality programming.

This chapter is based on the results of surveys of program providers in and school district officials for our national probability sample of schools. The information from school district officials is for middle schools and high schools only; the information from program providers is for elementary schools, middle schools, and high schools. School district officials, typically the prevention coordinator or coordinator for the Safe and Drug-Free Schools and Communities Act (SDFSCA) program, reported on how the districts for the middle schools and high schools participating in the study planned their prevention programs; we report the results in terms of the districts for a given percentage of secondary schools nationally. Program providers reported on aspects of how they planned their activities or programs; we report the results in terms of the percentage of schools nationally.

### **Many School Districts Influence the Planning of Prevention Activities at Schools**

Schools rarely plan prevention activities in a vacuum. A variety of forces and factors can influence planning in schools, especially for local school districts. Specifically, districts often shape school planning by restricting the range of prevention activities permissible and by requiring and providing support for schools to engage in planning.

First, some districts restrict the choice of SDFSCA-funded prevention activities that schools have open to them. (As discussed in Chapter 6, districts often draw on sources in addition to SDFSCA to fund their prevention activities.) Districts for 20 percent of secondary schools require schools to select prevention activities from a list offered by the district. Districts for another 44 percent of schools offer a list of SDFSCA-funded prevention activities from which schools can choose activities. (Some of these schools have the option of adopting activities other than those on the district list.) However, schools also can influence district use of SDFSCA funds. For example, in districts for 73 percent of schools, input

from secondary schools is a great or very great influence on the violence prevention efforts supported by the district.

Second, districts can require or encourage schools to engage in planning activities. Districts for 48 percent of secondary schools require schools to participate in needs assessments or evaluations by administering surveys sponsored by the district; districts for another 27 percent of schools permit schools to participate in these surveys at their discretion. Districts for 60 percent of schools require their secondary schools to prepare plans specifying how the schools will spend their SDFSCA funds; districts for another 25 percent of schools permit schools to develop plans at their discretion. Finally, districts for 60 percent of schools require schools to report on their progress on SDFSCA-funded activities using forms or structures specified by the district; again, districts for 23 percent of schools leave reporting using district specified forms or structures to the discretion of the schools. We are unable to judge the quality of these prevention planning activities or the extent to which schools actively use them to improve their prevention strategies.

Third, many districts provide support for school planning of prevention activities. Districts for the vast majority of secondary schools provided the following: (1) training on program implementation (districts for 93% of schools), (2) assistance to schools on conducting needs assessments (districts for 89% of schools), (3) training on program planning and development (districts for 88% of schools), (4) technical assistance on selecting prevention activities to implement (districts for 84% of schools), and (5) assistance on conducting program evaluations (districts for 84% of schools). In Chapter 6, we provide additional information on the types of assistance that districts provide to their schools.

### **Prevention Planning Is Weak for Many Individual Activities**

Schools can engage in two types of planning of prevention activities. They can plan individual activities or programs; they also can conduct school-wide or systemic planning of prevention activities, which can entail taking a broader view of school problem behavior and how to reduce or prevent it. Fewer than two-thirds of individual prevention activities are based on “sound” planning. (We discuss the criteria for sound planning in the next section.) For the 57 percent of schools that engage in it, school-level planning appears to be considerably stronger than activity-level planning.

**Activity- or Program-level Planning.** Although planning for many individual prevention activities meets some criteria of sound planning, planning for fewer than two-thirds of these activities meets all of the criteria. Our criteria for sound planning are as follows: (1) initiation of activity by “school insiders” (e.g., school staff), (2) development of activity by school insiders or researchers, (3) selection of activity using research-based information sources, and (4) adoption of activity based on approaches that have been demonstrated by research to be effective.

**Initiation of prevention activities** is the starting point for a school adopting or developing a given activity. It might follow, for example, awareness of an unacceptable level or type of problem behavior in a school and the willingness to address it. The impetus for new activities can be local, for example, a committee of concerned parents and school staff; at the other extreme, activities can be imposed by outside actors, such as school districts. We consider initiation by school insiders to be an element of sound planning because insiders are most knowledgeable about the applicability of prevention activities to their own schools; in addition, involving insiders in these roles can increase school staff acceptance of and support for the activities. Schools were as likely to adopt prevention activities that were initiated by school insiders as activities that were initiated by school districts or researchers. None of these types of initiators—school insiders, school districts, or researchers—had substantial influence on initiating activities.

**Development of prevention activities** follows the initiation of these activities. It is the process of deciding what the prevention activities will include. Involving insiders in the development is important for some of the same reasons that insider initiation of prevention activities can be important. Involving researchers in development helps to ensure that the activities are tied to school needs and that the activities are based on evidence of effectiveness. Prevention activities were as likely to be developed by school insiders as by external parties: Both were among the developers for 64 percent of the prevention activities. Prevention activities were less likely to be developed by researchers (26% of activities).

**Selection of prevention activities** using research-based information is potentially valuable because that information can inform the fit between the activities and school needs, and thereby increase the likely effectiveness of the activities. On average, schools used two sources to select a given prevention activity; however, research-based sources were among the less frequently used sources. The sources that schools used most often to select activities were: (1) other program providers (57% of activities), (2) meetings within the school district (51% of activities), and (3) meetings outside of the

district (50% of activities). Among the less frequently used sources were (1) formal outcome evaluation (28% of activities), (2) publications summarizing research (38% of activities), and (3) formal needs assessment (40% of activities).

**Adoption of prevention activities** based on approaches that have been demonstrated by research to be effective also can increase the chances that an activity will be effective in a particular implementation. Perhaps as a result of the limited use of research-based information on effectiveness, only 33 percent of the prevention activities used methods or approaches found to be effective in the research literature, and only 61 percent of the activities used research-based content.

**School-level Planning.** In addition to the planning of individual prevention activities, many schools engaged in formal school-level planning that successfully incorporated the elements of sound planning. More than one-half of the schools (57%) have implemented “interventions that involve a school planning structure or planning process to manage change.” These activities were more likely than other types of activities to have as an objective improving school capacity for self-management (e.g., by involving key individuals in planning for school improvement).

The school planning structure or planning process activities include many elements of strong planning. The vast majority of these activities involve the following: (1) use of information about the school (91%), (2) identification of goals (91%), (3) use of information about effective practices (88%), (4) development of action plans (93%), (5) monitoring of planned activities (88%), and (6) evaluation of outcomes (91%). School planning activities were among the higher quality types of activities, with 71 percent of the quality measures for these activities being judged “adequate” (as opposed to 57% across measures for all activities). (See Chapter 4.)

### **Sound Planning Is Related to High-quality Prevention Activities**

As mentioned in Chapter 4, the use of certain planning approaches is associated with higher quality prevention activities. Prevention activities initiated by school insiders are more likely to be associated with measures of higher quality programming than activities for which the school district or researchers had greater responsibility for initiation. Prevention activities that are developed locally or by researchers also are more likely to be associated with measures of strong implementation. Use of formal needs assessment and more extensive searching for information about what will work best in the school is

associated with measures of stronger implementation. The latter type of activities is especially likely to incorporate “best practices.” (As discussed in Chapter 4 and Appendix B, Gottfredson Associates developed criteria for best practices for a given type of prevention activity, based on a review of the science-based literature.)

### **Problem Schools: Planning and Information**

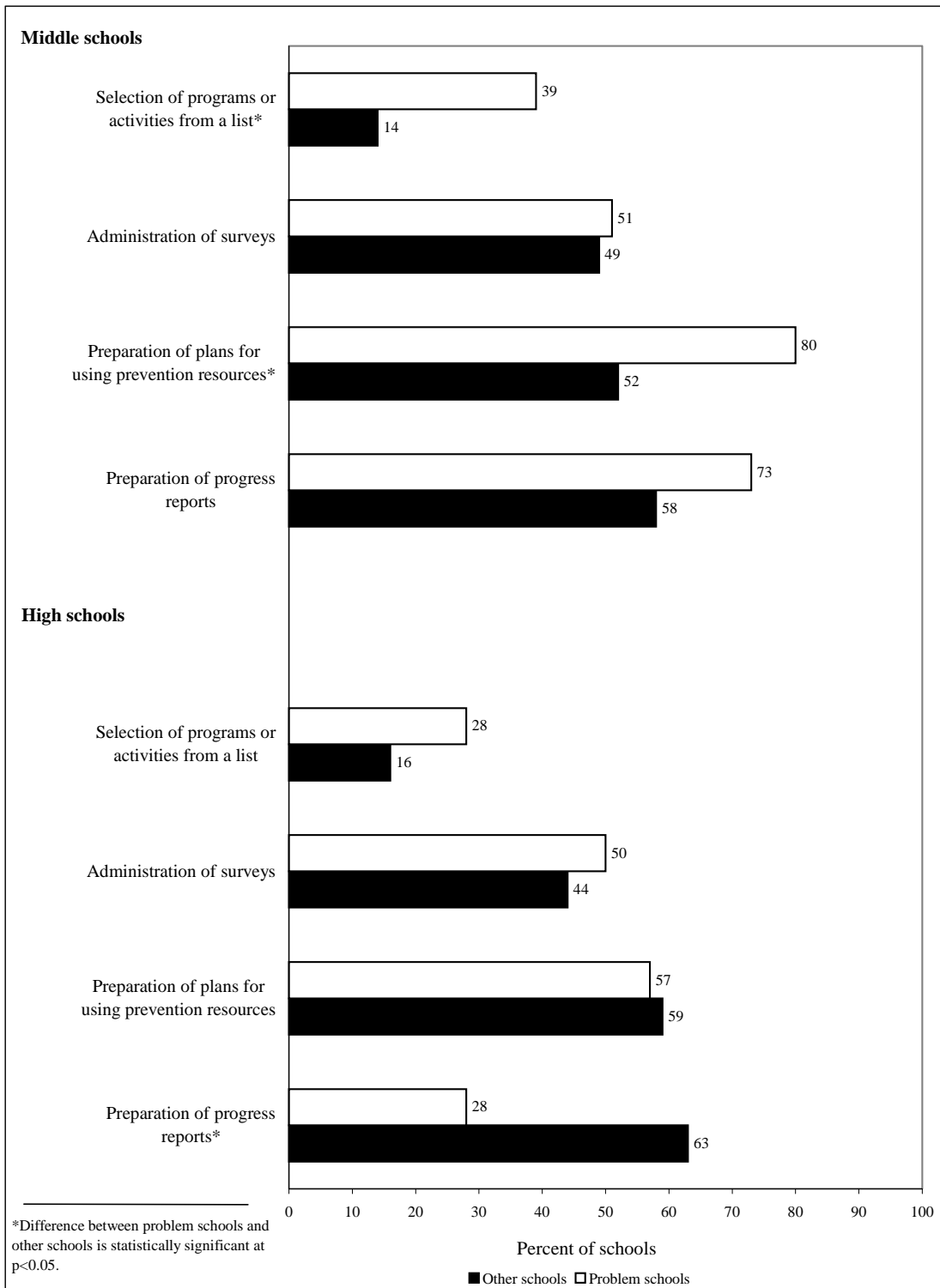
Problem schools and other schools tended to be similar on many aspects of program initiation and original program development. (As discussed in Chapter 2, problem schools were the schools with the highest levels of serious violent crime reported to law enforcement.) An exception is that school districts were more likely to start prevention activities for problem middle schools than for other middle schools. Compared with other middle schools, problem middle schools generally are more often required to receive direction from school districts and are more likely to receive some forms of assistance from them.

**Responsibility for Program Initiation and Original Development.** School districts are more often responsible for starting prevention programs or activities in problem middle schools than in other middle schools. However, problem schools and other schools were similar on who originally developed the school’s prevention programs (local or external parties or researchers). Problem high schools and other high schools also were similar on all seven of the information sources used to select prevention programs and on the average number of different information sources used (2.5 for problem schools compared with 2.3 for other high schools).

Problem middle schools and other middle schools were similar on responsibility for starting school programs, original development of school programs, and the type or amount of information sources sought to select prevention programs.

**School District Direction and Influence.** In general, problem middle schools are more likely than other middle schools to be located in school districts that require schools to engage in certain types of program planning and implementation activities. For example, when selecting prevention programs or activities, 39 percent of problem middle schools are located in districts that require schools to select programs or activities from a district list compared with only 14 percent of other middle schools. (See Figure 5-1.) Problem middle schools also are more likely to be located in districts require to

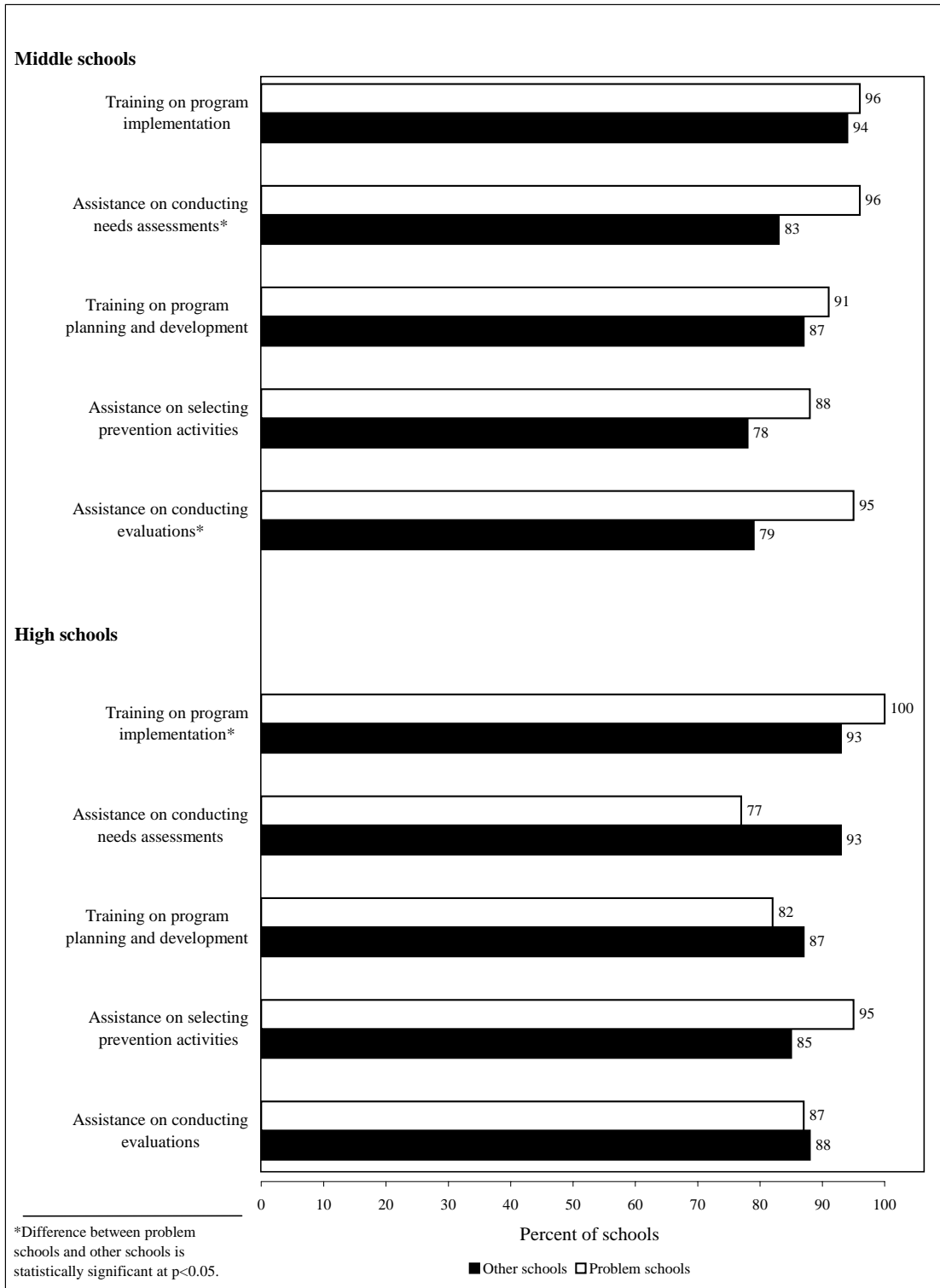
**Figure 5-1. Percentage of problem schools and other schools in districts reporting mandated school planning of prevention activities -- 1997-98 school year**



schools to conduct some type of needs assessment or evaluation (64% compared with 35%). A larger percentage of problem middle schools (80%) than other middle schools (52%) are located in districts that require schools to prepare plans specifying how prevention resources will be used. In contrast, a much lower percentage of problem high schools than other high schools (28% compared with 63%) are located in districts that require schools to write progress reports.

**Services and Resources Provided by School Districts.** Problem middle schools are as likely as other middle schools to be located in school districts that provide training to schools on program implementation. However, a higher percentage of problem high schools than other high schools are located in districts that provide training on program implementation. (See Figure 5-2.) Roughly equal percentages of problem schools at both the middle school and high school levels are located in school districts that provide training on program planning and development. A higher percentage of problem middle schools than other middle schools also are located in school districts that provide assistance with conducting needs assessments (96% compared with 83%). While more problem middle schools are located in school districts that provide program evaluation assistance (95% of problem schools compared with 79% of other schools), approximately the same percentage of problem high schools and other high schools are located in school districts providing this assistance.

**Figure 5-2. Percentage of problem schools and other schools in districts providing support for school planning of prevention activities -- 1997-98 school year**



## **6. FUNDING FOR PREVENTION EFFORTS IN SCHOOLS**

The Safe and Drug-Free Schools and Communities Act (SDFSCA) program is the most frequently used source of funding for district prevention programming. Many districts also draw on a wide variety of other federal, state, and local funding sources to support their prevention activities. Districts use their SDFSCA funding for diverse prevention activities, including direct activities for students (e.g., prevention and instruction) and indirect activities (e.g., staff training). Districts for the majority of schools believe that SDFSCA funding is important to maintaining their prevention programming; a smaller proportion of principals indicated that this funding actually helped to increase the safety and orderliness of their school, or to prevent problem behavior.

This chapter is based on the results of surveys of principals and program providers and school district officials for our national probability sample of schools. The information from school district officials is for middle schools and high schools only; the information from principals and program providers is for elementary schools, middle schools, and high schools. School district officials, typically the prevention coordinator or coordinator for the SDFSCA program, reported on how the districts for the middle schools and high schools participating in the study funded their prevention programs; we report the results in terms of the districts for given percentages of secondary schools nationally. Principals and program providers reported on aspects of how they funded their activities or programs; we report the results in terms of the percentage of schools nationally.

### **SDFSCA is the Most Widely Used Source of Funding for Prevention Activities, though the Districts for Many Schools Also Receive Funding from Other Sources**

SDFSCA was the most widely used funding source for prevention activities in schools. Districts for approximately 98 percent of schools nationally, public and private, provided prevention activities that were funded by SDFSCA. School principals and program providers within schools often are unaware that their prevention activities are funded by SDFSCA. For example, only 58 percent of principals knew that their schools receive SDFSCA-funded resources. This information conflicts with reports by school district SDFSCA coordinators (for 88% of schools nationally) indicating that **all** public schools in their district provided SDFSCA-funded prevention services to students. We view the discrepancy as reflecting the difficulty school principals have in distinguishing among different types of services and funding received from their districts.

Students attending private schools are less likely to receive SDFSCA-funded prevention activities than students attending public schools. SDFSCA coordinators report that, although all or many students received SDFSCA-funded services at 92 percent of public schools, all or many students received such services at only 44 percent of private schools.<sup>9</sup>

In addition to SDFSCA, districts draw on many other sources of funding for prevention activities in schools. The most frequent other sources are general state funds (districts for 41% of schools), state funds specially earmarked for prevention (districts for 31% of schools), and federal funds besides SDFSCA funds (districts for 31% of schools). In addition to these funding sources, 51 percent of districts received in-kind contributions (e.g., photocopying of program materials); and, in 88 percent of districts, parents volunteered time (e.g., to assist with mentoring efforts).

### **Districts Use SDFSCA Funds to Support a Wide Variety of Prevention Activities**

School districts use SDFSCA funds to support a broad range of prevention activities. To some degree, SDFSCA funds support all of the types of prevention efforts described in Chapters 3 and 4. In districts for nearly 50 percent of schools nationally (49%), SDFSCA funds supported prevention instruction or training to a great or very great extent. Other activities that received a high degree of SDFSCA support include counseling (districts for 43% of schools), prevention activities to improve instructional practices in classrooms (districts for 42% of schools), training or staff development (districts for 40% of schools), and behavioral programming or behavior modification (districts for 29% of schools). Activities that focus on architectural or structural features of the school were least supported by SDFSCA funds (districts for 4% of schools). The type of effort that received the most SDFSCA support from school districts was provision of information about violence, drug use, other risky behaviors, or the availability of prevention services (districts for 60% of schools).

Districts also used SDFSCA funds to support prevention-related activities other than direct activities for students. These activities, which were funded in whole or in part by SDFSCA, include team building or organization development (districts for 45% of schools), assistance with conducting needs assessment (districts for 51% of schools), assistance in program planning (districts for 63% of schools), and assistance with program evaluation (districts for 58% of schools). Although many districts do

---

<sup>9</sup> Equitable participation by private school students is statutorily required. However, private school officials may decide to have their students opt out of the services.

provide these activities entirely without SDFSCA funds—for example, districts for 42 percent of schools fund team building or organization development with only non-SDFSCA funds—SDFSCA funds play a major role in the needs assessment, planning, and evaluation assistance that districts provide to their schools

Districts varied on how they allocated SDFSCA resources across their schools. Most often districts used these funds to make prevention activities available to all schools districtwide (districts for 54% of schools). Districts also targeted funds based on school needs (districts for 22% of schools), used a formula to allocate funds (districts for 11% of schools), and required schools to apply for funds (districts for 5% of schools).

### **SDFSCA Funding is Very Important to District Prevention Programming**

District officials for 82 percent of schools report that SDFSCA funding has helped to continue useful programs to a great or very great extent. Districts for 72 percent of schools also report that SDFSCA funding has been a great or very great help with initiating new types of programs.

In the 58 percent of schools for which principals report that SDFSCA funds are used, nearly one-half of the principals (48%) said that SDFSCA funds are very important to improving or maintaining the safety and orderliness of their school or are very important in preventing problem behavior.

## 7. CONCLUSIONS

One of the central findings of the Study on School Violence and Prevention is that while, on average, schools nationally are implementing a large number of prevention efforts, the quality of those efforts is low. In this chapter, we briefly examine the implications of that finding for policy and research. We also suggest approaches to increasing the quality of school-based prevention.

### **Shift Resources to Emphasize Quality over Quantity**

As discussed in Chapters 3 and 4, we were struck by both the large number of prevention activities in operation in schools and by the low quality of those efforts. For example, schools implemented a median of 14 different activities, but fewer than 60 percent of activities in certain categories met adequacy criteria.

The balance between quality and quantity of prevention efforts seems to have shifted to quantity. Given limited resources for prevention, we urge a shift back to quality. Fewer but higher quality activities may help schools and districts to achieve their goals better. For example, one of the quality dimensions on which activities fared least well is number of lessons or sessions: only 37 percent of activities were judged adequate on these criteria. One can argue that directing resources to increasing the number of lessons for the otherwise strongest activities--even if it means discontinuing weaker activities--is justified.

In our view, willingness to choose carefully among the activities to adopt, retain, or discard is the starting point for improving school-based prevention. The remainder of our conclusions assumes that administrators, particularly at the school and district levels, have this willingness.

### **Improve Program Planning and Monitoring**

In addition to focusing resources on fewer but stronger activities, administrators may be wise to increase the amount of resources allocated to planning and monitoring prevention activities. We found that planning for individual activities was fairly weak overall. For example, schools used formal need assessments as a source in selecting only 40 percent of activities; they used publications summarizing research as a source for selecting only 38 percent of activities. Also, only 61 percent of activities met

adequacy criteria for using best practices for content; only 33 percent met criteria for using best practices for methods.

To help make difficult decisions on adopting, retaining, or discarding prevention activities, districts need to investigate better the research evidence on the effectiveness of those activities. More and more guides are becoming available that can facilitate these investigations, including those developed by the Center for the Study and Prevention of Violence (1995), U.S. Department of Education (e.g., on exemplary and promising programs), and Center for Substance Abuse Prevention (e.g., on effective prevention programs). Besides using these guides to select new effective activities, administrators should seriously consider using them to critically examine ongoing strategies and eliminate those that have little or no research support.

Administrators may also wish to increase emphasis on monitoring the extent to which the implementation of research-based activities remains true to the program model, or be willing to conduct their own outcome evaluation to ensure that program objectives are being met. Clearly, an important issue is balancing attempts to achieve fidelity to a program model with the desire to tailor programming to local needs and conditions. This is an area in which additional research would be helpful, for example, in identifying how and the extent to which different activities can be adapted before they lose fidelity.

### **Strengthen Factors Associated with Quality of Programming**

The Study on School Violence and Prevention raises serious questions about the overall quality of school-based prevention programming. We found, for example, that several types of prevention activities were judged adequate on fewer than 60 percent of quality criteria. In line with focusing efforts better and allocating resources more wisely, educators may wish to concentrate on efforts to improve quality. Gottfredson et al. (2000) discuss findings from our collaborative study on predictors of the quality and extensiveness of prevention activity. They conclude that the most important predictors are: (1) extensiveness and quality of training of the staff who implement activities; (2) supervision of the activity; (3) principal support for the activity; (4) degree of structure or scriptedness of the activities; (5) local responsibility for initiating the activity; (6) use of multiple sources of information on the activity, including district personnel and experts; and (7) activity is a part of the regular school program. (See Gottfredson et al, 2000, for a detailed discussion of these findings and recommendations.)

Some of these predictors emphasize program management at the school level, such as the extent of staff training for implementing program activities and supervision of those activities. While

strengthening these factors may be obtainable for many schools and districts, they will have costs (e.g., for additional staff time). Again, the costs potentially could be met by focusing on fewer but stronger prevention activities.

## APPENDIX A. STUDY METHODS

In this appendix, we provide detailed information on the study method including: (1) sampling, (2) recruitment, (3) questionnaires, (4) data collection, (5) response rates, (6) data processing, (7) weighting, and (8) analysis.

### Sampling

The sample was drawn from a commercial list of all public and private schools in the United States (excluding schools in Puerto Rico and other territories) maintained by Market Data Retrieval. The list incorporates data from the National Center for Education Statistics' Common Core of Data, adds private schools, and provides additional information (such as principal names).

We drew a stratified probability sample of schools, with nine strata defined by the three instructional levels (elementary, middle, and senior high school) and three levels of metropolitan status (rural, suburban, and urban).<sup>10</sup> Stratifying the sample on instructional level and metropolitan status was desirable because we expected that prevention activities would be likely to differ greatly on both of these factors.

From each of the nine strata, 143 public and private schools (or 429 schools for each instructional level) were selected. (Private schools account for 19% of the total sample: 23% of elementary schools, 2% of middle schools, and 31% of high schools.) We hoped for a response rate of approximately 85 percent for each of the screener and the detailed data collection efforts, which would have yielded an overall response rate of just over 70 percent or approximately 300 schools from each instructional level. The sample sizes were chosen based on an analysis of the relationship between the standard error of the mean and sample sizes for each instructional level, since our study design called for separate analyses for each level. The analyses revealed that large and moderate gains in the efficiency of sample statistics could be made with sample sizes up to about 300 schools per instructional level. Beyond 300, the gains in efficiency would be much more modest per additional 100 schools.

---

<sup>10</sup> The sampled high schools include a large percentage of schools that differ from what one typically considers a high school (i.e., schools with either 9th to 12th grade or 10th to 12th grade enrollment). The convention that we used (and that has been used by many other education studies) is to classify schools with kindergarten to 12th grade enrollment as high schools. (In fact, public high schools with 9th to 12th grade or 10th to 12th grade enrollments account for only 33 percent of high schools nationally.) In addition to these combined schools, the sampled high schools include a number of vocational and alternative schools.

The reader should note that during data collection and analysis we discovered that approximately 7 percent of schools had been assigned inappropriate urbanicity classifications. In addition, approximately 1 percent of schools had been assigned inappropriate educational levels. We also discovered that eight of our sampled schools were no longer functioning as schools. However, these inappropriate assignments had a negligible effect on sampling, weighting, and data analysis.

## **Recruitment**

Recruitment consisted of several steps, including recruitment for the first phase of data collection (or principal screener survey); and state, district, and school recruitment for the second phase of data collection.

**Recruitment for Principal Screening Survey.** Sample recruitment for the first phase of data collection began in spring 1997 with a principal screening survey questionnaire that was mailed to all sampled schools. The mailing included a letter from the National Institute of Justice (NIJ) describing the study, and letters of endorsement from the National Association of Secondary School Principals (NASSP) and the National Association of Elementary School Principals (NAESP). Schools that did not return completed questionnaires were prompted through the summer and fall of 1997 by telephone and mail, including overnight mail service.

**State Recruitment.** For the second phase of data collection, the first step in the recruitment process was to contact each state's superintendent's office and the state SDFSCA coordinators. Materials were mailed to both chief state school officers (CSSO) and all state SDFSCA coordinators in October 1997. Each package included letters from ED and NIJ describing the study, letters of endorsement from NASSP and NAESP, list of the sampled districts and schools in their state, and copy of the study brochure. Westat staff telephoned the CSSO offices to confirm receipt of the materials and to follow up on any questions.

**District Recruitment.** Next, we approached the school districts in which the sampled schools were located. Recruitment materials were mailed to district superintendents in November 1997. Depending on information previously gathered on district policies, different recruitment packages were sent to districts. For most districts, the mailing included a letter describing study activities and requesting permission for the sampled school(s) to participate in the study; for districts whose sampled school(s) indicated that it (they) had authority to decide to participate, the mailing included a letter only describing

the study activities. (During the first phase of data collection, principals had been asked to indicate whether or not they could approve a student survey.) As needed, formal applications were submitted with the other recruitment materials.

District recruitment was a lengthy and time-consuming process. Because we had a probability sample of schools, without any clustering of schools within school districts, we approached more than 500 districts regarding participation of schools in their districts. In most cases, only one school in a district had been sampled and the most time-consuming part of recruitment was contacting the appropriate district official. Another complication was that recruitment efforts identified additional districts that should have initially been sent formal applications.

Some recruitment was conducted by a refusal conversion team. After recruiters had seemingly exhausted avenues of approach, the tough cases were turned over to project staff who were more experienced in working with school districts. These staff approached all refusing districts and requested they reconsider their decision not to participate. Much district-level refusal conversion was underway just after a tragic school shooting; in light of those events, some officials did agree to participate.

Recruitment of the formal application districts was also managed by experienced project staff. Those districts were telephoned 10 days after the applications were submitted and repeatedly telephoned until approval was granted or refused. Some districts were very responsive to our applications and made a decision within 6 weeks. Other districts required repeated contacting.

**School Recruitment.** As soon as a district agreed to participate, efforts to recruit the school(s) in that district began. Making initial contact with principals was somewhat easier than reaching district officials, though it was still time intensive. Once reached, the principals were asked to participate. Some principals requested copies of study materials before giving consent. Other principals expressed hesitation about surveying students. Where necessary, recruiters were permitted to drop the student survey component so as not to lose the school's participation completely. After principals agreed to participate, the recruiters explained what participation would involve and asked the principal to name an individual who could act as school coordinator. Principals were then sent a confirmation letter thanking them for agreeing to participate. School coordinators were provided with a stipend of \$100 to compensate them for work on the study that occurred outside of regular business hours.

We successfully recruited 220 elementary schools and 458 middle and high schools to participate in the study. An additional 80 schools had initially agreed to participate, but were unable to do so.

## Questionnaires

Data collection was primarily conducted using instruments developed by Gottfredson Associates. The instrument used to collect information from school district officials was developed by Westat. Specifics on the data collected from each type of respondent are as follows:

- **Principals** completed screening instruments<sup>11</sup> that identified all prevention activities in the sampled school.
- **Principals** provided information on the school's discipline policy and management of student behavior. They also reported on (1) discipline practices, (2) school demography, (3) their leadership style, (4) biographical information, (5) origins of programs, (6) costs and funding sources for programs, (7) staffing stability, and (8) organizational capacity.
- **Program providers** completed activity detail questionnaires. Fourteen questionnaires--one for each type of prevention activity--collected detailed information on the implementation of each prevention effort. They also collected information on the formal planning efforts that schools initiate to improve school management and on the funding sources for violence prevention efforts. Topics included (1) content, (2) objectives, (3) level of use, (4) duration and frequency of exposure, (5) time and place, (6) target population, (7) size of group, (8) training, (9) cultural appropriateness, (10) sources of funding, (11) obstacles to implementation, (12) characteristics of provider, and (13) biographical information.
- **Teachers**<sup>12</sup> reported on student behaviors in class; personal safety; school climate, including the relationships between administrators and teachers, how they perceived administrators and the rest of the teaching staff, and ability of staff to collaborate and work together toward shared goals and objectives; and information on the school's programs and practices to prevent problem behavior or to increase school safety or orderliness.
- **Students**<sup>13</sup> also reported on their exposure to prevention efforts and on personal victimization at school and their perceptions of school safety. In addition, the student survey collected information on demographics; educational plans and efforts;

---

<sup>11</sup> The screener instruments were based on a taxonomy of prevention efforts that was developed after a review of technical reports, agency and foundation reports, and funding lists to identify examples of programs or activities undertaken by schools to reduce or prevent violence, drug use, and other forms of problem behavior; more than 600 different program or activity models were classified to devise a comprehensive taxonomy of prevention activities.

<sup>12</sup> Teachers were only surveyed in middle and high schools.

<sup>13</sup> Students were only surveyed in middle and high schools.

students' access to, and experiences with, drug use, violence, and other delinquent behavior; school climate, including fairness of rules and their enforcement; and correlates of problem behavior.

- **School district officials**<sup>14</sup> provided information on interactions with schools and the school personnel that operate prevention programming; amount and sources of prevention funding received by the district, distribution of funds to schools in the district, and limitations on uses of funding; and planning and evaluation of prevention programs.

### **Data Collection for the Second Phase**

Conducting principal, provider, teacher, student, and district surveys was a complex task. Again, elementary schools were treated differently than middle and high schools, in that elementary schools were excluded from the teacher and student surveys.

**Surveying Elementary School Staff.** The principal was the first contact at elementary schools. He or she was asked to confirm that prevention activities reported in the screener survey were still in place. The provider and principal surveys were then sent to the school. Follow-up contacts were made when completed questionnaires were not quickly returned. In some cases, project staff asked the principal to name an individual to coordinate data collection efforts.

**Surveying Middle and High School Staff and Students.** When principals committed their schools to participating, they were asked to name an individual to serve as the school coordinator. In some cases, the principal was able to identify a coordinator immediately or chose to assume the coordinators' role themselves; in other cases, recruiters called back to learn who would serve as the coordinator. Principals were told that the coordinator could be anyone from a school counselor to a parent volunteer; and, if necessary, we would send Westat field staff to administer the surveys. No principals chose the Westat field staff option.

Once coordinators were identified, they were asked to complete a program review form to confirm that the prevention activities reported previously were still in place and a coordinator checklist that collected information about the student body (such as number of students per grade, average daily attendance, and percentage of students unable to read English at a sixth grade level). The checklist also collected information on the number of teachers at the school, expected student survey date, and last day

---

<sup>14</sup> District officials were only surveyed in districts with one or more middle schools or high schools participating in the study.

of school. Finally, coordinators were asked to send a copy of their student roster so that we could sample students to be surveyed.

We began sending study materials to middle and high schools in March 1998, soon after the Office of Management and Budget (OMB) clearance was received. Data collection at elementary schools conducted by Gottfredson Associates under the NIJ grant had begun earlier.<sup>15</sup> These materials included an instruction manual for the coordinator, parental consent materials, questionnaires, answer sheets, cover letters to school staff, confidentiality envelopes, and machine-readable pencils for the student survey.

For the **staff survey**, the coordinator was instructed to distribute teacher questionnaires with our cover letter, an answer sheet, and a confidentiality envelope. They were given forms on which teachers were supposed to enter their names after completing the questionnaire. The coordinator's responsibilities also included distributing the principal questionnaires, and questionnaires to individuals who coordinated prevention activities (providers). For some schools, we selected a subset of program questionnaires for providers to complete. This generally was done where one person was responsible for coordinating multiple prevention activities.

For the **district official survey**, questionnaires were sent to SDFSCA coordinators as soon as school recruitment was complete. We only requested the participation of district officials in districts where at least one middle or high school was participating in the study. (The original analysis plan called for only analysis of data from middle and high schools for our report to ED. Information from elementary schools is also presented in this report.) Before questionnaires were mailed, every effort was made to identify the appropriate respondent. In a number of cases, the individual we had been told was the appropriate respondent was not, so we sent replacement questionnaires. District questionnaires were sent with cover letters and postage paid return envelopes. Respondents were prompted by mail and telephone to return surveys.

For the **student survey**, Westat staff developed a sampling algorithm that considered average daily attendance, percentage of students with low English proficiency, and expected response rate, and computed how many students needed to be sampled to yield 50 completed surveys. At schools

---

<sup>15</sup> A memorandum of understanding between the National Institute of Justice (NIJ) and the U.S. Department of Education (ED) specified that Westat, under contract to ED, and Gottfredson Associates (GA), the recipient of a grant from NIJ, would coordinate future data collection activities to minimize burden on respondents. The memorandum also stated that Westat and GA would share access to data and coordinate on conducting analyses of the data.

GA had begun its data collection activities prior to execution of the memorandum. (OMB clearance is generally not required for research conducted under a grant.) GA subsequently contracted with Westat to collect principal and provider data at the middle and high schools to reduce confusion and respondent burden.

with fewer than 50 students, all students were surveyed. After computing the sample size, the algorithm indicated which students should be selected (e.g., students 1, 7, 12, and 18). To get as representative a sample of the student body as possible, the roster was stratified by gender (or grade where gender stratification was not possible), and separate samples were drawn. We then selected the appropriate students from the roster and typed up the list of sampled students for mailing to the school with survey materials.

In accordance with Westat's IRB, the parental consent materials were passive in nature. That is, if parents did not want their children to participate in the study, they could either call Westat's toll free hotline or return the consent postcard to us and we would notify the school of their decision; some schools instructed parents to call the coordinator directly to refuse consent. We asked that coordinators mail parental consent letters to the parents of sampled students two weeks before data collection was scheduled. We provided a letter to parents, envelopes for the mailing, a return postcard, and stamps. We suggested that, in addition to the letter from the study directors, schools enclose a cover letter introducing the study, and we also included a suggested format. Parents of approximately six percent of the sampled students refused to allow their children to participate.

To minimize student absenteeism, we requested that students not be surveyed on Mondays or Fridays and that they be surveyed toward the middle of the school day. Another important instruction to the coordinator was that students should be instructed to meet in place A where they were to be read a description of the study and be invited to go to place B if they agreed to participate. We asked coordinators to take this step so that students would truly know that their participation in the study was voluntary.

After allowing students the opportunity to refuse their consent, the coordinators distributed the questionnaires, answer sheets, confidentiality envelopes, and machine-readable pencils to the participating students. To protect student confidentiality, we asked that students not record their names on the answer sheets. In addition, we implemented procedures to discourage efforts to link personal identifying demographic information and other questionnaire responses. Demographic information was collected on the top part of the answer sheet; all other information was collected on the bottom part of the answer sheet. Students were instructed to separate the top and bottom parts of the answer sheet, seal the bottom part in the confidentiality envelope, and turn the top part in separately. While the answer sheets could be linked in analysis via machine-readable symbols, doing so manually would have been very difficult.

## Response Rates

Of the 1,287 schools originally drawn from the Market Data Retrieval list, 69 percent completed the principal screener questionnaire in the first phase of data collection. The main reasons reported by principals for nonresponse include lack of time or interest and excessive respondent burden. These school-level response rates for the principal screener questionnaire are shown in Table A-1.

**Table A-1. School-level response rates for the first phase of data collection**

Disposition	Schools	
	Number	Percent
Complete	886	69
Nonresponse	401	31
Total sample	1,287	100

Because of the late start of recruitment and our inability to start data collection in middle and high schools until March when OMB clearance was received, fewer schools than desired were able to participate in the post-screener phase of data collection. Table A-2 illustrates the school level participation rates for the post-screener data collection. The response rate for schools that had previously completed the principal screener questionnaire was 77 percent.

**Table A-2. School-level participation rates for the second phase of data collection**

	All schools		Schools participating in screener survey*	
	Number	Percent	Number	Percent
Participate	678	53	678	77
Refuse	609	47	208	23
Total sample	1,287	100	886	100

\*We excluded 101 schools from the second phase of data collection due to district refusal.

Furthermore, not all the schools that participated were able to provide all the requested types of data. Table A-3 shows that 72 percent of eligible schools (i.e., those that had completed a principal screener questionnaire) provided principal data. Table A-4 shows that the provider response rate was 52 percent, Table A-5 shows the teacher response rate was 67 percent, and Table A-6 illustrates that the student response rate was 73 percent.

**Table A-3. Principal response rate**

Disposition	School	
	Number	Percent of eligible schools*
Complete	634	72
Nonresponse	252	28
Total schools	886	100

\*Schools were eligible if they completed a screener survey form..

**Table A-4. Provider response rate**

Disposition	Provider	
	Number	Percent of eligible programs*
Completed	3,691	52
Nonresponse	3,413	48
Total sampled	7,104	100

\*Programs were eligible if they completed a screener survey form.

Reasons for provider nonresponse include the following:

- Coordinator never distributed the questionnaires;
- Appropriate respondent was ill; and
- Could not locate appropriate respondent (e.g., appropriate respondent was not school staff and had completed work at the school for the year).

**Table A-5. Teacher response rate**

Disposition	Teachers	
	Number	Percent of eligible teachers*
Complete	13,842	67
Refusal	4,719	23
Nonresponse	1,470	7
Other	746	3
Total teachers	20,777	100

\*Six teachers were ineligible.

Most of the nonresponse was a result of questionnaires not being distributed to all teachers. Reasons for “other” include the following:

- Teachers, who were also program providers, completed only provider questionnaires,
- Answer sheets completed in pen were unusable, and
- Transmittal not returned explaining reasons for incomplete surveys.

**Table A-6. Student response rate**

<b>Disposition</b>	<b>Students</b>	
	<b>Number</b>	<b>Percent of eligible students*</b>
Complete	17,181	73
Refusal	762	3
Parent refusal	1,307	6
Absent	416	2
Nonresponse	2,254	10
Other	1,629	7
Total sampled	23,549	100

\*Six hundred and three students were ineligible.

Coordinators indicated that much of the student nonresponse was due to teachers not releasing students from class to participate in the survey. In addition, approximately 3 percent of students refused to participate, in addition to those whose parents refused their consent. The exact nature of nonresponse was not reported for nearly 7 percent of the eligible sampled students.

We believe that both the student and teacher response rates would have been higher had field staff gone to the schools to collect the survey data; however, some schools might have refused to participate if a condition of participating was having an outsider come into the school to conduct data collection. We also believe that overall participation would have been greater if we had been able to send survey materials to these schools as soon as they had agreed to participate.

Relatively low response rates increase the potential for nonresponse bias. To examine this issue, Gottfredson et al. (2000) analyzed the associations between participating in several of the data collection components (e.g., screener, principal, teacher, and student surveys) and the characteristics of schools and the communities in which they are located (based on 1990 Census data aggregated at the zip code level). These associations indicate a relatively strong association between nonresponse and urban

location. That is, nonresponse tended to be higher for schools located in predominantly urban areas. School auspices (public, Catholic, or private sectarian or nonsectarian) also is strongly associated with nonresponse: Private schools tended to have higher levels of nonresponse than public or Catholic schools. Hence, schools located in urban areas and private schools are underrepresented in the responding schools. We sought to correct for the underrepresentation through nonresponse adjustments to weights. However, to the extent that the nonresponding differed from other schools on the variables of interest, their absence may still influence the study results.

### **Data Processing**

Processing the data that was returned from schools was done in three steps. First, clerks sorted the contents of each box. This was somewhat time intensive because all respondents had been instructed to seal questionnaires in confidentiality envelopes that then had to be opened. The second step was to log the contents of each box and note differences between expected data and actual data. These differences were resolved by the recruitment staff. In some cases, reasons for discrepancies were noted; in other cases, replacement surveys were sent to the school.

The third data processing step was to actually process the data. The principal and provider surveys were coded and keyed into a database at Gottfredson Associates. The school district surveys were coded and keyed into a database at Westat. The teacher and student answer sheets were processed by an optical scanning machine (also at Westat). The student forms were processed in their two component pieces. A program was written to match both halves of each data form. The program was unable to match all data forms, for example, because some students had marked in the machine-readable identification code. A clerk sorted through all of the data forms to resolve these problems.

### **Weighting**

Weights were developed by project statisticians to reflect differential probabilities of selection and to adjust for nonresponse. The study weights are as follows:

- Screener 1 school-level nonresponse adjusted weights—to describe school characteristics,
- Screener 2 school-level nonresponse adjusted weights—to describe activity characteristics,

- Screener 3 school-level nonresponse adjusted weights—to describe activity characteristics (these weights incorporated supplemental data gathered during the detailed phase of data collection),
- Detailed principal questionnaire school-level nonresponse adjusted weights—to describe school and principal characteristics,
- School district questionnaire school-level nonresponse adjusted weights (adjusted with respect to school and school district official response rates)—to describe school characteristics,
- Student questionnaire **respondent-level** nonresponse adjusted weights—to describe characteristics of **students** nationally,
- Student questionnaire **school-level** nonresponse adjusted weights—to describe characteristics of **schools** nationally,
- Teacher questionnaire **respondent-level** nonresponse adjusted weights—to describe characteristics of **teachers** nationally,
- Teacher questionnaire **school-level** nonresponse adjusted weights—to describe characteristics of **schools** nationally,
- Activity (provider<sup>16</sup>) questionnaire **activity-level** nonresponse adjusted weights—to describe characteristics of prevention activities nationally, and
- Activity (provider) questionnaire **school-level** nonresponse adjusted weights—to describe characteristics of schools nationally,

The computation of these weights was a multistage process. First, base-weights were developed for every sampled school based on the probability with which the school was sampled. Then, a nonresponse adjustment was applied to the base-weights for each type of set of school-level weights (one for each instrument) to compensate for the number of schools that did not participate in that aspect of data collection. For the types of instruments that were completed by multiple respondents at a school, a respondent base-weight (based on the number of possible respondents) was created. Then, a second nonresponse adjustment was applied to the respondent-level base-weights to compensate for nonresponse within a school, in the case of student and teacher weights; or within category, in the case of the activity weights. Additionally, before the within respondent student and teacher nonresponse adjustments, an algorithm was applied to help decide whether or not each school had sufficient responses to consider the school responding in that category.

---

<sup>16</sup> Although we have referred to the survey on prevention efforts as provider questionnaires (because they were completed by prevention providers), the survey collected information on the actual programs and activities. They were also weighted to describe the characteristics of the prevention activities themselves.

**School-level Nonresponse Adjustment.** The nonresponse adjustments were performed for all data types by forming nonresponse cells at the school level based on sampling strata and the predictors of school-level response propensity. The predictors of school-level response included school size, type of school (i.e., public and Catholic schools versus other types of private schools), and grade levels covered by the school (i.e., whether a high school served 10th through 12th graders or some other combination of grade levels).

**Multiple Respondent Response Rate Adjustment.** For students, teachers, and program providers to represent their universes (i.e., all middle and high school students, all middle and high school teachers, all prevention activities nationally), the respondent level files were adjusted based on within unit sampling fractions. As noted, student samples were drawn with the intent of receiving 50 completed student questionnaires, regardless of whether the school had 50 students or 5,000 students. Hence, each responding student typically represented a number of other students in the school. Within each school, student weights were also adjusted based on how many of the sampled students actually responded.

We had asked that all teachers in each middle and high school complete teacher questionnaires. Some schools did, in fact, return surveys for 100 percent of the teachers, but more typically, 60 percent to 80 percent of teachers participated. Within each school, the teacher base-weights were adjusted for the nonresponding teachers.

As noted, more than 8,000 prevention activities were named by school principals. Project staff decided to ask a school to complete one provider survey within a given category. Hence, only 7,104 provider surveys were actually sent to schools. In addition, within a school, we sometimes drew a subsample of surveys so as not to overburden program providers. Weights were adjusted for these factors and for nonresponse within each of the 14 categories of prevention activities.

**Respondent-level Nonresponse Adjustment.** The respondent-level, nonresponse adjustment was done separately for the student, teacher, and provider (activity) surveys. For the student survey, the respondent-level, nonresponse adjustment was a multistage process. Student sampling had generally been performed by stratifying students by either grade or gender; hence, these were critical values for the weighting process. In some cases, because of data loss from the perforated student response forms, a respondent's grade and gender were not known. Missing values for grade and gender were "replaced" with imputed values. We then dropped students who had responded to less than 80 percent of the data items. After dropping these deficient records, a nonresponse adjustment was performed based on either gender or grade level, depending on how the sample was drawn. Hence, the responding male students in a school, for example, represented all male students in that school. This

adjustment was performed only on schools judged to have a sufficient response rate. The response criterion was as follows: (1) total number of students in a school is 11 or more and the estimated proportion of responding students is more than 40 percent, or (2) total number of students in a school is less than 11 and the proportion of responding students is more than 70 percent.

In computing weights for the teacher survey, teachers who responded to a low number of items in the teacher questionnaire (less than 60%) were treated as nonrespondents. Then school response status was assigned based on the number and proportion of responding teachers in each sampled school. A school was defined as a responding school with regard to the teacher survey if (1) total number of teachers in a school is 12 or more and the proportion of responding teachers is 25 percent or more; or (2) total number of teachers in a school is less than 12 and the proportion of responding teachers is 50 percent or more. By this rule, we defined about 5 percent of schools with at least one responding teacher as nonrespondents.

The procedure for the activity-level nonresponse adjustment was similar to the procedure for the respondent level non-response adjustment.

## **Analysis**

Once the data were cleaned and weighted, Gottfredson Associates and Westat staff conducted three types of analyses. These are: (1) data reduction and psychometric analysis (e.g., reliability and validity analysis); (2) descriptive statistics (e.g., measures of central tendency, dispersion, maximum and minimum values, and frequencies); and (3) inferential statistics (e.g., tests of differences between groups). Although each technique is potentially very useful, regardless of the statistical procedures used, none can be used to establish cause and effect relationships.

One of the first steps in conducting the data analysis was to create composite measures made up of several different questions from a given questionnaire. Many of these measures had been used in earlier studies or designed as part of instrument development by Gottfredson Associates. Gottfredson Associates staff also performed psychometric (reliability and validity) analyses to assess the reliability and validity of the measures. They examined internal consistency measures such as Cronbach's alpha and/or split-half correlations on the measures.

In order to describe characteristics of the prevention activities, schools, and the districts, we computed descriptive statistics. These statistics, which primarily used weighted data, included

frequencies and measures of central tendency (such as the mean or median) for individual questionnaire items and composite scores. The descriptive statistics were also broken down by instructional level, urbanicity, and other variables of interest.

In addition to descriptive statistics, we computed inferential statistics to examine whether or not a statistical relationship occurred by chance. While some of the research questions for the study were easily answered using descriptive statistics, others can only be answered using inferential statistics. These analyses focused on associations between continuous variables (e.g., correlations) and differences between groups (e.g., chi-square tests and t-tests). To perform the inferential analyses correctly with weighted data, we used WesVar<sup>®</sup> for Complex Samples, which is a special software application that was designed by Westat to correctly calculate standard errors when using weighted data.

## **APPENDIX B. METHODS AND CRITERIA FOR JUDGING THE ADEQUACY OF PREVENTION PROGRAMS OR ACTIVITIES**

This appendix describes our approach to assessing the quality of school-based prevention programs or activities and the quality of school-wide discipline practices. It includes a description of the adequacy cut points (criteria) that we used in the assessment of quality.

### **Quality of School-Based Prevention Programming and Criteria Used to Judge Adequacy**

For the Study on School Violence and Prevention, Westat and Gottfredson Associates (GA) sought to assess the quality of school-based prevention programming. This entailed several critical steps, including: (1) defining 10 dimensions that are on rational or empirical grounds expected to influence the likelihood that a program will achieve a measurable effect; (2) within each dimension and separately for 14 categories of prevention programs (e.g., prevention curriculum, instruction, or training; recreation, enrichment, or leisure; and mentoring), establishing criteria for the designation of “adequate” quality; and (3) comparing implementer reports about operating programs against the criteria. In other words, we conducted a criterion-based assessment, judging quality by comparing program performance against standards.

Concern with the measurement of quality is based on the findings of research that indicates that the quality of program implementation, in prevention programs and educational innovations more broadly, can be highly variable and is critical to achieving desired effects. For example, G. D. Gottfredson, Gottfredson, Czeh, Cantor, Crosse, and Hantman (2000) refer to research conducted by Botvin, Baker, Dusenbury, Tortu, and Botvin (1990) that found tremendous variability in the fidelity of implementation of Life Skills Training and the deleterious effects of poor implementation. More extensive discussions of the problem of poor program implementation and program ineffectiveness may be found in reports by D. C. Gottfredson, Gottfredson, & Skroban (1998); D. C. Gottfredson, Fink, Skroban, & Gottfredson, 1997; G. D. Gottfredson, Jones, & Gore (in press); and Jones, Gottfredson, & Gottfredson (1997).

No comprehensive measures of program quality applicable to all kinds of programs have ever been developed. To meet the need for survey-based measures of quality in the present research, we have defined quality in terms of 10 indicators that capture both program intensity and adherence to best practices. These dimensions are as follows: (1) level of use by school personnel, (2) best practices for content, (3) best practices for methods, (4) frequency of operation, (5) number of lessons or sessions, (6)

duration, (7) frequency of student participation, (8) frequency of staff participation, 9) ratio of providers to students in the schools, and (10) proportion of students exposed or participating. Hence, an adequate or “good” prevention program (i.e., program that is likely to achieve measurable effects) is one that achieves a specific minimum threshold on each of these dimensions. These 10 measures of program quality and the range of responses appear in Table B-1.

**Table B-1. Measures of program quality**

Measures	Possible range of responses
Level of use by school personnel	Ranges from “1” (at least one person in the school knows something about it) to “5” (one or more persons is conducting the activity on a regular basis)
Best practices for methods	Ranges from 0 to 100 percent*
Best practices for content	Ranges from 0 to 100 percent*
Frequency of operation	Ranges from “1” (special occasions once or twice a year) to “3” (continually throughout the year)
Number of lessons and sessions	This question had an open response category in which the respondent could write in the exact number of lessons or sessions
Duration	Ranges from “1” (less than a day) to “7” (more than a full school year)
Frequency of participation by students	Ranges from “1” (monthly or less often) to “6” (more than once a day)
Frequency of participation by staff	Ranges from “1” (monthly or less often) to “6” (more than once a day)
Ratio of providers to students in the school	$100 (\ln(N_p/N_s+1))$ , where $N_p$ = number of persons providing the service and $N_s$ = the number of students in the school
Proportion of students exposed or participating	Generally, $N_e/N_s$ , where $N_e$ = number of students exposed or participating and $N_s$ = number of students in the school. For the category youth participation in school decision making, $N_e$ = disciplinary incidents handled by student court of peer mediation and $N_s$ = disciplinary incidents handled by student court, peer mediation, or the administration

\* Scores for the best practices scales are the proportion of the identified best practices (content or methods) reportedly used in a particular activity or program. For example, for the program activity prevention curriculum, instruction, or training, the program provider was asked about the use of 10 best practices, such as use of rewards for group accomplishments, student recognition for effort expended, and assessment of student mastery and reteaching material not mastered. Following this example, if a program provider reported using 4 of the 10 best practices, the curriculum, instruction, or training program would receive a score of 0.40 (4 divided by 10) for the best practices for methods measure.

The importance of some of these indicators is self-evident. Level of use of a program is important, because if no one is using a program it can have no influence. Frequency of staff participation is important for the same reason. If school personnel seldom operate a program, it cannot have much effect on anything. Interventions of very brief duration cannot be expected to have much influence on levels of problem behavior (which tends to be enduring characteristics of persons and subject to powerful influences by peers) on the basis of rational analysis as well as general evidence about the relation of dose

to program effectiveness (Lipsey, 1992). Accordingly, number of lessons, duration, and frequency of student participation are obviously related to a program's potential to influence problem behavior. Other indicators of potential program quality are more tentative. We measured the proportion of students exposed to or participating in programs on the grounds that an intervention that reaches only a small number of individuals will generally leave most of the population unaffected. Ratio of providers to students is a similar indicator: if a very large number of students relative to the number of providers engage in a prevention activity, that program's influence is likely to be diluted.

The importance of other indicators is induced from a reading of the literature reporting on evaluations of specific programs. For instructional programs, meta-analytic literature reviews (Tobler, 1986; Tobler & Stratton, 1997) as well as an examination of the primary literature imply that programs involving the use of cognitive-behavioral instructional approaches tend to be more effective than programs that omit these approaches (also called "interactive" approaches by Tobler). In some areas, a research literature makes the identification of a least some "best practices" an unambiguous task. This is certainly true for instruction, behavioral, and classroom management programs where a great deal of literature exists on effective interventions (see generally Slavin, 1997, on instruction; Emmer, Evertson, Clements, & Worsham, 1994, on classroom management; and Walker, Colvin, & Ramsey, 1995, on behavioral interventions).

In other areas, little or no scientific literature is available to guide the induction of best practices. This is true of recreation or enrichment activities, for example, where no credible literature implies the effectiveness of such programs for preventing problem behavior and very little in the way of published guidance or recommendations from experienced practitioners. In such cases, we specified no best practices and measured none in the present research.

Between these two extremes are program areas where guidance in the form of established professional opinion exists. For example, counselors, social workers, and school psychologists in training are taught to base intervention on an assessment of the problem, establish treatment goals, and follow up on progress. This guidance did form the basis of specification of some best practices, because it is sensible to regard an intervention with objectives as likely to be more effective than one without objectives.

Because of the unevenness of the literature on best practices in different categories of preventive intervention, best practices are not measured in several of the categories. In these categories, the assessment of quality rests solely on indicators such as duration, frequency, and level of use that can generally be assessed for any kind of intervention.

GA also identified thresholds for “adequacy” that varied by the 14 categories of prevention activities or programs. Tables B-2 and B-3 show the minimum criteria necessary to be judged adequate on each of nine measures of program quality. (One of the quality measures does not have corresponding adequacy criteria.) Given the diversity of prevention activities, developing separate criteria was necessary. For example, the criterion for adequate duration was longer than a month for the prevention curriculum, instruction, or training program category (where instructional programs of less than six week’s duration are seldom found to have substantial effects). In contrast, the criterion for duration was at least one school year for the mentoring category (where the single credible evaluation implying the effectiveness of mentoring was of a carefully implemented program of a full year’s duration [Tierney et al., 1995]). In developing the “adequacy” criteria for each dimension of quality and each program activity, Gary Gottfredson and Denise Gottfredson, experts in the field of delinquency and violence prevention in schools, independently indicated the level for each criterion. They based their judgements on their understanding of the research (reviewed in an extensive manner by D. C. Gottfredson, 1997, 2001; and D. C. Gottfredson, Wilson, and Najaka, in press) for each program category; for categories that lacked sufficient research on which to base an assessment, they exercised their judgments. The raters discussed and resolved any discrepancies on ratings. In assessing the reasonableness of these ratings, readers may wish to consult the detailed account of the cutting scores for adequacy spelled out in the full report (G. D. Gottfredson et al., 2000). A summary rating was also developed based on the fraction of the separate dimensions of quality that were judged to be adequate. This summary rating is extremely conservative – often calling for only a fraction of the individual ratings to be “adequate.” By this lenient standard, a program may be judged “adequate” if it meets several criteria even if no one is implementing it on a regular basis.

In the final step, Westat and GA collected and analyzed survey data from a national probability sample of program providers using program-specific instruments that measured each dimension of quality. That is, the researchers developed and used 14 different instruments that corresponded to the 14 categories of prevention activities. In their analyses, the researchers assessed the performance of each program against the criterion for each dimension of quality. They summarized the results in terms of program category and dimension of quality. Readers need not rely solely on the “adequacy” ratings in interpreting the data on program quality. The underlying quantitative data – not dichotomized using any cutting scores – are available in a longer report (G. D. Gottfredson et al., 2000).

**Table B-2. Criteria used to assess adequacy or best practices for quality measures that have similar criteria across program or activity types**

<b>Quality measures with common minimum criteria across program or activity types</b>	<b>Minimum criteria required to be judged adequate</b>
Level of use by school personnel	For all program types: minimum criteria needed to be judged as adequate is defined as at least "one or more persons is conducting the activity on a regular basis"
Best practice for methods	For all program types where best practices: methods could be established, 70 percent or more of possible best practices used (see footnote on previous page) is needed for the program to be judged adequate
Best practices for content	For all program types where best practices: methods could be established, 70 percent or more of possible best practices used (see footnote on previous page) is needed for the program to be judged adequate

**Table B-3. Criteria used to assess adequacy or best practices for quality measures that have different criteria across program or activity types\***

Quality measures with different minimum criteria across program or activity types	Minimum criteria required to be judged adequate
<b>Number of lessons and sessions for</b>	
Prevention curriculum, instruction, or training Mentoring Tutoring Recreation, enrichment, leisure Improvements to instruct practices/methods External personnel resources for classroom	Greater than or equal to 16 Greater than or equal to 52 Greater than or equal to 26 Greater than or equal to 26 Greater than or equal to 30 Greater than or equal to 25
<b>Duration</b>	
Prevention curriculum, instruction, or training Counseling, social work, psychological or therapeutic activity Tutoring Recreation, enrichment, leisure Mentoring Planning structure or management of change; security and surveillance	More than 1 month More than 1 month More than 1 month More than 1 month At least 1 school year More than 1 full school year
<b>Frequency of participation for students</b>	
Culture, climate or expectations Intergroup relations and school-community interaction Planning structure or management of change Prevention curriculum, instruction, or training Counseling, social work, psychological, or therapeutic activity Mentoring, tutoring, coaching, apprenticeship Recreation, enrichment, leisure Services/programs for family members External personnel resources for classroom Improvements to instructional practices Behavioral programming or behavioral modeling Security and surveillance	At least 2 to 3 times per month At least 2 to 3 times per month At least 2 to 3 times per month At least weekly At least weekly At least weekly At least weekly At least weekly At least weekly At least weekly More than once per week At least daily At least daily
<b>Frequency of participation by staff</b>	
Culture, climate or expectations Intergroup relations and school-community interaction Planning structure or management of change Security and surveillance	At least 2 to 3 times per month At least 2 to 3 times per month At least 2 to 3 times per month At least daily
<b>Frequency of operation</b>	
Culture, climate or expectations Intergroup relations and school-community interaction Planning structure or management of change Security and surveillance	Continually throughout the year Continually throughout the year Continually throughout the year Continually throughout the year
<b>Proportion students exposed or participating</b>	
Culture, climate, or expectations Intergroup relations and school community interaction Youth participation in discipline	Greater than or equal to 70% Greater than or equal to 70% Greater than or equal to 10% of referrals handled by student court or through peer mediation

\* Not all quality measures apply to all program types.

## **Quality of School-wide Disciplinary Practices and Criteria Used to Judge Adequacy**

In a parallel process, we also conducted a criterion-based assessment for measuring quality of school-wide disciplinary practices, judging quality by comparing practices against standards. Quality of school-wide discipline practices consists of five measures: (1) communication and documentation, (2) range of appropriate responses to misconduct, (3) range of responses to desirable conduct, (4) disciplinarian consistency, and (5) predictable disciplinary decision making. (See Table B-4.) The items that make up each of the five scales and the cut points necessary for an adequacy or best practices rating were developed by the same two experts in the field of delinquency and violence prevention in schools mentioned in the previous section. These two researchers have published extensively in this area (e.g., see Gottfredson, D.C., 1997; Gottfredson, D.C., 2001; Gottfredson, G.D. and Gottfredson, D.C., 1985) and are familiar with the extant literature.

For a school to be judged adequate or using best practices on the first four measures listed, 70 percent of the responses to the items that make up the measure must be the desired responses. Desired responses are those that have been shown in the research literature to be the best approach (or best practice) for that particular area of school-wide discipline. An example of the category “best practices for range of appropriate responses to misconduct” would be evidence of a great variety of appropriate responses to misconduct. Using the communication and documentation scale as an example, responses for five of the seven items (71%) need to be the desired responses for a school to receive a best practices or adequacy rating on the communication and documentation scale. For the fifth measure, predictable disciplinary decision making, the average response to two questions on how often teachers and students can predict the administration's disciplinary response must be equal to or greater than (where a “4” means that it can be predicted most of the time, and a “5” means that it can be predicted almost always).

**Table B-4. Measures of quality for school-wide discipline practices and cut points for assessing adequacy**

<b>Measure</b>	<b>Explanation</b>	<b>Possible range of responses</b>	<b>Cut point for adequacy</b>
Best practices for communication and documentation	This measure is made up of seven items about the extent of distribution of the school's discipline policy and current efforts to maintain or use procedures for documentation. Higher percentages mean that more sound communication and documentation practices are employed.	0 to 100%	70%
Best practices for range of appropriate responses to misconduct	This measure is made up of 17 items about a variety of potential responses to misconduct the schools might exercise, ranging from brief exclusion from class, to use of peer mediation or student court, detention, reprimands, and to notifying parents to community service. A higher percentage means that a greater variety of appropriate responses are employed.	0 to 100%	70%
Best practices for range of appropriate responses to desirable conduct	The range of appropriate responses to desirable conduct scale is made up of seven items about the variety of potential responses to desirable student behavior that a school might exercise, ranging from material rewards through informal recognition or praise, activity or privilege reinforcers, to formal recognition or praise. A higher percentage means that a greater variety of potential reinforcers are used.	0 to 100%	70%
Best practices for disciplinarian consistency	Made up of three items, this scale is about whether specific disciplinary responses are independent of the source of referral, identity of the decision maker, or the student disciplined. Higher percentages mean the disciplinarian(s) is/are administering discipline with greater consistency.	0 to 100%	70%
Best practices for predictable disciplinary decisionmaking	This short scale is made up of the average of two Likert-type items that assess whether students and teachers can predict the administration's disciplinary response. The responses are on a scale from 1 to 5, where a "4" = most of the time and a "5" = almost always. Higher scores imply greater predictability.	1 to 5	4

## REFERENCES

- Botvin, G., Baker, E., Dusenbury, L., Tortu, S., and Botvin, E. (1990). Preventing adolescent drug abuse through a multi-modal cognitive-behavioral approach: Results of a 3-year study. *Journal of Counseling and Clinical Psychology*, 58, 437-446.
- Centers for Disease Control and Prevention. (1993). Violence-related attitudes and behaviors of high school students-- New York City, 1992-1993. *Morbidity and Mortality Weekly Report*, 42 (40), 773-777.
- Centers for Disease Control and Prevention. (1999). Youth Risk Behavior Surveillance -- United States, 1999. *Morbidity and Mortality Weekly Report* 49 (No. SS-5).
- Center for the Study and Prevention of Violence. (1995). *Blueprints for violence prevention*. Boulder, Colorado: Author.
- Chandler, K.A., Chapman, C.D., Rand, M.R., & Taylor, B.M. (1998). *Students' reports of school crime: 1989 and 1995*. Washington, D.C: U.S. Departments of Education and Justice.
- Emmer, E. T., Evertson, C. M., Clements, B. S., & Worsham, M. E. (1994). *Classroom management for secondary teachers* (3rd ed). Boston: Allyn & Bacon.
- Gottfredson, D.C. (1997). School-based crime prevention. In L.W. Sherman, D.C. Gottfredson, D. MacKenzie, J. Eck, P. Reuter, & S. Bushway (eds.). *Preventing crime: What works, what doesn't, what's promising: A report to the United States Congress*. Washington, D.C.: U.S. Department of Justice Office of Justice Programs.
- Gottfredson, D.C. (2001). *Delinquency and schools*. New York: Cambridge University Press.
- Gottfredson, D. C., Fink, C. M., Skroban, S., & Gottfredson, G. D. (1997). Making prevention work. In Weissberg, R. P., Gullotta, T. P., Hampton, R. L., & Adams, G. R. (eds.), *Healthy children 2010: Establishing preventive services*. Thousand Oaks, CA: Sage.
- Gottfredson, D. C., Gottfredson, G. D., & Skroban, S. (1998) Can prevention work where it is needed most? *Evaluation Review*, 22, 315-340.
- Gottfredson, D. C., Wilson, D. B. & Najaka, S. S. (Forthcoming). School-based crime prevention. In Farrington, D. P., Sherman, L. W., and Welsh, B. *Preventing crime*. United Kingdom: Harwood Academic Publishers.
- Gottfredson, G.D., and Gottfredson, D.C. (1985). *Victimization in schools*. New York: Plenum.
- Gottfredson, G., Gottfredson, D. C., Czeh, E. R., Cantor, D., Crosse, S. B., & Hantman, I. (2000). *National study of delinquency prevention in schools*. Final report for the National Institute of Justice, U. S. Department of Justice, Grant # 96-MN-MV-008. Ellicott City, MD: Gottfredson Associates, Inc.
- Gottfredson, G. D., Jones, E. M., & Gore, T. W. (In press). Implementation and evaluation of a cognitive-behavioral intervention to prevent problem behavior in a disorganized school. *Prevention Science*.

- Heaviside, S., Rowand, C., Williams, C. & Farris, E. (1998). *Violence and discipline problems in U.S. public schools: 1996-97*. Washington D.C.: U.S. Department of Education, National Center for Education Statistics.
- International Association of Chiefs of Police (1995). *Reducing gun and other violence in schools: An on-site analysis of fifteen promising programs*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention.
- Johnston, L.D., O'Malley, P.M., & Bachman, J.G. (1998). *Outcome measures from the Monitoring the Future Study relevant to Goal 7: Safe, disciplined, and alcohol- and drug-free schools*. Report commissioned by the National Education Goals Panel.
- Jones, E. M., Gottfredson, G. D., & Gottfredson, D. C. (1997). Success for some: An evaluation of a "Success for All" program. *Evaluation Review*, 21, 643-670.
- Katchur, S.P., Stennies, G.M., Powell, K.E., Modzeleski, W., Stephens, R., Murphy, R., Kresnow, M., Sleet, D. & Lowry, R. (1996). School-associated violent deaths in the United States, 1992-1994. *Journal of the American Medical Association*, 275, 1729-1733.
- Lipsey, M. W. (1992). Juvenile delinquency treatment: A meta-analytic inquiry into the variability of effects. In T.D. Cook, H. Cooper, D. S. Cordray, H. Hartmann, L. V. Hedges, R. J. Light, R. J. Louis, & F. Mosteller (eds.), *Meta-analysis for explanation: A casebook*. NY: Russell Sage Foundation.
- Minnesota Department of Education. (1992). *Promising prevention strategies: A look at what works*. St. Paul, MN: Author.
- National School Boards Association. (1993). *Violence in the schools: How America's school boards are safeguarding our children*. Alexandria, VA: Author.
- National School Safety Center. (1995). *School safety work book. What works: Promising violence prevention programs*. Malibu, CA: Author.
- Slavin, R. E. (1997). *Educational psychology: Theory and practice*. Boston: Allyn & Bacon.
- Tierney, J. P., Grossman, J. B., & Resch, N. L. (1995). *Making a difference: An impact study of Big Brothers/Big Sisters*. Philadelphia: Public/Private Ventures.