

# John J. Wilson, Acting Administrator August 2000 JUVENILE JUSTICE BULLETIN

## Youth Gangs in Schools



#### James C. Howell and James P. Lynch

The proliferation of youth gangs since 1980 has fueled the public's fear and magnified possible misconceptions about youth gangs. To address the mounting concern about youth gangs, the Office of Juvenile Justice and Delinquency Prevention's (OJJDP's) Youth Gang Series delves into many of the key issues related to youth gangs. The series considers issues such as gang migration, gang growth, female involvement with gangs, homicide, drugs and violence, and the needs of communities and youth who live in the presence of youth gangs.

Youth gangs are linked with serious crime problems in elementary and secondary schools in the United States. A report issued by the U.S. Departments of Education and Justice (Chandler et al., 1998) found that the percentage of students reporting the presence of gangs at school nearly doubled between 1989 and 1995. This report also found a strong correlation between the presence of gangs and both guns and drugs in school. Higher percentages of students reported knowing a student who brought a gun to school when gangs were present at the school (25 percent) than when gangs were not present (8 percent). In addition, gang presence increased the likelihood of seeing a student with a gun at school: 12 percent of the students surveyed reported having seen a student with a gun in school when gangs were present,

compared with 3 percent when gangs were not present. Students who reported that drugs (marijuana, cocaine, crack, or uppers/downers) were readily available at school were much more likely to report gangs at their school (35 percent) than those who said that no drugs were available (14 percent). The presence of gangs more than doubled the likelihood of violent victimization at school (nearly 8 percent, compared with 3 percent).

The report by Chandler and colleagues (1998) analyzed the findings of the 1989 and 1995 School Crime Supplements (SCS's) to the National Crime Victim Survey (NCVS). The supplements were distributed in January through June of their respective years to nationally representative samples of approximately 10,000 students. These students were in the NCVS sample; thus, the SCS was an enhancement to the NCVS. Eligible respondents to the supplements were between the ages of 12 and 19 and had attended school at some point during the 6 months preceding the interview. Respondents were asked about their victimization experience during the last 6 months and whether the crime occurred at school during the 6 months prior to the interview. "At school" was defined as in the school building, on school grounds, or on a school bus. The response rate was 78 percent.

#### From the Administrator

The incidence of gangs in schools nearly doubled from 1989 to 1995, mirroring the growth in youth gangs seen over the past two decades. With the strong correlation between the presence in schools of gangs and guns—and gangs and drugs—this increase is particularly disturbing.

Drawing on a report published by the U.S. Departments of Education and Justice in 1998 and other literature, *Youth Gangs in Schools* analyzes findings from the School Crime Supplements (SCS) to the National Crime Victim Survey, describes characteristics of gangs in schools, and discusses contributory factors to gang prevalence in schools. The impact of gang presence in schools on victimization is also reviewed.

One-third of the students surveyed in the 1995 SCS reported the presence of gangs in their schools. Most gangs that students see at school are actively involved in criminal activity, with two-thirds involved in one or more of the following types of criminal acts: violence, drug sales, and carrying guns.

As the above data illustrate, the problem of youth gangs in schools demands our attention. The information that this Youth Gang Series Bulletin provides will help us to focus our efforts in this direction.

John J. Wilson Acting Administrator This Bulletin presents results of additional analyses of gang-related SCS data. Three main topics are examined:

- ◆ Characteristics of gangs in schools.
- Reasons for greater gang prevalence in some schools.
- Impact of gangs on victimization at school.

#### Characteristics of Gangs in Schools

Chandler and colleagues (1998) reported that 28 percent of the surveyed students reported gangs in schools. However, their analysis used only one indicator of gang presence, responses to the question: "Are there any street gangs at your school?" To obtain a more complete measure of gang presence in schools, two additional questions from the 1995 SCS are considered here: "Do any of the students at your school belong to a street gang?" and "What about gangs that don't have members attending your school . . . have any of those gangs come around your school in the past 6 months?" When positive responses to any of these three questions were counted, gang presence in schools increased from 28 to 37 percent.

To assess the characteristics of these gangs, the SCS asked students who reported gang presence at school to indicate how they knew street gangs existed by responding yes or no to questions of whether gangs:

- ♦ Had a name.
- ◆ Had a recognized leader.
- ◆ Had their own territory or turf.

- ◆ Tagged or marked turf with graffiti.
- Committed violent acts.
- ◆ Spent time with other members of the gang.
- Wore clothing or other items to identify their gang membership.
- ♦ Had tattoos.

Between 33 and 80 percent of students used one of these criteria to define gangs (table 1). Students could use more than one indicator of gang existence. Most students used three of the indicators as evidence of a gang: having a name (80 percent), spending time with other members of the gang (80 percent), and wearing clothing or other items to identify their gang membership (71 percent). The fourth most frequently used indicator was tagging or marking turf (56 percent), followed by violent gang activity (50 percent). Thus, it appears that students often, but not always, associate the groups they call "gangs" with violent acts. The least frequently used indicators, in descending order of importance, were these: territory or turf (47 percent), tattoos (37 percent), and recognized leader (33 percent).1

To explore further the issue of student association of school violence and gangs, the students' use of various gang indicators (characteristics) was compared with their reports of the degree of gang involvement in criminal activities at school. To measure gang involvement in criminal activities, a gang crime scale was created based on student answers to the following three questions:

◆ How often have street gangs been involved in fights, attacks, or violence at your school in the past 6 months?

- Have street gangs been involved in the sale of drugs at your school in the past 6 months?
- Have any street gang members brought guns to your school in the past 6 months?

Table 2 shows the percentage of students who used the various gang indicators when they said gangs were involved in none, one, two, or three criminal activities at school. For brevity, this Bulletin refers to these criminal activities as violence, drug sales, and carrying guns, respectively.

Table 2 shows that students use the gang indicators most frequently in reference to gangs that are involved at school in only one of the three types of criminal activities in the gang crime scale. The extent of gang involvement in school-related criminal activities in relation to the three criteria students most often use to define gangs (having a name, spending time together, and wearing identifying clothing) is shown in table 2. It is readily apparent that students do not use these three criteria to distinguish degrees of gang involvement in criminal activity.

#### Reasons for Greater Gang Prevalence in Some Schools

A number of student and school attributes that might be related to the presence of gangs in schools are analyzed here to determine why gangs are more prevalent in some schools than in others. The study examined the impact of the following factors and found each one statistically significant with the exception of gender.<sup>2</sup>

#### **Demographic Characteristics**

Significant differences appear in the age and race/ethnicity of students reporting gangs in schools. The percentage of students reporting gang presence in their schools increased considerably with age (see table 3): 26 and 34 percent of students ages 12 and 13, respectively, reported gang presence, compared with an average of 41 percent for students ages 14–19. More than one-fourth (26 percent) of 12-year-olds reported gangs in their schools, and more than one-third of 13year-olds and 40 percent of 14-year-olds reported gangs. Fifteen-year-olds were most likely to report gangs (43 percent) (excluding 19-year-olds, for whom the number of surveyed students was very small).

Table 1: Criteria Students Recognized as Indicating Gang Presence at School

	Percentage of Student Responses			
Indicator of Gang Presence	Yes	No	Don't Know	
Name	80%	9%	11%	
Recognized leader	33	40	27	
Territory or turf	47	33	20	
Tagging or marking turf with graffiti	56	30	14	
Violence	50	29	21	
Time spent with other gang members	80	8	12	
Clothing or other identifying items	71	21	8	
Tattoos	37	38	25	

**Note:** Number of respondents (n)=2,604.

Table 2: Percentage of Students Reporting Gang Involvement in Criminal Activities, by Indicators Used To Identify Gang Presence

Number of Types of Criminal Gang Activities Reported\*

		neuvines reported			
<b>Indicator of Gang Presence</b>	None	One	Two	Three	
Name	29%	41%	21%	9%	
Leader	22	39	25	13	
Territory or turf	24	40	25	11	
Tagging or marking turf	26	40	23	10	
Violence	19	38	30	13	
Time spent with other gang members	27	40	23	10	
Clothing or other identifying items	27	40	23	10	
Tattoos	21	37	29	13	

<sup>\*</sup>As measured by a gang crime scale derived from student responses to the 1989 and 1995 School Crime Supplements to the National Crime Victim Survey. Types of criminal activities: violence, drug sales, and carrying guns.

**Note:** Number of respondents (n)=2,604. The percentages for each indicator of gang presence may not equal 100 percent due to rounding.

Table 4 shows that consideration of gang criminal involvement (violence, drug sales, and carrying guns, as measured by the gang crime scale) changes how students of different ages perceive gangs in school. On average, 31 percent of the students reported that the gangs in their schools were not involved in any of the three specified criminal activities. Of the 12year-old students, 43 percent said that the gangs in their schools were not involved in any of the three types of criminal activity. The proportion decreased each year up to age 16, at which only 26 percent of the students said that the gangs in their schools were not involved in criminal activities. At age 17, the proportion rose to 31 percent; at age 19, it fell to a low of 25 percent.

Table 4 also shows the average percentage of students reporting criminal involvement of gangs at their school. About two-thirds of the students reported gang involvement in one or more of the three specified types of criminal activities. Students ages 15 and 17 reported the highest percentage of gangs involved in all three types of criminal activities (11 and 12 percent, respectively). However, the largest percentage (40 percent) of the students reported gang involvement in one type of criminal activity; one in five students (21 percent) reported gang involvement in two types of criminal activities; and only 8 percent of the surveyed students reported gang

involvement in all three types of criminal activities. Thus, only a small fraction of gangs appears to be highly active in all three types of crimes.

The percentage of white, black, and Hispanic students who reported gangs in their schools in 1995 varied significantly. According to the gang presence scale, 61 percent of Hispanic students reported gangs, com-

pared with 44 percent of black students and 33 percent of white students. There was no significant difference between the percentages of males (38 percent) and females (37 percent) reporting gangs in schools.

#### **Population Size**

Table 5 shows the percentage of students who indicated gang presence in school according to the population size of their community. As expected, the presence of gangs in schools increases with the size of the community, up to 50,000. The response from students living in areas with populations of 50,000 or larger did not vary greatly (from 51 percent to 54 percent of these students reported gangs). The highest percentages of student reports of gangs were not in the most populated areas but rather in areas with populations between 100,000 and 249,999 (54 percent), followed closely by areas with populations between 250,000 and 999,999 (53 percent). Students in areas with populations of 1 million or more were slightly less likely to report gangs (51 percent). Even in the smallest jurisdictions (populations smaller than 1,000), 23 percent of students reported gangs in their schools.

Urban and rural areas were compared using the composite measure of gang presence. One-quarter (25 percent) of students attending schools in rural areas reported gangs in their schools, compared with 43 percent of students in all urban areas. In another population comparison, 51 percent of students in

Table 3: Percentage of Students Reporting Gang Presence in School, by Age

Age	Gang Presence*	
	Yes	No
12 ( <i>n</i> =1,618)	26%	74%
13 ( <i>n</i> =1,655)	34	66
14 ( <i>n</i> =1,609)	40	60
15 ( <i>n</i> =1,581)	43	57
16 ( <i>n</i> =1,463)	40	60
17 ( <i>n</i> =1,252)	41	59
18 ( <i>n</i> =660)	40	60
19 ( <i>n</i> =116)	43	57
Total $(n=9,954)$	37	63

\*Using a composite measure of gang presence derived from student responses to the questions: (1) Are there any street gangs at your school? (2) Do any of the students at your school belong to a street gang? and (3) What about gangs that don't have members attending your school . . . have any of those gangs come around your school in the past 6 months?

Note: n=number of respondents.

schools within central cities of metropolitan statistical areas (MSA's) reported gangs, in contrast with 36 percent of students in suburban areas of MSA's and 27 percent of students outside MSA's. These population patterns are consistent with the findings of the National Youth Gang Survey (National Youth Gang Center, 1999a and b).

#### **Household Income**

Gang presence varied significantly with household income. At the lowest income level (less than \$7,500), the largest percentage (47 percent) of students reported gangs in their schools (see table 6). As expected, as income level increased, reported gang presence decreased. However, reports of gang presence were fairly evenly distributed across households with income levels of \$12,500 to more than \$50,000. This finding is not surprising, given the pervasive presence of gangs in schools.

#### **Drug Availability**

Students were asked whether "it is easy. hard, or impossible to get" drugs (including alcohol, marijuana, crack, other forms of cocaine, uppers/downers, LSD, PCP, heroin, and other illegal drugs) at school.3 Table 7 shows the percentage of students who reported gangs in relation to the number of drugs they said were readily available at school. Where none of the drugs was easy to get, only 25 percent of surveyed students said gangs were present. This percentage increased from 42 percent when only one drug was readily available to 69 percent when seven drugs were readily available, and then dropped slightly when eight or nine drugs were readily available. Thus, gangs were significantly more prevalent when a large number of drugs were easy to get at school.

#### **Security Steps**

This study examined whether gang presence was related to general school security measures. Students were asked whether their school had:

- Security guards.
- Other school staff supervising the hallway.
- ◆ Metal detectors.
- Locked doors during the day.
- ◆ A requirement that visitors sign in.
- ◆ Locker checks.

Table 8 shows the percentage of students who indicated gang presence, based on

Table 4: Percentage of Students Reporting Gang Involvement in Criminal Activities, by Age

Number of Types of Criminal Gang Activities Reported\*

		<u>-</u>			
Age	None	One	Two	Three	
12 (n=289)	43%	41%	11%	5%	
13 ( <i>n</i> =376)	38	37	20	5	
14 ( <i>n</i> =455)	30	44	18	7	
15 ( <i>n</i> =489)	27	41	21	11	
16 ( <i>n</i> =419)	26	38	27	9	
17 ( <i>n</i> =354)	31	36	21	12	
18 ( <i>n</i> =186)	28	39	24	9	
19 ( <i>n</i> =36)	25	33	33	8	
Total $(n=2,604)$	31	40	21	8	

\*As measured by a gang crime scale derived from student responses to the 1989 and 1995 School Crime Supplements to the National Crime Victim Survey. Types of criminal activities: violence, drug sales, and carrying guns.

**Note:** *n*=number of respondents at a particular age. The percentages for each age may not equal 100 percent due to rounding.

the composite measure of gang presence, in relation to the number of security measures employed by the schools.<sup>4</sup> In schools reported by students to employ none of the six security measures, only 13 percent of the students reported gangs. The presence of gangs increased consistently as the number of security measures increased, from 22 percent when only one

security measure was employed to 63 percent when all six security measures were in place.

Interpretation of these results is difficult. When more security measures are used in schools, gangs are significantly more prevalent. These data may indicate that more security measures are employed for

Table 5: Percentage of Students Reporting Gang Presence in School, by Population Size

	Gang Presence*		
Population Size	Yes (n=3,732)	No (n=6,222)	
Less than 1,000	23%	77%	
1,000-9,999	29	71	
10,000–24,999	41	59	
25,000-49,999	45	55	
50,000-99,999	51	49	
100,000–249,999	54	46	
250,000–499,999	53	47	
500,000-999,999	53	47	
1 million or more	51	49	
Unincorporated areas	27	73	

\*Using a composite measure of gang presence derived from student responses to the questions: (1) Are there any street gangs at your school? (2) Do any of the students at your school belong to a street gang? and (3) What about gangs that don't have members attending your school . . . have any of those gangs come around your school in the past 6 months?

Note: n=number of respondents.

Table 6: Percentage of Students Reporting Gang Presence in School, by Household Income

Gang Presence*		
Yes	No	
47%	53%	
42	58	
37	63	
36	64	
37	63	
	Yes 47% 42 37 36	

\*Using a composite measure of gang presence derived from student responses to the questions: (1) Are there any street gangs at your school? (2) Do any of the students at your school belong to a street gang? and (3) What about gangs that don't have members attending your school . . . have any of those gangs come around your school in the past 6 months?

**Note:** *n*=number of respondents.

protection in response to gang presence and other security risks. However, many of the security measures may not be implemented effectively (see Gottfredson and Gottfredson, 1999) and thus may not be particularly effective in curbing gang activity in schools.

#### **Victimization Prevalence**

A victimization prevalence measure was developed using student responses to the following three survey questions:

- During the past 6 months, did anyone take money or things directly from you by force, weapons, or threats at school?
- During the last 6 months, did anyone steal something from your desk, locker, or some other place at school (other than any incidents just mentioned)?
- Other than the incidents just mentioned, did anyone physically attack you at school during the last 6 months?

Table 7: Percentage of Students Reporting Gang Presence in School, by Number of Drugs That Were Readily Available at School

Gang Presence*		
Yes	No	
25%	75%	
42	58	
52	48	
54	46	
60	40	
57	43	
67	33	
69	31	
63	37	
62	38	
37	63	
	Yes  25% 42 52 54 60 57 67 69 63 62	

<sup>\*</sup>Using a composite measure of gang presence derived from student responses to the questions: (1) Are there any street gangs at your school? (2) Do any of the students at your school belong to a street gang? and (3) What about gangs that don't have members attending your school . . . have any of those gangs come around your school in the past 6 months?

Note: *n*=number of respondents.

A positive response to any of these three questions correlated significantly with gang presence. When students said gangs were present, 54 percent of them reported one or more of the three types of victimization, compared with 46 percent when gangs were not present.

#### **Public or Private School**

Using the composite measure of gang presence revealed that the type of school made a significant difference with respect to gang presence. Almost 40 percent of students in public schools reported that gangs were present, compared with 16 percent in private schools. Students also were asked if they were "assigned" to the school they attended or if they "chose" that school. Surprisingly, students who chose the school they attended reported significantly more gang presence (47 percent compared with 39 percent).

#### Summary

These analyses indicate that, when a comprehensive measure of gang presence was used, all of the attributes of persons (except gender) and schools that were examined predicted gang prevalence in schools. Hispanic and black 15-year-olds from lowincome households reported the highest prevalence of gangs in school. These students were most likely to attend public schools that were located within central cities of MSA's with populations between 100,000 and 1 million and characterized by high levels of student victimization, numerous security measures, and a large number of readily available drugs.

### Impact of Gangs on Victimization at School

This study also examined the importance of gang presence with respect to overall victimization rates in schools. Although NCVS victimization data could not be linked with the SCS data by geographical area, correlations between respondent reports of victimization at school, at home, and elsewhere were examined. If the risk of victimization at school is due to the dangerousness of the areas in which schools are located, then the risk at home and in the student's neighborhood should be highly correlated with the risk at school. If risk in these other domains is not highly correlated with victimization at school, then the school environment must make a unique contribution to the risk of victimization. Table 9 shows a significant correlation of violent and property-related

Table 8: Percentage of Students Reporting Gang Presence in School, by Number of School Security Measures

Number of School Security Measures	Gang Presence*		
	Yes	No	
None ( <i>n</i> =377)	13%	87%	
1 ( <i>n</i> =1,073)	22	78	
2 (n=2,396)	31	69	
3 (n=3,159)	38	62	
4 ( <i>n</i> =2,000)	49	51	
5 ( <i>n</i> =747)	54	46	
6 (n=202)	63	37	
Total $(n=9,954)$	37	63	

\*Using a composite measure of gang presence derived from student responses to the questions: (1) Are there any street gangs at your school? (2) Do any of the students at your school belong to a street gang? and (3) What about gangs that don't have members attending your school . . . have any of those gangs come around your school in the past 6 months?

**Note:** *n*=number of respondents.

victimization at school, at home, and in other places; however, the correlation coefficients are not large. Thus, this analysis suggests that the school environment makes a unique contribution to the criminal victimization of adolescents. This observation, together with other findings reported in this Bulletin, suggests that gang presence is an important contributor to overall levels of student victimization at school.

#### Conclusion

Gangs are very prevalent in schools. More than one-third (37 percent) of the students surveyed in the 1995 SCS reported gangs in their schools. This number included nearly two-thirds of Hispanic students, almost one-half of black students, and onethird of white students. Students in middle to late adolescence who lived in households with incomes of less than \$7.500 and who had been victimized personally were most likely to report gang presence. These students were most likely to attend public schools that they (or their parents or guardians) had chosen in cities with populations between 100,000 and 1 million. These largely urban schools employed a large number of security measures, had high rates of victimization, and were places where drugs were readily available. The most criminally active gangs were reported by 15- to 17-year-old students of either gender.

This analysis shows a fairly high level of consensus among students with respect

to indicators of youth gangs. Gang indicators used by students should be researched further to develop empirical indicators of gangs in schools that school officials and others could use in developing communitywide antigang programs and strategies.

The students reported that most of the gangs they see at school are actively involved in criminal activities. About two-thirds of the students reported that gangs are involved in none or only one of three types of criminal acts: violence, drug sales, or carrying guns. Nevertheless, students said that a small proportion of gangs in schools (8 percent) are involved in all three types of crimes, and these gangs are probably responsible for the most disruption and violent victimization in and around schools.

Readers should note that only three types of crimes—violence, drug sales, and carrying guns—were included in this study. Data from the National Youth Gang Surveys (National Youth Gang Center, 1999a and b) and studies of representative urban samples of adolescents (see Thornberry, 1998, for a summary of four major studies) show that youth gangs are actively involved in a wide variety of offenses not analyzed in this Bulletin.

Nevertheless, many of the gangs in and around schools that are not actively involved in the criminal activities discussed in this Bulletin may not be actively involved in serious crimes. These gangs may be qualitatively different from typical youth gangs that have a large proportion of adult members and are fully committed to a "criminal orientation" (Klein, 1995, 30; see also, Wiebe, Meeker, and Vila, in press). Thus, it is very important for school

Table 9: Correlation of Student Victimization at Home, School, and Elsewhere

#### **Correlation Coefficient Number of Crimes Neither at Home** Number of Number of **Crimes at Home Crimes at School** nor at School Number of crimes at home 1.000 Number of crimes at school 0.045\* 1.000 Number of crimes neither at home nor at school 0.093\*0.078\*1.000

Note: Number of respondents (n)=9,954.

<sup>\*</sup>Correlation is significant at the 0.01 level (Pearson's *r*, two-tailed). Pearson's *r* is a statistical significance test of the probability that two variables will appear to be correlated simply because the estimate is based on a sample rather than the population. A two-tailed significance test takes into account scores on both ends of the continuum.

officials, working in collaboration with law enforcement and others in the community, to assess the extent of gang involvement in criminal activity so that resources can be directed toward efforts that address the most criminally active and disruptive gangs.

The presence of gangs is correlated with criminal activity and the use of selfprotective measures that indicate an atmosphere of perceived danger in the school environment. It is not clear, however, that gangs are a direct cause of criminal victimization at school. Belonging to gangs may be a type of selfprotection employed by students in response to threatening school and community environments. In the original report on the SCS, the study team noted that "various types of problems tended to co-exist. For instance, student reports of drug availability, gang presence, and gun presence at school were all related to student reports of having experienced violent victimization at school" (Chandler et al., 1998, p. 12). The analyses presented in this Bulletin found a high correlation between student victimization of all types and gang presence. Both gangs and criminal victimization in schools are products of disorder in schools (see Gottfredson and Gottfredson, 1985; Welsh, Green, and Jenkins, 1999) and a host of other factors in the school, family, community, peer group, and individual domains (Hill et al., 1999; Loeber and Farrington, 1998). This could account for the positive relationship between gang presence and the use of self-protective security measures in schools.

Nevertheless, gangs contribute significantly to school-related victimization. An analysis of gang arrests reported by 22 law enforcement agencies throughout Orange County, CA, showed that violent gang crimes began to escalate early in the school day and peaked early in the afternoon and again long after the schoolday ended (Wiebe, Meeker, and Vila, in press). In contrast, overall juvenile violence has been found to peak immediately after the end of the schoolday (Sickmund, Snyder, and Poe-Yamagata, 1997). The Orange County data suggest that schools and surrounding communities need to implement gang intervention measures throughout the school day to prevent and reduce gang violence. The school security measures analyzed in this study do not appear to be solutions, in and of themselves, to gang problems. Other interventions need to be implemented

along with school security measures to combat gangs in schools (see Howell, 2000; Gottfredson and Gottfredson, 1999, for promising and effective interventions).

#### **Endnotes**

- 1. A large number of respondents (n=882) who reported gang presence inadvertently were not asked the followup question regarding how they knew gangs existed. This omission reduced the number of respondents who should have been asked the followup question from 3,486 to 2,604; therefore, the responses to this question are not nationally representative. The analyses directly affected by this omission pertain to student indicators of gangs (tables 1, 2, and 4). The skipped students were significantly (but not greatly) more likely to be younger, white, from higher income households, in private schools, in suburban areas, and in areas where crime was less prevalent. Thus, the responses of the students who were asked the followup question would skew the gang perceptions of students toward greater seriousness. For this reason, weighted data were not used for the analyses.
- 2. In this study, findings were reported as significant if the Pearson chi-square had a probability of less than 0.001 of occurring by chance or because the estimates were based on a sample. The probability of this value of chi-square occurring as a result of sampling error is less than or equal to 0.001. The chisquare statistic measures the probability that two variables will appear to be correlated simply because the estimate is based upon a sample rather than the population. Usually, researchers are willing to assume that the observed results are not due to sampling error if the probability that the results are due to sampling error is 5 percent or less. The more stringent 0.001 criterion was used to take account of the fact that the NCVS is not a simple random sample and that the standard errors computed in standard statistical packages such as SPSS will be too small for use with the NCVS. The customary response to this problem is to use complex standard error estimation routines (e.g., WESTVAR), or to double the standard errors computed by statistical packages to take account of the cluster in the NCVS sample. Using the more stringent significance level effectively accomplishes the same end.
- 3. A drug availability index was created for this analysis. Each of the nine substances that was reported to be readily available added "1" to the score on the index.
- 4. A school security index was created for this analysis. Each of the six school security measures added "1" to the score on the index.

5. Correlation coefficients indicate the strength and direction of the relationship between two variables. More specifically, they indicate the unit change in one variable that can be expected when the value of the other variable changes one unit.

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