

## Chapter 5

# An Exploration of the Relationship Between Carrying Weapons to School and Victimization

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### Introduction

Juvenile violence has become a major social and health problem in the United States. The Office of Juvenile Justice and Delinquency Prevention (OJJDP) reported that the number of juveniles murdered increased 82% between 1984 and 1994 (OJJDP, 1996). An average of seven juveniles a day were victims of homicide in 1994 compared to five per day in 1980. The majority (64%) of juveniles were killed by an acquaintance or a family member. In addition, 49% of all juvenile homicides involved the use of a firearm. For homicides of 15-17 year olds, the percentage rises to 76% that involved a firearm.

OJJDP also reported an increase in the number of juveniles committing violent crimes. In 1994, there were 150,200 juvenile arrests for violent crimes representing a 75% increase over the 1984 rate. For males, the increase was 69% and for females it was 128%. In comparison, the adult arrest rate for violent crimes increased 48% during the same time period. The Office of Juvenile Justice and Delinquency Prevention predicts that if these trends continue, juvenile arrest rates for violent crimes will more than double by the year 2010 (OJJDP, 1996).

The problem of youth violence has also become a major concern in schools (Gaustad, 1991, Johnson & Johnson, 1995b; Mulhern, 1994). Bastian and Taylor (1991) reported that 9% of students participating in the School Crime Supplement of the National Crime Victimization Survey had been a victim of a violent crime or a property crime while at school. Another national survey of 6th through 12th grade students conducted by

the National Center for Education Statistics found that 12% of the surveyed students had been a victim of a physical attack, robbery, or bullying while at school and 71% of the students knew of these types of incidents occurring in their school (Nolin, Davies, & Chandler, 1996).

In addition, there were 105 school-associated violent deaths across the nation from 1992 to 1994 (Kachur, Stennies, Powell, Modzeleski, Stephens, Murphy, Kresnow, Sleet, & Lowry, 1996). Forty percent of these deaths (42) occurred as a result of an interpersonal dispute and 94% involved a gun or a knife. Even though school-associated violent deaths account for less than 1% of deaths among school aged children, these numbers were higher than other studies have reported.

Violent incidents and fear of violence can have a profound effect on the educational process. Schools with high rates of crime and violence are less effective in educating students. These schools have lower levels of student achievement, higher rates of absenteeism, and more drop outs (Christie & Toomey, 1990; Lowry, Sleet, Duncan, Powell, & Kolbe, 1995). Even in schools that have a low percentage of students being victimized, a few violent acts can have far reaching detrimental effects for a large number of students. Fear of victimization has been found to inhibit students' educational and psychological development (Asmussen, 1992; Christie & Toomey, 1990). Fear and apprehension affects concentration and academic performance, participation in school activities, and attitudes toward school (McDermott, 1980).

The rise in school-related violence has been attributed to the increase in weapons being brought to school. While students bringing weapons to school is not a new phenomenon, it is occurring more frequently (Gausrad, 1991; National Center for School Safety, 1993). For instance, 35% of 6th through 8th grade students and 48% of 9th through 12th grade students reported that they had seen students bring weapons to school (OJJDP, 1996). Almost one-half of eighth grade students surveyed had seen a weapon (44%), while 38% of the seventh graders and 24% of the sixth grade students had observed a student with a weapon.

Research has suggested two primary reasons students bring weapons to school. First, Webster, Gainer, and Champion (1993) found that students who carried knives and guns were more aggressive than students who did not carry weapons. Students who carried knives were more likely to be males and had been threatened or attacked with a knife. The authors speculated that these students were victims due to their propensity to get into a fight than through random victimization. Gun carrying students were, in fact, found to be more aggressive than knife carrying students. In addition, students who carried guns or knives had been arrested for drug-related charges, held extreme attitudes regarding the use of violence, perceived peer support for violence, and tended to start fights. These results

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The second reason students bring weapons to school is for protection (National Center for School Safety, 1993; Pearson & Toby, 1992; Webster et al., 1993). These students have either been victimized or have a fear of being victimized and feel that the only way they can avoid this is to carry a weapon. The National Institute of Education (1978) reported that 29% of assault victims brought a weapon to school while only 9% of nonvictims carried weapons. Bastian and Taylor (1991) found that two percent of surveyed students had brought some type of weapon to school for protection at least once during the six month period prior to being surveyed. The weapons being brought to school consisted of guns, knives, brass knuckles, and razor blades. Boys were more likely than girls to carry a weapon to school for protection. In addition, as more schools resort to different types of increased security (e.g., metal detectors, armed security guards, random locker searches, police officers stationed in the school), students' fears of being victimized have increased to the extent that many students feel they are unsafe unless they carry a weapon (Asmussen, 1992; National Center for School Safety, 1993).

While much attention has been dedicated to the level of school violence, characteristics associated with violent acts (e.g., number of incidents, perpetrator-victim relationships, structural characteristics of the school), and the increase in weapons in schools, little research has fully explored the relationship between weapon carrying and victimization. This relationship is important as a significant amount of school violence reduction strategies are primarily aimed at decreasing the number of weapons being brought into schools. Many of these strategies may not be addressing the root causes of the problem.

### Victimization and Weapon Carrying

Theory and research suggest that there are two types of victims who bring weapons to school: passive victims and provocative victims (Olweus, 1978). Passive victims are innocent victims who do not provoke attacks and cannot adequately defend themselves. These students believe they are victimized because they are smaller and weaker than other students (Boulton & Underwood, 1992).

There are generally three defensive responses passive students adopt after being victimized at school or as a result of fear of victimization. Besides carrying a weapon to school for protection, students avoid certain places in the school or simply do not attend school (Batsche & Knoff, 1994; Lab & Whitehead, 1992; Pearson & Toby, 1992; Ringwalt,

Messerschmidt, Graham, & Collins, 1992). Johnston, O'Malley, and Bachman (1993 as cited in Batsche and Knoff, 1994) found that 20% of the middle school students in their study avoided certain places at school because they felt unsafe and 8% of the sample did not attend school-related events. In addition, 16% of 8th graders were afraid at school and 7% of 8th grade students skipped school at least once during the previous month because they felt unsafe.

Although we could not find empirical evidence to support our beliefs, a logical assumption would be that the measures a student takes to avoid victimization escalates with fear of victimization. For example, a student with minimal or no fear of victimization will take no precautions. The same student who is later victimized or has an increased fear of victimization will take minor precautions (avoiding perceived dangerous areas of school). As the level of fear increases, the student may skip school or ultimately start carrying a weapon to school for protection.

This is not to say that all students who are extremely afraid of victimization will eventually carry a weapon to school. Highly victimized students who carry weapons for protection do so because they believe that this is the only way to protect themselves from further violence. Studies of gun ownership have found that gun ownership for protection is highest for people who believe that the police and courts cannot effectively deal with crime and they cannot depend on others for protection (McDowall, 1995). Similarly, as passive students become victims, observe other students being victimized, and feel that the protective measures of the school are not working, weapon carrying seemingly becomes their only choice.

In contrast to passive victims, provocative victims are highly aggressive students who actively participate in risk-taking behaviors (Perry, Kusel, & Perry, 1988). Research has found a direct relationship between aggression and victimization (DuRant, Cadenhead, Pendergrast, Slavens, & Linder, 1994; Perry et al., 1988; Sheley, McGee, & Wright, 1995; Webster et al., 1993). Sheley et al. (1995) found that engaging in high-risk behaviors (criminal activity, drug use and trafficking, and gang activity) increased the likelihood of being a victim of violent crime.

This type of relationship between victimization and weapon carrying can be explained using routine activities theory which states that individuals who participate in high-risk behaviors or are involved in situations where the risk of victimization is greater are more likely to be crime victims (Jensen & Brownfield, 1986). Using this approach, students who carry weapons to school participate in several high-risk behaviors, with weapon carrying being one of those behaviors. Victimization occurs as a result of participating in high risk behaviors, therefore, victimization is more of a correlate of weapon carrying rather than a cause.

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While there has been research that has supported both views between the relationship of victimization and weapon carrying, little research has directly tested these two approaches. There have been several issues left unanswered by prior research. For example, what is the true relationship between high-risk activities, weapon carrying, and victimization? Does victimization predict weapon carrying for students who participate in high-risk activities? Is there a difference between victims who carry weapons and victims who do not carry weapons? Is there any one type of victimization that increases the probability of weapon carrying? The following study further investigates the relationship between victimization and weapon carrying by addressing these questions. This will be followed by a discussion of the different school policies that have been put in place to decrease the number of weapons in schools.

## Methodology

*Sample.* Data for this study were collected from four middle schools in a large midwestern city. The schools were in the same urban school district but located in different areas of the city. These four schools were selected by research staff and school officials based upon their representativeness of middle schools in the school district. The schools were located in low income residential areas of the city. The principals of these schools believed the area around their school was home to gangs, crack houses, and drug dealers.

Anonymous surveys were distributed and collected during homeroom periods in each school. The surveys were given to all sixth, seventh, and eighth grade students in attendance. The sample consisted of 994 middle school students across the four schools. Slightly more than half (55%) were female and the mean age was 12.6 with a range of 9 to 15 years old. One-third of the students in the sample were sixth graders, 37% were seventh graders, and 30% were eighth graders.

*Measures.* The student survey contained several items related to weapon carrying. The constructs contained in the survey were: number of times students carried weapons to school, students' self-efficacy, attitude toward school, attitude toward fighting, perception of school safety, self-reported delinquency, the amount of delinquency witnessed at school, and victimization. All of these scales were created by summing the scale items and dividing the sum by the number of items with non-missing responses. Several items were reverse coded to maintain consistency in the direction of the scale.

*Carrying a weapon.* The students were asked to report the number of times in the past two months that they had brought a gun or a knife to

school. The possible responses to these questions were "zero," "one," "two," "three," and "four or more."

*Self-efficacy.* The scale which assessed students' self-efficacy was comprised of twenty items asking students how difficult it would be to use nonviolent methods to resolve potential conflicts. The responses were coded as "very hard," "hard," "easy," and "very easy." A high scale score indicated that a student felt it would not be difficult to avoid conflicts nonviolently while a low scale score indicated that a student did not feel confident that he or she could avoid a conflict situation by employing nonviolent methods. The scale reliability was tested using coefficient alpha (Cronbach, 1970) and was .80 for self-efficacy.

*Attitudes toward school.* The construct was based on a six item scale that measured general attitudes toward school (Gold & Mann, 1984). Students were given statements regarding their feelings about teachers, principals, and the school in general and were asked if they "strongly agreed," "agreed," "neither agreed nor disagreed," "disagreed," or "strongly disagreed" with the statement. The scale measured the extent to which the students liked or disliked school. A high scale score represented a positive attitude toward school. The scale reliability was .75.

*Attitude toward fighting.* The attitude toward fighting scale measured students' belief that fighting was an appropriate way to handle problems. Students were given seven statements regarding the appropriateness of fighting and asked if they "strongly agreed," "agreed," "did not know," "disagreed," or "strongly disagreed" with each item. A high scale score signified a positive attitude regarding fighting and a low scale score meant the student did not believe fighting was an acceptable or appropriate method of handling interpersonal conflicts. The scale reliability was .75.

*Perception of school safety.* The perception of school safety scale contained five items measuring how safe students felt while they were at school (Clifford & Davis, 1991). For these items, students read a statement regarding a safety issue in their school and reported the extent to which they "strongly agreed," "agreed," "did not know," "disagreed," or "strongly disagreed" with the statement. A high score represented a perception that the school was a safe place while a low score represented a perception that the school was not safe. The scale reliability for perception of school safety was .59.

*Self-reported delinquency.* The self-reported delinquency scale consisted of six items that focused on school-related misbehavior and were adapted from Elliott, Huizinga, and Ageton (1985). The items included in this scale pertained to school vandalism, being sent to the principal's office for misbehavior, skipping a class, skipping an entire school day, threatening other students, and being suspended. Students were asked to report how many times, "zero" through "four or more," in the past two

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months they had been involved in these activities. The scale reliability for self-reported delinquency was .82.

*Observed delinquency.* In measuring the amount of school-related violence students had witnessed in school, students were asked to report the number of times in the past two months they had seen: (1) a fist fight between other students, (2) a student threaten a teacher, (3) a student destroy school property, (4) a weapon that was brought to school by another student, (5) the police remove a student from the school, and (6) students possessing drugs in school. Similar to the questions involving fighting and weapons, the possible responses to these items were "zero," "one," "two," "three," and "four or more." The scale reliability was .73 for observed delinquency.

*Victimization.* School victimization was measured using four self-report items. Students were asked how many times in the past two months they had been physically assaulted, had something physically taken from them, had something stolen from their school locker, and been threatened by another student. These items were also coded with the responses of "zero" through "four or more" times. The coefficient alpha for this scale was .67.

## Results and Discussion

The purpose of this study was to examine the relationship between weapon carrying and victimization in four urban middle schools by testing for differences between weapon carriers and nonweapon carriers who have been victimized, testing for differences between weapon carriers and nonweapon carriers who have not been victimized, and identifying which victimization item may have the most influence on weapon carrying.

The first step in the analysis was to determine the frequency of victimization of the students participating in the survey. The purpose of this step was to compare this sample to other similar studies of school victimization and to determine if victimization was a problem for students participating in this study.

Table 1 presents the frequencies of the four victimization items (see Table 1). The percentages of students who were victimized were higher in our sample than in prior studies. Twenty-two percent of the students had been assaulted at school at least once in the two month period prior to taking the survey. Thirty-five percent had been physically threatened, 47% of the students had an item stolen from their locker, and 27% had been robbed. Overall, 67% of the sample had been a victim of a crime at school at least once in a two month period with 35% of the students reporting to have been victimized four or more times in the same two month period.



Table 1  
Frequencies of responses to victimization survey items.

Number of times victimized	Zero	Once	Twice	Three	Four or More
<b>Offense</b>					
Assaulted	768 (78%)	71 (7%)	63 (6%)	38 (4%)	54 (5%)
Physically threatened	647 (66%)	119 (12%)	64 (6%)	41 (4%)	123 (12%)
Items stolen from locker	527 (53%)	180 (18%)	107 (11%)	52 (5%)	128 (13%)
Robbed	724 (73%)	101 (10%)	62 (6%)	48 (5%)	59 (6%)
Ever been victimized	325 (33%)	152 (15%)	98 (10%)	72 (7%)	347 (35%)

Note: All percentages are row percentages.

The second step in the analysis was to determine if the same students who were victimized were bringing weapons to school. Of the 67% of the sample that had been victimized (669 students), 23% (151 students) reported that they had brought a weapon to school in the two month period prior to taking the survey and 77% of the victims (518) reported not carrying a weapon (see Table 2). As expected, only 8% of the students (27) who had not been victimized carried a weapon to school. These percentages suggest a moderate relationship between victimization and weapon

Table 2  
Crosstabulation of students carrying a weapon by victimization.

Ever carried a weapon to school	Ever been victimized		Totals
	Yes	No	
Yes	151 <b>(85%)</b> (23%)	27 <b>(15%)</b> (8%)	178 (18%)
No	518 <b>(64%)</b> (77%)	298 <b>(36%)</b> (92%)	816 (82%)
Totals	669 <b>(67%)</b>	325 <b>(33%)</b>	994

Note: Column percentages are **bolded**.  
Row percentages are in *italized*.  
 $r = .18$

### Comparison of scale carriers for students

#### Variable

Self-efficacy  
School attitude  
Attitude toward fighting  
Perception of school safety  
Delinquency  
Observed delinquency  
Victimization

\*p. value is less than .05.

carrying. If victimization would expect the percentage to be greater than 23% and the correlation coefficient is .18.

The third step attention was given to comparing victims who carried weapons to school with those who did not. This step used a t-test to determine if there was a difference in the variables. The analysis has been found in previous research (Batsche & Knoff, 1994; Toby, 1992; Sheley et al.

For victims, there was a difference between weapon carriers and non-carriers (perception of school safety and perception of school safety compared to be students in the sample who did not participate in delinquency. These students, like school, had low levels of delinquency (see Table 3). Being a victim of school violence does not appear to influence delinquency. This lends further support to the idea that students who are afraid of school violence do not carry weapons for protection.

The same t-tests were used to compare the two groups on victimization. This analysis was used to determine if there was a difference in weapons for reasons other than fear.



tion survey items.

Twice	Three	Four or More
63 (6%)	38 (4%)	54 (5%)
64 (6%)	41 (4%)	123 (12%)
107 (11%)	52 (5%)	128 (13%)
62 (6%)	48 (5%)	59 (6%)
98 (10%)	72 (7%)	347 (35%)

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No	Totals
(15%)	178
8%	(18%)
(36%)	816
2%	(82%)
(33%)	994

Table 3  
Comparison of scale means between weapon carriers and nonweapon carriers for students reporting being a victim of a crime in school.

Variable	Weapon Carriers (n=151)	Nonweapon Carriers (n=518)	t value
Self-efficacy	2.70	2.80	2.62*
School attitude	3.55	3.81	3.09*
Attitude toward fighting	2.73	2.27	-6.36*
Perception of school safety	3.02	3.11	1.42
Delinquency	1.86	.67	-14.31*
Observed delinquency	2.66	2.24	-4.74*
Victimization	1.74	.97	-8.30**

\*p. value is less than .05.

carrying. If victimization was highly predictive of weapon carrying, we would expect the percentage of victims carrying weapons to be higher than 23% and the correlation between the two items to be greater than .18.

The third step attempted to determine what differences existed between victims who carried weapons and victims who did not carry weapons. This step used t-tests to compare mean scale scores of victims who carried weapons and did not carry weapons. The scales used in this analysis have been found in other studies to be related to weapon carrying (Batsche & Knoff, 1994; National School Safety Center, 1993; Pearson & Toby, 1992; Sheley et al., 1995; Webster et al., 1993).

For victims, there were statistically significant differences between weapon carriers and nonweapon carriers for all of the scale scores except one (perception of school safety). The victims who carried weapons appeared to be students in a high-risk group. These were students who participated in delinquency, were exposed to various delinquent acts, did not like school, had low levels of self-efficacy, and were victims multiple times (see Table 3). Being victimized multiple times was probably related to their involvement in high-risk activities. Perceptions of school safety did not appear to influence students' decisions to carry weapons. This finding lends further support to the argument that random victims and students who are afraid of school crime are not necessarily the ones who resort to carrying weapons for protection.

The same t-tests were conducted for students who reported no victimization. This analysis was conducted to determine which students carried weapons for reasons other than victimization. The results of the t-tests for

Table 4  
Comparison of scale means between weapon carriers  
and nonweapon carriers for students reporting that they  
have not been a victim of a crime in school.

Variable	Weapon Carriers (n=27)	Nonweapon Carriers (n=298)	t value
Self-efficacy	2.95	2.91	-.51
School attitude	3.58	3.98	2.76*
Attitude toward fighting	3.02	2.28	-4.56*
Perception of school safety	3.05	3.27	1.81
Delinquency	1.61	.36	-5.92*
Observed delinquency	2.80	1.88	-4.53*
Victimization	—	—	—*

\*p. value is less than .05.

nonvictims were almost identical to the results for the victims (see Table 4). Weapon carriers had poorer school attitudes, more positive attitudes toward fighting, higher amounts of delinquency, and higher amounts of observed delinquency. No statistical differences were found for self-efficacy and perception of school safety.

The same types of victimized students carried weapons to school as the nonvictimized students. In general, high-risk students were more likely to have carried a weapon to school. However, victimization appeared to increase the likelihood that high-risk students carried weapons. Referring back to Table 2, of those students who reported carrying a weapon (178 students), 85% were victims and 15% reported not being victimized. We tested for differences between these two groups of students (weapon carriers who were victims and who were not victims).

There was only one statistically significant difference between these two groups: self-efficacy (see Table 5). Besides being a victim, weapon carriers had lower levels of self-efficacy than nonweapon carriers. Rather than simply being a correlate of weapon carrying, victimization appeared to be a catalyst that causes high-risk youth to carry weapons to school. In this sense, weapon carrying was increased or moderated by victimization, but only for high-risk youth. The lower level of self-efficacy of weapon carriers might further be attributable to victimization.

While there appears to be a strong relationship between weapon carrying and victimization, it is possible that this relationship is not as strong when controlling for other variables that have been used to explain weapon carrying. To test the strength of victimization to weapon carrying,

### Comparison students re

#### Variable

Self-efficacy  
School attitude  
Attitude toward fight  
Perception of school  
Delinquency  
Observed delinquenc

\*p. value is less than

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weapon carriers reporting that they were in school.

Weapon Carriers (n=298)	t value
2.91	-.51
3.98	2.76*
2.28	-4.56*
3.27	1.81
.36	-5.92*
1.88	-4.53*
—	—*

Table 5  
Comparison of scale means between victims and nonvictims for students reporting that they have carried a weapon to school.

Variable	Victims (n=151)	Nonvictims (n=27)	t value
Self-efficacy	2.70	2.95	2.62*
School attitude	3.55	3.58	.89
Attitude toward fighting	2.73	3.02	1.61
Perception of school safety	2.03	3.05	.20
Delinquency	1.86	1.61	-1.25
Observed delinquency	2.66	2.80	.74*

\*p. value is less than .05.

for the victims (see Table 5), more positive attitudes toward school, and higher amounts of self-efficacy were found for self-effi-

carriers of weapons to school as the independent variables. Victims were more likely to carry weapons to school than nonvictims. Referring to carrying a weapon (178 not being victimized). We found that students (weapon carri-

There was a difference between these groups. For a victim, weapon carrying was more likely than for weapon carriers. Rather than self-efficacy, victimization appeared to be a predictor of carrying weapons to school. In addition, self-efficacy was moderated by victimization, and self-efficacy of weapon carrying was not significant.

The relationship between weapon carrying and victimization is not as strong as self-efficacy. It has been used to explain the relationship between victimization and weapon carrying,

we conducted a multiple regression analysis using victimization, grade in school, gender (boys were coded 1 and girls coded as 2), self-efficacy, attitude toward school, attitude toward fighting, perception of school safety, self-reported delinquency, and observed delinquency as the independent variables. If there was a strong relationship between victimization and weapon carrying, the slope of the victimization scale should be statistically significant.

An additional regression analysis was conducted to determine if any one type of victimization may influence weapon carrying. The same independent variables were entered into the regression equation with one exception, the victimization scale was omitted and the individual victimization items were entered in its place.

Table 6 presents the t-values of the two regression equations (see Table 6). The significant predictors for both equations were: gender, attitude toward fighting, self-reported delinquency, and victimization. These results suggest that males, students who believe fighting is a positive way to resolve interpersonal problems, students who have a high rate of delinquency, and students who are victimized are most likely to carry weapons to school. The number of times students were victimized was the second strongest predictor behind self-reported delinquency.

When substituting the actual victimization items as independent variables for the victimization scale, number of times assaulted was the only item that was statistically significant. Students who were assaulted were more likely to bring weapons to school than students who were physically threatened, had items stolen from their lockers, and who were robbed (although we were unable to determine how many of these students were victims of multiple offenses). Again, the characteristics of students who

Table 6  
Regression models predicting number of times  
students carried weapons to school.

Variable	t-value	t-value
Grade	.58	1.49
Gender*	-2.05**	-2.13**
Self-efficacy	-.80	-1.74
School attitude	-.80	-.96
Attitude toward fighting	2.70**	2.02**
Perception of school safety	.68	1.21
Delinquency	12.94**	10.34**
Observed delinquency	1.93	1.48
Victimization	4.54**	
Assaulted		2.98**
Physically threatened		1.60
Items stolen from locker		1.27
Robbed		.49
R <sup>2</sup>	.32	.32*

Gender was coded as males=1 and females=2.

\*\*p. value is less than .05.

were likely to have brought weapons to school were males, students who believed fighting is a positive way to resolve interpersonal problems, students who had a high rate of delinquency, and students who were assaulted. These findings were consistent with Perry et al. (1988) who suggested that the students who are aggressive and victimized probably are aggressors against weaker students and then are victimized by their stronger, more aggressive peers.

## Conclusion

The analyses revealed two distinct findings regarding the relationship between victimization and weapon carrying. First, the students participating in this study were a highly victimized group. The majority of students in the sample (67%) reported that they had been victimized at least once in a two month period. The most commonly reported offense was having something stolen from lockers (47% of the students had something stolen) while the least reported offense was assault, yet this was the distinguishing factor between weapon carriers and nonweapon carriers (23% of the sample was assaulted).

Second, victimization who participated in high risk activities and weapon carrying directly test the temporal relationship, victimization and weapon carrying. One apparent relationship was that students who carried weapons and high risk activities were not high-risk. In other words, the ones that carry weapons were not high-risk.

Three programmatic implications since the group most likely involved in high-risk behavior target these students. First, students with high risk attitudes, who likely engage in delinquent activity and have a high likelihood of participation. Targeting these students with school-based programs may be effective. Johnson and Johnson (1990) found that factors that cause high risk students to fail and be suspended will resort to violence.

Third, the second implication is that high risk students being as a result of school district programs have become a problem in school districts. These programs have become a problem and attempt to teach students to resolve conflicts. Social learning theory suggests that students learn conflict resolution skills through interpersonal conflicts, which are associated with using violence.

The findings of this study suggest that school-based violence prevention programs may be more effective at the individual level as the level of the program. The Violence and Youth Prevention Program is a school-wide program that is difficult to implement unless the inter-

f times  
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t-value
1.49
-2.13**
-1.74
-.96
2.02**
1.21
10.34**
1.48
2.98**
1.60
1.27
.49
.32*

Second, victimization was predictive of weapon carrying for students who participated in high-risk behaviors. While this study was not able to directly test the temporal ordering of the victimization-weapon carrying relationship, victimization appeared to be a moderator for high-risk activities and weapon carrying. That is, not all high-risk students carried weapons. One apparent difference between high-risk students who carried weapons and high-risk students who did not carry weapons was victimization. There were no findings in this study that suggested victimization or fear of victimization caused weapon carrying among students who were not high-risk. In other words, it appears that provocative victims are the ones that carry weapons for protection rather than the passive victims.

Three programmatic implications can be derived from this study. First, since the group most likely to bring weapons to school were students involved in high-risk behaviors, the initial step in any program would be to target these students. These were delinquent students, having poor school attitudes, who likely performed poorly in school. Therefore, decreasing delinquent activity and improving school attachment may decrease the likelihood of participating in high-risk behaviors that lead to victimization. Targeting these students and placing them in traditional education-based programs may indirectly lead to a decrease in weapon carrying. Johnson and Johnson (1995a) stressed that schools must not overlook the factors that cause high-risk students to engage in violence. Allowing students to fail and be socially inept increases the probability that students will resort to violence to deal with their problems.

Third, the second strategy attempts to deal with the problem of high-risk students being assaulted. These students have a positive attitude toward fighting and using violence to resolve conflictual situations. This attitude probably increases their likelihood of being assaulted. Anti-violence programs have become popular in many urban, suburban, and rural school districts. These programs are grounded in social learning theory and attempt to teach students nonviolent methods to resolve interpersonal conflicts. Social learning based programs typically consist of teaching students conflict resolution skills, promoting peer mediation to resolving interpersonal conflicts, and impressing upon all students the problems associated with using violence.

The findings of this study suggest that school-wide violence intervention programs may be more effective in decreasing weapon carrying than individual-level approaches. Conflict resolution programs often target the individual as the level of intervention (Tolan & Guerra, 1994) while school-wide program target multiple facets of violence (Commission on Violence and Youth, 1993). G. Gottfredson (1987) pointed out that implementation of programs in schools with a high number of problems is difficult unless the intervention is also aimed at improving the school as a

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was the distin-  
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whole. Research on school environment programs is limited (D. Gottfredson, 1987; Lane & Murakami, 1987), but it has indicated that school improvement programs have been moderately successful in improving the school environment, decreasing the number of suspensions, and decreasing the number of delinquent and drug-related activities in school (G. Gottfredson, 1987). Therefore, a school environmental approach appears to be best suited to decrease the number of assaults taking place in school and decrease students' need to carry weapons for protection.

It is important that school administrators consider all possible effects as they explore different strategies to stop the increase in weapons being brought into their schools. Placing metal detectors at the entrances, posting armed security guards in the hallways, housing police substations, and conducting locker searches may deter some students from carrying weapons, but these measures may do little to prevent high-risk students from bringing weapons to school. Future anti-violence strategies need to focus more on the causes of school violence and less on simple deterrence.

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### Discussion Questions

What is the relationship between victimization and weapon carrying suggested by this research?

What are the programmatic interventions and policy implications of this study?

Many schools have resorted to using metal detectors and armed security guards to decrease the amount of violence and the number of weapons being brought into school. Do you think these are effective strategies for decreasing victimization and violence in school? What are some of the potential indirect effects of using metal detectors and armed security guards?

## Chapter 6

# The Role of Self-Reported Results from United States

Roberto Hugh  
Alban L. Wheeler

Alcohol has been well as an acknowledgment and staff. It turned to the negative and college setting by an individual empirical generalization of alcohol, but increased problem alcohol consumption behaviors, been traditional setting.

Among the categories motor vehicle-related academic performance by alcohol in marriage picture of the relational events among Siegel, 1991; Engstler & Larimer, 1993

This study examines criminal behavior