Deviant Lifestyles and Violent Victimization at School

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This study examines how the lifestyles of juveniles influence violent victimization at school. Using data from the National Survey of Adolescents, this study demonstrates that both indirect victimization, through witnessing violence, and sexual and physical assaults of students are pervasive problems at schools. Although a number of individual and structural characteristics predict the risk of becoming a victim at school, the most consistent predictor of violent victimization is the juvenile's own deviant lifestyle. Those who participate in a deviant lifestyle substantially increase their odds of all three forms of victimization. Therefore, even within the relatively controlled setting of schools, juveniles who participate in deviant lifestyles are at a high risk for victimization.

Keywords: lifestyle theory; routine activities; indirect victimization; juvenile victimization; school violence

Becoming a victim of a crime is not a risk that is evenly spread throughout the population. Victims tend to be young, male, a racial minority, poor, and live in disadvantaged or high-crime communities (M. R. Gottfredson & Hindelang, 1981; Hindelang, Gottfredson, & Garofalo, 1978; Lauritsen, 2001a, 2001b; Lauritsen & White, 2001). In addition to demographic consistencies, victims of crime have also been found to lead lifestyles that put them into situations where they may become a victim. Lifestyles that include numerous activities away from home, particularly at night (Kennedy & Forde, 1990; Miethe & Stafford, 1987), increase the likelihood that the individual will be a victim of crime. However, more important than where people spend their time is who they are in regular contact with and whether the individuals are involved in deviant behavior themselves.

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Numerous studies have found that the risk for victimization is substantially increased through association with deviant peers (Bjarnason, Sigurdardottir, & Thorlindsson, 1999; George & Thomas, 2000; Jensen & Brownfield, 1986; Lauritsen, Laub, & Sampson, 1992; Lauritsen, Sampson, & Laub, 1991; Leone, Mayer, Malmgren, & Meisel, 2000; Lowry et al., 1999; Nofziger & Kurtz, 2005). Those who engage in deviant behaviors tend to seek out targets that are easily accessible (M. Gottfredson & Hirschi, 1990), thus making their own peers more susceptible to becoming victims. In addition, juveniles who are involved in deviance are also likely to experience victimization (Lauritsen et al., 1992; Nofziger & Kurtz, 2005). Such victimization may be in the form of retaliation for deviant acts committed by the individual or through simply being in situations where crimes are more likely to occur. Such situations open the possibility to becoming either an offender or a victim, depending on the circumstances or even sheer luck. Past research on victimization concludes that particular high-risk or "deviant lifestyles create more frequent opportunities for the individual to be involved in crime, either as an offender, witness, or victim" (Nofziger & Stein, 2006, p. 374). Therefore, an understanding of the lifestyles of individuals is important for predicting the risk of victimization.

Most studies utilizing such a perspective assume the individual is free to act in ways that fit his or her normal lifestyle when the victimization occurs. However, juveniles experience a great deal of violent victimization within schools, a setting that provides adult supervision, constrains the movements of juveniles, and enforces regulations on behaviors. Although there have been studies examining a variety of predictors of student victimization, this study contributes to the literature in two ways. First, this study is the first known examination of the predictors of indirect victimization, in the form of being a witness to serious acts of violence, within the school. In addition, by using nationally representative data that ask detailed questions about a range of violent experiences, this study is able to extend our understanding of how the lifestyles of juveniles, including their routines both in and out of school, affect their violent experiences within this setting.

Violence in Schools

Although crime in schools has been declining since the early 1990s (U.S. Department of Education, 2007), serious forms of violence do still occur. In 2004, 22 out of every 1,000 students aged 12 to 18 reported being a victim of a violent crime at school (U.S. Department of Education, 2007).

Even though school shootings grab the headlines, the majority of violent incidents at school are simple assaults, in the form of fights (Devoe et al., 2003; Snyder & Sickmund, 1999). However, extremely serious forms of violence also occur in this setting. During the 2004-2005 school year, 107,000 rapes, sexual assaults, robberies, and aggravated assaults were perpetrated against 12- to 18-year-olds on school grounds (Dinkes, Cataldi, Kena, & Baum, 2006). Data gathered from school administrators found that in the 2003-2004 school year, 81% of public schools reported experiencing at least one violent crime (Dinkes et al., 2006). These findings demonstrate that schools are "a dominant source of violence" (Reed & Strahan, 1995, p. 323) in the lives of youth.

Being a direct victim of violence is not the only way juveniles are victimized. Many students also witness acts of violence at school. Past studies have indicated that such an experience is a form of indirect victimization, with many of the same negative consequences as direct victimization. For example, in one study, witnessing violence was the strongest predictor of drug abuse and dependence (Kilpatrick et al., 2000). In addition, Nofziger and Kurtz (2005) found that witnessing violence increased the likelihood of juvenile violent offending. This form of victimization can occur in any setting. In the family violence literature, witnessing violence between parents has been found to lead to developmental problems and various forms of psychopathology (Groves, 1999). Adolescents who witness domestic violence act out through various deviant behaviors, including truancy and drug or alcohol use (Knapp, 1998). The literature consistently finds that being an indirect victim of violence, within communities or at home, results in serious negative outcomes, ranging from mental health problems to substance use, and interferes with cognitive and even physical development (for review, see Adams, 2006; Buka, Stichick, Birdthistle, & Earls, 2001). Indirect victims of violence at the school have been found to suffer from anxiety and to have problems with absenteeism (Arnette & Walsleben, 1998). Therefore, it is not sufficient to only examine direct victims of violence, but we must also consider those who experience indirect victimization through witnessing violence.

Because violence at school impacts so many juveniles, it is important to understand what factors may increase exposure to violence in order to effectively manage or prevent such incidents. Two types of risks that have been studied are the structural characteristics of the school and the demographic traits of the students. Although violent incidents occur in schools of all sizes, types, and regions of the country, they are not evenly distributed. A representative study of public schools found that 7% of the schools accounted for approximately 50% of the total violent incidents reported by principals (Miller, 2003). Schools with the highest rates of student victimization and violence tend to be larger, public, urban schools, located within communities with other social problems such as higher crime rates or poverty (George & Thomas, 2000; G. D. Gottfredson & Gottfredson, 1985; Haller, 1992; Miller, 2003).

In addition to certain types of schools having higher risk of victimization, various demographic groups are more susceptible. According to the U.S. Department of Education (2007), younger students (12 to 14 years old) are twice as likely to be victimized as students who are 15 to 18 years old, and male students have substantially higher rates of violent victimization than female students. Although other characteristics do not show such large gaps, Black students have slightly higher rates than White students, and urban students have the highest rates as opposed to their suburban or rural counterparts.

Although such demographic traits of students and structural characteristics of the school may account for some of the difference in exposure to violence at school, these are not the whole story. Even within schools with high rates of violence, most students do not become victims. Individual factors that increase the risk for some students to experience violence at school must therefore be examined. In one recent study, individual traits such as the students' effort at school, belief in school rules, and involvement in school activities were examined in predicting a range of negative school experiences, including victimization (Welsh, 2001). This study found that victimization was lower among students who invest effort at school and were more involved in school activities. In addition, having positive, nondeviant, peer associations greatly decreased the risk of most forms of school disorder, including victimization. Finally, Schreck, Miller, and Gibson (2003) found that having potential offenders at school, such as students involved in gangs, and having peers who drink alcohol, smoke, or use drugs increased the risk of victimization within the school setting.

Studies examining a range of behaviors have consistently shown that there are connections between victimization and offending. One such activity is bullying. From the earliest studies of this school yard activity, it has been clear that although there may be some individuals who are limited to being the victims or "whipping boys" (Olweus, 1978) and some who are the bullies, there are also many who cross between these roles (Andreou, 2000; Boulton & Underwood, 1992; Olafsen & Viemero, 2000; Olweus, 1978). Although this tends to be a smaller group, particularly within older students (Solberg, Olweus, & Engresen, 2007), they have unique characteristics that may influence their offending and victimization in other forms of delinquency as well. For example, one study found that the bully-victims tended to be more impulsive in their aggression (Schwartz, 2000). Other work has found that bully-victims are at greater risk for other forms of victimization, including dating violence or sexual harassment (Espelage & Holt, 2007). Although the bully-victim literature focuses on whether the individual engages in both roles within one type of delinquency, many other studies find that the individual may be involved as a victim in one form of delinquency and an offender in different acts (i.e., Sampson & Lauritsen, 1990; Zhang, Welte, & Wieczorek, 2001). The fact that many juveniles are both victims and offenders of a variety of delinquency indicates that some-thing about the characteristics of the individual makes them more likely to be involved in such behaviors in multiple roles.

These studies all indicate that a number of personal characteristics may influence exposure to school violence, even while controlling for demographic traits of the individual or the environmental characteristics of the schools. The current study extends this literature by examining whether various elements of the students' lifestyles affect both direct and indirect violent victimization at school. Although it may seem that schools provide few opportunities for the juveniles' individual lifestyle to be exerted, there remain many opportunities for variation. For example, students with deviant lifestyles are likely to spend time with different peer groups, before and after school as well as between classes, than those with less deviant lifestyles. Individual lifestyles may also change the students' level of success in school, both in terms of the grades earned and getting into various forms of trouble at school. In addition to what juveniles do within schools, their external lives may also have a substantial influence on their victimization at school. Rivalries that begin in a neighborhood may be carried into the school. Drug use and drinking may lead to poor school performance and subsequent teasing or other negative responses from fellow classmates. The importance of the deviance of the juvenile away from school is demonstrated by studies that find juveniles who engage in delinquency and violence in other settings are more likely to be victims of violence at school as well (George & Thomas, 2000; Leone et al., 2000). Therefore, lifestyle theory may provide some insights into how deviant lifestyles influence individual students' risk of becoming a victim of violence at school.

Lifestyle Theory

Lifestyle theory was developed in an attempt to explain patterns of victimization in American society. Hindelang et al. (1978) proposed that lifestyles, or the routines associated with work, school, and leisure activities, influence rates of victimization. These lifestyles develop from limitations imposed on the individual based on the role expectations and structural constraints that are socially linked to the demographic and social characteristics of the individual. The normative expectations associated with specific characteristics, such as age or sex, limit what activities are available to an individual. For example, girls are culturally defined as in more need of direct supervision and protection and are thus expected to spend more time within the family home being supervised by their parents (Hindelang et al., 1978). Structural constraints, such as unemployment rates in a region, also create limited options in choosing between alternative lifestyles. For example, economic deprivation limits where individuals live, the types of leisure activities they engage in, and the ability to take advantage of educational opportunities (Hindelang et al., 1978). Hindelang et al. proposed that role expectations and structural constraints result in individuals developing skills and attitudes that in turn develop into the lifestyle of the individual. This lifestyle influences who individuals associate with, the potential exposure to criminal opportunities, and ultimately if they are victimized by crime. Thus, lifestyle theory explains rates of victimization based on the activities engaged in by individuals that are a result of cultural and social realities.

In support of this theory, studies have regularly found that those who engage in high-risk or deviant lifestyles are more likely to be victimized by crime (Lowry et al., 1999; Rani & Thomas, 2000). Associating with deviant individuals and active participation in crime as an offender have been used either independently or together in numerous studies as a measure of deviant lifestyles (Hindelang et al., 1978; Jensen & Brownfield, 1986; Lauritsen et al., 1991, 1992; Lowry, Sleet, Duncan, Powell, & Kolbe, 1995; Nofziger & Kurtz, 2005; Rani & Thomas, 2000; Zhang et al., 2001). In addition, researchers have argued that victimization is itself part of a deviant lifestyle that can also predict offending (Nofziger & Kurtz, 2005; Zhang et al., 2001). Such studies indicate that deviant peer associations, juvenile offending, and victimization are all "manifestations of a general involvement in violence" (Halliday-Boykins & Graham, 2001, p. 395). If juvenile lifestyles include spending time with peers who are involved in delinquency or lead the juvenile to be an offender, it is reasonable to believe that such lifestyles will not only lead to victimization out on the streets but also within the school environment.

In order to examine this possibility, this study tests whether participation in deviant lifestyles will increase the juvenile's risk of both direct and indirect violent victimization at school. By including measures of indirect victimization, this study goes beyond previous research and tests whether this form of victimization may be influenced by the juvenile's lifestyle. Ignoring predictors of indirect victimization is a serious gap in previous work on school violence as many students report this form of victimization at school. In addition, by including multiple types of experiences, we gain a better understanding of how violent our schools are and whether lifestyles are capable of predicting a range of violent acts. Finally, I argue that if this theory is able to predict victimization within this relatively controlled setting, it is likely that the juveniles' own lifestyles will have an even greater impact in other environments.

The Study

Data

The data for this project are drawn from the National Survey of Adolescents (NSA) in the United States, 1995 (NIJ Grant 93-IJ-CX-0023). These data were collected through a national probability telephone sample of 4,023 juveniles between the ages of 12 and 17, with some oversampling of central city areas. In order to ensure that the sample is representative of the juvenile population, data are weighted by age, race, and sex to be consistent with 1995 U.S. census estimates (Kilpatrick et al., 2000).¹ These data include information on the respondents' experiences with several forms of victimization and other forms of exposure to stressful life events, assessment of peer and family deviance, and the juvenile's own delinquent activities.

Method/Analytic Strategy

The first step in this analysis is to discover who experiences violence at school. Therefore, the social and demographic characteristics of juveniles who experience both direct and indirect victimization at school are examined along with chi-square tests to determine whether there are significant differences in victimization across categories of juveniles. The second step is to examine whether the lifestyle of the juvenile influences his or her exposure to violence at school. To test whether an examination of the lifestyles adds to our understanding of different types of victimization at school, separate models are run for indirect violence, sexual assaults, and physical assaults. Due to the relatively rare nature of violence, logistic regression analyses are used for these analyses.

Control Variables

National data on school violence indicate that some groups are more regularly exposed to violence at school and that certain characteristics of the community or school may also affect school crime. Therefore, these analyses examine both individual demographic characteristics as well as a number of structural characteristics that may predict individuals' victimization at school. The individual respondents' race, age, and sex are examined. Age is a continuous variable ranging from 12 to 17, and sex is coded 1 for males and 0 for females. The respondent's race is coded as a series of dummy variables that divide the sample into White (used as the comparison category in logistic analysis), African American, Hispanic American, and Other which includes Native American and Asian American respondents as well as respondents who indicated Other on the survey. Structural controls include family income, coded as an ordinal variable ranging from \$0 to \$5,000 up to more than \$100,000; the type of school the juvenile attends (1 = public, 0 = other); and the type of community. Data regarding where the respondent lives were originally coded as an ordinal scale ranging from urban settings to rural communities. For the purposes of these analyses, this variable was recoded into a series of dummies for each type of community, with the urban community being used as the comparison category in the logistic regressions. A final control variable assesses whether the juvenile views his or her school as a violent place. It is possible that victimization at school is simply a function of how violent the school actually is. Attending a school where violence is a serious problem would increase the risk of becoming a victim regardless of the lifestyle of the student. Therefore, controlling for how violent the juvenile perceives his or her school to be serves to control, at least to some extent, for the environment of the school.

Deviant Lifestyles

There are potentially many ways to measure deviant lifestyles. Because the focus of this study is on violence in schools, it may arguably be useful to limit the choice of lifestyle variables to events that only occur in this location. However, such an approach misrepresents the primary argument of the theory. The behaviors that develop from the role expectations and structural constraints imposed on people are carried into a range of settings. For example, juveniles who develop lifestyles that involve drugs may use these substances at home, in their neighborhood, in friends' homes, and at school. Even if the use is not at school, the consequences of drug or alcohol use, such as poor attention skills or being high or hung over, will have consequences in the school setting. Similarly, association with peers who themselves engage in violence may lead the juvenile to be a victim in multiple ways and locations. Rival peer groups that have been victimized by the friends previously may retaliate out in the streets or on school grounds. If the juvenile is spending time with these friends, he or she may become the inadvertent target of direct victimization, or be an indirect victim. In addition, the juveniles may find themselves becoming the victim of various violent acts that are perpetrated by their deviant peers. Therefore, measures of the juveniles' own deviance and the deviance of their peers are important indicators of lifestyles.

Similar to past work, this study conceptualizes a deviant lifestyle as a combination of indicators of peer deviance and the respondents' own delinquent behaviors. Measures of peer deviance include items assessing whether the respondent's friends are involved in drug and alcohol use, property crime, and violent acts. Indicators of the respondent's own deviance include very serious crimes, including assaults and breaking and entering, as well as more common juvenile activities of regular binge drinking and drug use. In addition to these measures, several items that are specifically related to school performance are also considered as potential indicators of the lifestyle of the juvenile. For example, a lifestyle that includes regularly skipping classes, not completing class work, or challenging the authority of teachers or other school officials may result in receiving failing grades or even suspension.

To determine whether these indicators should be considered as separate indicators or a unidimensional measure of a deviant lifestyle, all of these items were subjected to a principal components factor analysis. In this analysis, all the items loaded onto one factor with only three exceptions. In addition, an examination of the scree plot demonstrates that there is one primary underlying factor before a substantial decline in the eigenvalues occurs. The difference between the first and second eigenvalues (6.53 and 2.06, respectively) corresponds to a 68% drop between these two factors. Therefore, it is reasonable to conclude that all these items can be considered as a unidimensional measure of deviant lifestyles. The utilization of one scale for lifestyles is consistent with past findings that many specific forms of routines, activities, or associations are all reflective of an underlying violent lifestyle (Halliday-Boykins & Graham, 2001; Nofziger & Kurtz, 2005). However, the three items that did not load clearly on this factor are unique in that they are the items that were directly related to school problems. Having to repeat a grade loaded onto one distinct factor while receiving a failing grade on a report card and being suspended from school loaded

together on yet another factor. A test to assess whether the three school items would combine into a reliable measure found that this was not the case (alpha .43). Due to these findings, the individual school items were kept as separate indicators of lifestyles that affect schoolwork, whereas the remaining items were combined into a standardized weighted scale indicative of an overall deviant lifestyle. The lifestyle measure has an alpha reliability of .88, indicating this is a highly reliable scale, and a range of slightly more than six standard deviations. (See appendix for full list of items and relevant statistics.)

Dependent Variables

Although studies of victimization at school find that nonviolent acts are most common (i.e., Bastian & Taylor, 1991; Dinkes et al., 2006), this study focuses on violent acts. The primary reason for this is based on a limitation within the data used in this study. The NSA was designed to measure the impact of direct and indirect violence on juveniles. Thus, all the questions about victimization are about violent victimization. Although this limits the generalizability of this study to violent acts at school, the importance of understanding such acts in order to assure the safety of students points to the importance of this research. In addition, the inclusion of both direct and indirect victimization is a substantial contribution from past work that is limited to direct victimization.

Three different types of victimization at school are examined in this study. The first is a measure of indirect victimization through being a witness to a serious form of violence. The respondents were asked if they had ever actually seen a violent attack in real life. Five specific types of events are included: seeing someone shoot someone else, seeing someone cut or stab someone else with a knife, seeing someone being sexually assaulted or raped, seeing someone being mugged or robbed, and finally, seeing someone threaten someone else with a knife, gun, or other weapon. Respondents then provided additional information about each act they had witnessed, such as if they had seen such an event more than once, the timing of the most recent event, where it happened, and the identity of the people involved. For this study, only the events that occurred "at school" are examined. The classification of at school included in the school building, on the school grounds, or on a school bus.

The remaining two forms of victimization are being sexually or physically assaulted at school. Although many studies may only provide one question for such measures, the emphasis of the NSA was to provide detailed information on violent victimization of juveniles. Therefore, there are multiple indicators of such victimization. For sexual assault, more than 20 items ask about specific types of assaults, details about the encounter, and the respondent's reactions. A total of six different specific forms of sexual assault are asked about in detail. For example, the first item asked respondents "Has a man or boy ever put a sexual part of his body inside your private sexual parts, inside your rear end or inside your mouth when you didn't want them to?" Each of the six forms of sexual assault are described in similar detail, thus minimizing any problems that might arise due to juveniles having to interpret their experiences as sexual assault from their own viewpoint. Although such events could have been reported in many settings, due to the focus of this study, only those incidents reported to have taken place at school were included.

Similarly, the measure of direct physical assault also was developed from in-depth questions about five different forms of physical assault. These include being attacked with a gun, knife, or other weapon; being attacked without a weapon when the juvenile thought the person was "trying to kill or seriously injure" them; being threatened with a gun or knife but not actually being shot or cut; being hit with a weapon like a stick, club, or bottle "so hard that you were hurt pretty bad"; and having someone "beat you up with their fists so hard that you were hurt pretty bad." As in the cases of sexual assault and indirect victimization, only those incidents that occurred at school were included. Due to the relatively rare nature of these events, the measures of exposure to violence at school are dichotomized (0 = never experienced that form of victimization at school, 1 = any such victimization at school), and the time range is open to reporting ever having experienced each form of victimization.

Findings

Types of School Violence

More than 19% of the respondents reported having experienced at least one act of violence at school. The most common of these was indirect victimization, with a total of 642 respondents (16% of the sample) reporting this experience. In comparison, only 51 and 169 respondents were direct victims of sexual or physical assaults at school (1.3% and 4.2% of the sample, respectively). Therefore, although a fairly small percentage of the respondents were directly victimized at school, these findings indicate that a range of violence does occur in schools and a significant percentage of students are either direct or indirect victims.

	Indirect Victimizatio	n	Sexual Assault		Physical Assault	
	% Yes	χ^2	% Yes	χ^2	% Yes	χ^2
Sex		5.66*		6.54*		17.09***
Male	17.0		1.0		6.0	
Female	14.1		2.0		2.9	
Age		83.15***		8.28		5.10
12	5.6		1.5		5.1	
13	11.5		1.0		4.4	
14	18.3		1.5		3.6	
15	19.2		1.3		4.1	
16	21.5		1.5		5.0	
17	19.0		1.6		5.9	
Ethnicity						
White	14.5	15.96***	1.2	7.02**	4.2	3.74
African American	19.8	6.06*	2.9	7.85**	6.8	5.86*
Hispanic	20.6	4.67*	0.7	1.01	3.7	0.61
Other	19.9	2.38	3.1	3.90*	6.1	1.04
Family income		17.44*		4.80		17.97*
\$0 to \$5,000	15.7	1,	1.0		6.8	1107
\$5,000 to \$10,000	15.3		1.3		7.6	
\$10,000 to \$20,000			1.5		4.5	
\$20,000 to \$30,000			1.9		4.5	
\$30,000 to \$40,000			1.7		7.2	
\$40,000 to \$50,000			1.3		3.6	
\$50,000 to \$75,000			1.5		4.0	
\$75,000 to \$100,00			0.8		2.8	
More than \$100,00			0.7		5.0	
Community	0 8.0		0.7		5.0	
City	20.8	9.91**	2.4	3.96*	5.3	0.61
Suburb of city	16.6	0.05	1.0	1.00	5.9	2.92
Large town	16.8	0.05	2.1	4.19*	6.4	2.92 5.60*
Small town	13.0	8.30**	0.7	5.58*	3.6	3.87*
Rural area	13.0	1.08	1.5	0.03	3.0	4.87*
	14.5	3.30	1.5	0.03	5.1	1.23
School type Public	16.3	5.50	1.5	0.09	4.7	1.25
Private/parochial	12.8	120 20***	0.8	0.45	3.4	20.07***
Violence at school		139.29***	1.0	0.45	2.0	39.07***
Not a problem	6.6		1.2		2.8	
Small problem	14.0		1.5		3.8	
Middle problem	23.5		1.4		6.6	
Very big problem	34.7		1.7		12.1	

 Table 1

 Characteristics of Juveniles Experiencing Violence at School

*p < .05. **p < .01. ***p < .001.

Table 1 provides information about the distribution of victimization at school across the individual and structural characteristics. What is most obvious from an examination of Table 1 is that all groups are fairly uniform in reporting being indirect victims though witnessing violence. However, also implied by the distribution of victimization experiences is that although there appear to be many consistencies in the patterns of victimization, some groups are clearly at greater risk than others. To determine if these descriptive figures do indicate statistically significant differences between groups, cross-tabulations with each variable and each type of victimization were conducted, with the resulting chi-square statistic reported in Table 1.

Boys and girls are significantly different in their exposure to violence at school. Girls are more likely than boys to experience sexual victimization, whereas boys are more likely to witness violence or be physically assaulted. The age of the juvenile only appears to be significant for indirect victimization, with older students being somewhat more likely to report such experiences. There are also mixed findings related to the race of the juvenile.² White juveniles are at significantly lower risk for witnessing violence or being the direct victims of a sexual assault. In contrast, Black respondents are significantly more likely to experience all three forms of victimization at school. The only other two race-related findings are that Hispanics are more likely to witness violence and respondents reporting they fit into the Other racial group are more likely than all other respondents to be victimized by a sexual assault. This analysis demonstrates that several individual characteristics may change the likelihood of being a victim of violence at school.

There are fewer statistically significant differences between the structural variables in this analysis. For two of the three types of victimization, there is a significant difference in involvement by the respondents' family income. However, an examination of the column and row percentages in the cross-tabulation does not reveal a simple linear relationship. Instead, it appears that there are varying peaks of victimization in the middle of the family income range. In addition, certain types of communities serve as a risk or as protection for juveniles. Juveniles living in cities are at higher risk for witnessing violence and for being sexually assaulted. Those in large towns are at higher risk for both forms of direct victimization. In contrast, those in small towns are somewhat protected from all three forms of violence, and rural communities protect students from physical assaults.

The final two structural elements relate to characteristics of the school. Although students in private or parochial schools report less of all three types of victimization, this difference does not achieve statistical significance. However, how violent the juvenile perceives his or her school to be is highly significant for both indirect victimization and physical assaults. One very interesting finding from this analysis is that direct victimization is clearly not a prerequisite for believing violence is a problem in school. By combining all those who said violence is at least somewhat of a problem, only 27% had actually been a victim of a direct physical or sexual assault. In contrast, it appears that perceptions about safety in school are largely dictated by indirect victimization. Whereas only 6.6% of juveniles who report violence is not at all a problem at their school report being a witness to a violent act, more than a third (34.7%) of those reporting violence is a very big problem were indirect victims. In addition, when combining all those who report violence is at least somewhat a problem in school, more than 72% had been a witness to a serious act of violence in this setting. Thus, it is highly probable that the perceptions of school are strongly linked to indirect victimization.

Overall, the results of this bivariate analysis indicate that school violence is an experience shared by a significant portion of students and that some individual and structural traits do influence the risk of victimization. In order to determine the multivariate relationships between individual demographics, structural characteristics, deviant lifestyles, and victimization at school, it is necessary to examine the results of the multivariate logistic regressions.

Predicting Victimization at School: Logistic Analysis

Two models are presented for each type of violent exposure at school. The first includes only the demographic and structural controls, and the second adds the measure of the juvenile's deviant lifestyle. Separate models are run for each form of victimization in this study. Table 2 presents the results of these analyses.

Sex and age are two significant individual effects on indirect victimization in Model 1, with boys and older students being more likely to report this experience. In addition, in comparison to White respondents, Hispanic students have a greater likelihood of indirect victimization (odds ratio [OR] = 1.40). Specifically, the odds of indirect victimization are 40% higher for Hispanics than Whites and 25% higher for boys than girls. In comparison, although statistically significant, the effect of age is relatively modest. In comparison to a student who is 12 years old, a 17-year-old student has only 10% greater odds of witnessing violence.³ However, all these individual effects fall to nonsignificance with the inclusion of deviant lifestyles in the model.

	Indirect/Witness		Sexual	Sexual Assault		Physical Assault	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	
Variable	Exp(b)	Exp(b)	Exp(b)	Exp(b)	Exp(b)	Exp(b)	
Male	1.25*	1.15	0.45**	0.36***	2.08***	1.81***	
Black	1.27	1.26	2.31*	2.28*	1.53*	1.38	
Hispanic	1.40*	1.40	0.72	0.54	0.82	0.70	
Other ethnicity	1.34	1.25	2.89*	2.39	1.44	1.22	
Age	1.02**	1.01	1.03*	1.03	0.99	0.94	
Suburb	0.84	0.83	0.51	0.51	1.27	1.33	
Large town	0.84	0.82	1.10	1.05	1.43	1.40	
Small town	0.69*	0.71**	0.30*	0.30*	0.86	0.87	
Rural area	0.82	0.89	0.66	0.78	0.74	0.80	
Family income	1.00	1.00	1.01	1.01	0.99	0.99	
Public school	1.08	1.18	1.93	1.98	1.21	1.24	
School violence	1.87***	1.74***	0.96	0.85	1.64***	1.51***	
Deviant lifestyle		1.49***		1.67***		1.31***	
Suspended		0.64		2.81*		2.37***	
Repeat grade		0.93		0.50		1.13	
Failed class		1.19		1.44		1.22	
Constant	0.03***	0.03***	0.01***	0.01***	0.01***	0.02***	
Chi-square	155.44***	215.40***	32.27***	60.17***	64.41***	99.80***	
R^2	0.07	0.12	0.07	0.12	0.06	0.09	

 Table 2

 Logistic Regression on Victimization at School

Note: N = 3,413.

*p < .05. **p < .01. ***p < .001.

Among the structural impacts on indirect victimization, living in a small town as opposed to a city and reporting greater problems of violence in school have significant impacts. Both these structural effects maintain significance in Model 2 when controlling for the deviant lifestyle of the respondent. In Model 2, respondents from small towns have 29% lower odds of witnessing violence at school than those living in cities. In addition, even when controlling for the deviant lifestyle of the student, each increase in the perception of problems with violence in school raises the odds of witnessing serious violence by 74%.

The theoretically important finding in this model is that the combined measure of a deviant lifestyle does significantly increase the risk of indirect victimization at school. A respondent who has a deviant lifestyle only one standard deviation above the mean has 49% greater odds for witnessing

violence. Because this scale has a range slightly more than six standard deviations, compared to those with the least deviant lifestyles, a juvenile in the group with the most deviant lifestyle has more than 634% greater odds of being a victim of indirect victimization $(1.49^5 = 7.344)$. However, none of the school-specific indicators of lifestyles are significant, indicating that experiencing this form of violence may be more related to a general lifestyle than limited to behavioral problems within the school.

The two forms of direct victimization are sexual and physical assaults. For both of these, being male remains significant across all four models. The impact of sex flips across these two forms of victimization. Not surprisingly, the risk of being sexually assaulted is higher for girls (OR = .36), whereas the odds of being the victim of a physical assault are higher for boys (OR = 1.81). In addition, Black students are at higher risk in all but the second model for physical assaults. The odds of being sexually assaulted are 128% greater for Black students than White students, even while controlling for lifestyles. While being Black also increases the risk for physical assault, the effect drops to nonsignificant levels when controlling for the respondent's lifestyle. Sexual assaults are also predicted by two other individual traits, being of other race and age; however, both these also fall to nonsignificant levels when controlling for lifestyle measures. For both forms of direct victimization, only one structural predictor attains significance. For sexual assaults, living in a small town decreases the risk of sexual victimization (OR = .30) as compared to living in a city. Perceiving their school to have problems with violence is associated with an increased risk for physical assaults.

Finally, both these models again demonstrate the importance of considering the deviant lifestyle of the student as a predictor of victimization. Each increase in the deviant lifestyle of the respondent increases the odds of being the victim of a sexual assault by 67% and of a physical assault by 31%. In addition, one indicator of a deviant lifestyle specific to the school setting is significant in predicting both forms of direct victimization. Those who have been suspended have 181% greater odds of being sexually assaulted and 137% greater odds of being physically assaulted.

These findings provide at least moderate support for the lifestyle theory. Being involved in a deviant lifestyle significantly predicts both indirect and direct forms of victimization, with the magnitude of these effects ranging from an odds ratio at the low end of 1.31 for the model on physical assault to a high of 1.67 on sexual assault. Because the lifestyle measure is a continuous variable, this substantively means that the odds of those with the most deviant lifestyles are approximately 286% higher to experience physical victimization $(1.31^5 = 3.86)$ and an astonishingly 1,199% higher to experience sexual victimization $(1.67^5 = 12.99)$ than those with the least deviant lifestyles. Therefore, having a deviant lifestyle is an extremely important predictor for all forms of victimization at school. However, other potential indicators that the respondents' deviant lifestyle carries over into school-related behaviors are not as consistent. Repeating a grade or failing a class is not significant in any models in this study. Therefore, academic failure does not appear to be clearly part of a deviant lifestyle that may contribute to victimization. Being suspended from school however does predict both forms of direct victimization. This measure is arguably a better fit with the idea of a deviant lifestyle. Academic failure may be linked to many causes and be a problem for many students regardless of their lifestyles. On the other hand, suspension implies behavioral problems, fitting more closely with the idea that the student engages in deviant behaviors both within the school setting and elsewhere.

Taken together, the models examining each type of violence indicate that some different risk factors exist depending on the form of victimization studied. However, the juveniles' participation in deviant lifestyles consistently predicts all types of violent victimization at school. Therefore, regardless of any structural differences that may exist in rural or city schools or between dangerous or safer schools, there is some ability of students to participate in lifestyles that increase their risk of victimization in school.

Discussion and Conclusions

Juveniles spend a great deal of their day in schools, and as both the current and previous studies indicate, this is a location where they are regularly exposed to violence. This study adds important information to our understanding of the experience of violence that occurs within the school by examining the predictors of victimization and finding that the lifestyle of the individual plays a substantial part in both direct and indirect victimization.

Although this study does provide important information about violence that occurs at school, there are several limitations of these data that should be considered. First, this study may actually be underestimating the amount of victimization at school. Data about each type of victimization were asked in a limited number of data loops in the NSA survey. For example, juveniles who reported more than one incident of sexual or physical assault were asked detailed information about the first such incident they remembered, the most recent, and what they thought was the most serious incident. If there were more than three incidents, the additional information was lost. With this method of coding, if the juvenile had been a victim of these forms of violence at school but the school incident was not the first, most recent, or "worst" incident that had occurred, the fact that such violence also occurred at school would not be reported. Similarly, the series of questions about witnessing violence only allowed the respondent to report details on the most recent act witnessed. Therefore, if they witnessed a stabbing at home, at school, and in the neighborhood, only the most recent occurrence would be recorded. It is impossible to determine how many other violent events may have actually taken place at school. However, because these data limitations would only serve to underestimate the amount of violence, the findings of this study could be considered to be conservative estimates of juveniles' violent victimization at school.

A second limitation is the relatively low explanatory power of the proposed models. The best models in these analyses only explain 12% of the variation in victimization (for both sexual assault and indirect victimization). The variation in these three forms of victimization may indicate that lifestyles play a more important role in some forms of victimization than others. For example, if most serious acts of violence at school occur in specific locations, juveniles with less deviant lifestyles are likely to avoid such places or are more likely to be in class rather than roaming school grounds. Therefore, those students with the more deviant lifestyles will be more likely to witness serious acts of violence. In addition, juveniles are more likely to be victims of sexual assault at the hands of a friend than any other type of offender (Stein & Nofziger, 2008). Thus, if one's lifestyle includes spending time with deviant peers and involves the use of drugs or alcohol that may lower the inhibitions of everyone involved, this lifestyle may be the key to sexual victimization. In addition, the victim in a case of sexual assault is clearly the intended target. Thus, there is not a situation that can occur, as in some cases of physical assaults, where the victim is someone who just happens to be caught in the crossfire and is therefore not involved in any way with the primary confrontation. Although such cases are thankfully rare, random school shootings in the past decade have clearly demonstrated that violent incidents at schools can create victims out of any student.

Although the explanatory power does vary across the different forms of victimization, the addition of the lifestyle measure does improve the fit of each model. But there is clearly a substantial portion of the variation in victimization that is still unexplained. It is possible that more detail about the setting of the schools would provide a better understanding of these experiences. Data on the racial and socioeconomic distribution of students in the schools as well as more contextual information about the communities where the students are located would enable a multilevel model to be utilized. For example, it is possible that the lifestyles of the students operate differently within a context of a school that has a serious problem with gangs, has a higher faculty to student ratio, or that maintains a closed rather than open campus. Such relationships are implied due to the fact that some types of settings do produce greater risk in the current analyses. For example, students who live in cities are more likely to be victims of sexual assaults and indirect violence compared to those living in small towns. The assumption is that city schools have larger numbers of students and likely greater density. With more students in the hallways and in classes, if a violent incident occurs, there are simply more students in the vicinity of the event, thus increasing the likelihood of witnessing violence. Because larger and overcrowded schools have more problems with violence (Warner, Weist, & Krulak, 1999), the size of the school would be an important control in future studies to determine if the effect of living in a city and attending public schools on violence is spurious through the size of the school.

These findings may also be an indicator that schools are affected by the general crime rates in the areas where they are located. This is consistent with past research that has indicated that the greater problems in urban schools reflect the "higher levels of violence that is seen in urban environments overall" (Warner et al., 1999, p. 61). Thus, information on the crime rates of the communities in which these respondents live may increase the explanatory power of these models. Such multilevel models are not possible with the existing data but are recommended for future studies on school violence.

Although determining what types of demographic and structural factors increase the risk for victimization at school is useful, the more important finding in this study is the clear relationship between the juveniles' own deviant lifestyle and the likelihood of violent victimization. This analysis indicates that experiences of violence at school are part of a larger pattern of a deviant lifestyle engaged in by the juvenile. Having a deviant lifestyle consistently increases the likelihood of both being a direct victim of violence at school and an indirect victim.

In every model, juveniles with more deviant lifestyles were at increased risk for victimization. Therefore, the most important factor that schools and parents who are concerned that their child may experience violence at school need to address is the lifestyle of the students themselves. Understanding that victimization is part of a lifestyle would assist school counselors and administrators to identify students who may be at risk. Recognizing that juveniles who are considered to be troublemakers are also likely to experience victimization and working with such students could lower their own victimization and potentially the indirect victimization of others.

This study indicates that lifestyle theory does apply to the school setting and can predict not only direct forms of victimization but also indirect. It also suggests that the experience of school violence cannot be fully understood without considering the students' own participation in deviance and association with deviant peers. No matter how many security devices or restrictions on movements schools may develop, students who are embedded in a deviant lifestyle will still be likely to find opportunities for violence in school.

		0	
Weighting	Mean	Standard Deviation	Variance
	.055	.227	.052
	.135	.342	.117
	.396	.489	.239
.404			
.592			
.490			
.482			
.412			
.474			
	.404 .592 .490 .482 .412	.404 .592 .490 .412	Weighting Mean Deviation .055 .227 .135 .342 .396 .489 .404 . .592 .490 .482 .412

Appendix Deviant Lifestyle Items and Scale Loadings

(continued)

been involved in gang fights?	.449	
used force or strong-arm methods	.320	
to get money or things from people?		
attacked someone with the idea of	.436	
seriously hurting or killing that person?		
Have your friends ever		
used marijuana or hashish?	.697	
used alcohol?	.643	
sold hard drugs such as heroin,	.565	
cocaine, or LSD?		
gotten drunk once in a while?	.665	
used prescription drugs such as	.433	
amphetamines or barbiturates when		
there was no medical need for them?		
sold or given alcohol to kids younger	.620	
than 18?		
purposely damaged or destroyed	.571	
property that did not belong to them?		
stolen something worth less than \$5?	.588	
broken into a vehicle or building	.655	
to steal something?		
stolen something worth more than \$50?	.708	
hit or threatened to hit someone	.512	
without any reason?		
suggested you do something that	.657	
was against the law?		

Appendix (continued)

Note: Cronbach's alpha = .879; N = 4,006; range of scale: 6.18.

Notes

1. A complete description of the methods and sample characteristics can be found in Kilpatrick et al. (2000).

2. Variables that were used as dummies in the logistic regression are kept in this form for the cross-tabulations. Therefore, the chi-square tests indicate the likelihood of victimization for the particular group in comparison to all other related groups, for example, the effect of being White as opposed to all other races or of living in a rural community as compared to all other communities.

3. When two groups are being compared using continuous variables in logistic regressions, the coefficient is exponentiated by the number of units between the two groups (Pampel, 2000). In this example, the odds ratio of 1.02 is exponentiated by 5, the number of steps between the oldest and youngest groups in this sample $(1.02^5 = 1.104)$.

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