A STUDY OF INDIVIDUAL AND SITUATIONAL ANTECEDENTS OF VIOLENT VICTIMIZATION*

CHRISTOPHER J. SCHRECK**
Arkansas State University

RICHARD A. WRIGHT***
Chicago State University

J. MITCHELL MILLER****
University of South Carolina

Researchers traditionally rely on routine activities and lifestyle theories to explain the differential risk of victimization; few studies have also explored nonsituational alternative explanations. We present a conceptual framework that links individual trait and situational antecedents of violent victimization. Individual risk factors include low self-control and weak social ties with the family and school. Situational risk factors include having delinquent peers and spending time in unstructured and unsupervised socializing activities with peers. We investigate the empirical claims proposed in this model on a sample of high school students, using LISREL to create a structural equation model. The results generally support our assertions that individual traits and situational variables each significantly and meaningfully contribute to victimization.

The routine activities (Cohen & Felson, 1979) and lifestyles (Garofalo, 1987; Hindelang, Gottfredson, & Garofalo, 1978) approaches, which stress how the context or situation influences vulnerability to crime, are the most important theoretical

* A version of this article was presented at the 2001 annual meeting of the Academy of Criminal Justice Sciences in Washington, DC. Direct all correspondence to Christopher J. Schreck, Department of Criminology, Sociology, Social Work, and Geography, Arkansas State University, P.O. Drawer 2410, State University, AR 72467; e-mail: cschreck@astate.edu.

** Christopher J. Schreck is an assistant professor of criminology at Arkansas State University. His current interests lie in researching the sources of victimization among students and the homeless.

*** In December 2001, as this article was going to press, Richard A. Wright died suddenly of a heart attack. Dr. Wright was a leading scholar in corrections and criminal justice education; however, his interests literally spanned the entire discipline. His energy, expertise, and courage will be deeply missed.

**** J. Mitchell Miller is an assistant professor in the College of Criminal Justice at the University of South Carolina. His current projects include a National Institute of Justice evaluation of the South Carolina residential substance abuse treatment program and a U.S. State Department assessment of the Moscow Police Command College. Professor Miller is also editor of the *Journal of Crime and Justice.*

JUSTICE QUARTERLY, Vol. 19 No. 1, March 2002

developments to occur in the study of victimization. The advent of these situational theories and the consequent research activity helped rejuvenate scholarly interest in what had been a marginalized field (Meier & Miethe, 1993). The downside of such influence is that the substantive focus of research on victimization has rarely spread beyond the situational framework—the study of other potential causes of victimization, such as how individual traits may lead someone to become more vulnerable, has received far less attention. Reviews of victimization theory (e.g., Meier & Miethe, 1993) have generally ignored the possibility that individual traits (like low self-control) may be important potential contributors to the risk of victimization. This situation is true of most major empirical studies of the antecedents of individual victimization (e.g., Fisher, Sloan, Cullen, & Lu, 1998; Kennedy & Forde, 1990; Miethe, Stafford, & Long, 1987; Miethe, Stafford, & Sloane, 1990; Mustaine & Tewksbury, 1998).

Promising nonsituational explanations of victimization exist, however. For instance, the earliest attempts to explain victimization stressed the vulnerability-enhancing characteristics of the victim, like physical weakness among females and the elderly (e.g., von Hentig, 1941). Current research has documented the potential role of social bonds as an insulator against victimization (e.g., Felson, 1986, 1998). Furthermore, Schreck (1999) outlined how self-control, an individual trait Gottfredson and Hirschi (1990) used to explain criminal activity, also accounts for variation in the risk of victimization. Schreck's empirical test offered preliminary support for a connection between self-control and the likelihood of becoming a victim. In addition to this empirical support, the logical compatibility of Gottfredson and Hirschi's general theory with situational approaches indicates that situational and individual factors should not be considered in isolation. That is, an exclusive focus on routine activities and lifestyles would offer only an incomplete understanding of the sources of the risk of victimization. Nevertheless, research on the relationship between personal characteristics like self-control and social ties to vulnerability to crime is exceedingly sparse.[1]

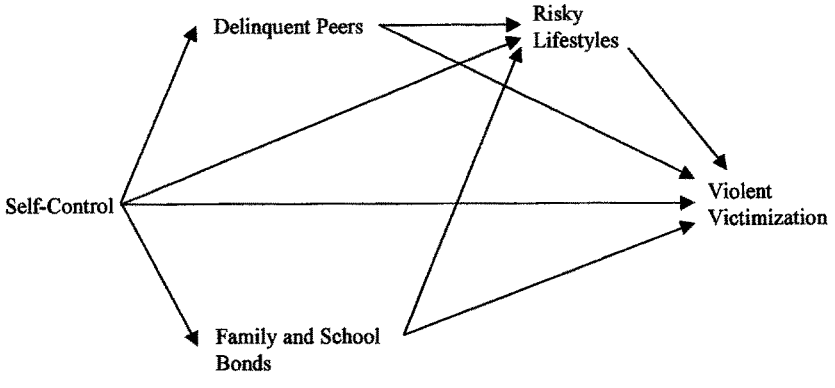
Our study extends previous work by describing a conceptual scheme that brings together situational and personal factors and relates them to exposure to the risk of personal violence. This

[1] Victimization is a politically sensitive topic because the mere notion that personal qualities increase vulnerability carries the stigma of victim blaming (Karmen, 2001; Meier & Miethe, 1993). We take the position that no one morally deserves to be the target of attempts at force or fraud. Nevertheless, in our imperfect world, some people draw more than their fair share of victimization; the discovery of the reasons why they do suggests policy options for reducing risk.

framework has two features. First, we propose that particular leisure activities and contact with delinquent peers lead to *situations* in which the risk of victimization is relatively high, while weak social ties and low self-control are factors that make some *people* more vulnerable than others. Our causal model thus reflects the belief that the risk of victimization is not solely dependent on one's lifestyle patterns, but neither do we assume that individual traits are the only source of risk. Second, we explore the interdependence of these individual and situational risk factors, which we derived from Gottfredson and Hirschi's (1990) general theory. Finally, we present our empirical claims using data from a sample of high school students.

THE CONCEPTUAL FRAMEWORK

Figure 1. Simplified Causal Model for Violent Victimization



As Figure 1 illustrates, self-control is the central concept in the framework. Low self-control is the differential tendency of people to engage in behavior that provides short-term pleasure that also carries long-term negative consequences. According to Gottfredson and Hirschi (1990), the disinclination to appreciate the long-term costs of decisions leads to the following characteristics: the inability to defer gratification, lack of diligence, insensitivity toward others, low frustration tolerance, preference for risky activities, and preference for physical activity over cognitive activity. These characteristics converge to form a higher-order latent trait that Gottfredson and Hirschi labeled "low self-control." Gottfredson and Hirschi linked the absence of self-control with an increased tendency to commit crime.

Gottfredson and Hirschi (1990) also stated that their theory is a general theory and thus that low self-control has relevance for a

variety of negative life outcomes besides crime (e.g., accidents and unstable relationships). Schreck (1999) extended the generality of self-control theory to the domain of victimization, arguing that the concept of low self-control is important for understanding the origins of victim precipitation and provocation. Low self-control may also compromise effective defenses against predatory crime through excessive drinking (Forde & Kennedy, 1997) or by making the individual more prone to ignore basic precautions against crime, like locking doors and windows. In short, the concept of self-control helps make sense of the otherwise ironic research finding that those who are highly likely to offend also have a higher risk of victimization (Jensen & Brownfield, 1986; Lauritsen, Sampson, & Laub, 1991; Sampson & Lauritsen, 1990; Mustaine & Tewksbury, 1998; Schreck, 1999).

In addition to low self-control, another direct source of the risk of victimization may emerge from social disaffiliation. At first, the idea that strong social relationships inhibit victimization seems counterintuitive, since researchers often study crime and victimization *within* social relationships, such as child abuse or domestic violence (e.g., Esbensen, Huizinga, & Menard, 1999; Finkelhor & Dziuba-Leatherman, 1994; Sellers, 1999). However, Felson (1998) reported that one is usually much safer in the company of family members than of strangers. Another difficulty is that researchers often think of a person's relationships with others in terms of how the relationship acts as a barrier to offending, rather than how it may lessen the chances of becoming a victim (e.g., Hirschi, 1969; Sampson & Laub, 1993). In the case of crime, individuals would fear the consequences that their criminal behavior would have upon those with whom they share close ties. But it is also possible to turn this argument around and examine it from the point of view of potential victims. Ties suggest bonds of social obligation, which may influence individual decision making in such a way as to promote less-risky behavior. For example, a father accompanied by his young children may be less willing to expose these children to victimization by behaving provocatively toward strangers. Those with strong social bonds may also consider the effect that their own victimization experience would have on the happiness of loved ones, even when these loved ones are not in danger. The awareness that some decisions carry a greater risk of victimization combined with the presence of strong social ties should lead to the selection of a safer alternative. We thus reason that individuals with strong bonds to others should be less vulnerable to crime.

The third and fourth elements in our framework are situational antecedents, which we assume influence the risk of victimization

independently of individual qualities (see Cohen & Felson, 1979; Osgood, Wilson, O'Malley, Bachman, & Johnston, 1996). Several conditions make a situation conducive to crime: there must be a would-be offender near a visible worthwhile target, and the offender must believe—if sometimes mistakenly—that he or she will be able to execute the crime successfully and get away. Circumstances that bring would-be offenders into contact with potential victims thus carry an unusually high risk. Lifestyles theory (Hindelang et al., 1978) also emphasizes that how people typically allocate their time to various daily pursuits will, in turn, affect their level of exposure to situations with a high potential for victimization. Social groups that spend more of their time in proximity to potential offenders or engaged in leisure activity away from watchful guardians will tend to be at a greater risk.

The research has identified some specific qualities of lifestyles that have heightened vulnerability. Simply spending more time outside the home is one way to increase risk because it places individuals in greater physical contact with those that are less safe to be around (Felson, 1998; Hindelang et al., 1978). Mustaine and Tewksbury (1998), however, added that where one goes and what one does outside the home is much more important for understanding the risk of victimization. If one leaves home and spends time with delinquent peers, for instance, one may be expected to have increased odds of becoming a crime victim (Jensen & Brownfield, 1986; Lauritsen et al., 1991; Sampson & Lauritsen, 1990). Association with delinquent peers is the third element in our causal model. The delinquent peer group may be hazardous to one's safety because likely offenders would not have to deviate far from their normal routines to find victims (Gottfredson & Hirschi, 1990). This possibility suggests that the friends of a delinquent constitute that delinquent's most eligible pool of victims. Moreover, spending time with delinquent peers carries the risk of victimization in the form of retaliation by other peer groups (Jensen & Brownfield, 1986; Singer, 1981).

Osgood et al. (1996) also posited that activity with peers that occurs away from informal authority figures (e.g., parents and teachers) is a necessary element for increasing the risk of delinquency. Since authority figures are often situated to act as guardians against victimization, as well as function as agents of social control, it would follow that those who spend a lot of time with peers away from home and the eyes of watchful guardians would have a greater likelihood of becoming a victim of, as well as a participant in, crime. Consequently, leisure activities with peers

(whether these peers are unusually delinquent or not) that are unstructured and unsupervised may lead to a greater risk of victimization. Thus, a risky lifestyle is the fourth factor that we consider.

Although these four factors may directly contribute to the risk of victimization, they may also be interrelated. A risky lifestyle and contact with delinquent peers, for instance, are probably not a consequence of chance. Hindelang et al. (1978) argued that demographic characteristics determine risky lifestyles, a point that some routine-activity research has taken as given (e.g., Cohen, Kluegel, & Land, 1981). In this study, we focus on two other plausible and meaningful determinants of lifestyle among adolescents: self-control and social ties to family and school. These factors may affect one's lifestyle choices and, in turn, indirectly influence victimization through activity. Gottfredson and Hirschi (1990) linked self-control with risky lifestyle patterns in their original theoretical statement. They noted that those with low self-control tend to avoid the home, instead preferring to "gravitate to the street. . .[and] to the same-sex peer group" (p. 157; see also, Matsueda & Anderson, 1998). For someone who lacks self-control, activity with peers away from home and parents seems to make good sense. The peer group is often a supportive and helpful audience for engaging in deviant behavior (Felson, 1998; Osgood et al., 1996), which contrasts favorably with parents' likely hostility to deviance (Hirschi, 1995). In short, activity with peers away from authority figures reflects the preferences of the individual because it provides pleasurable short-term benefits. This decision has a negative long-term cost, however, since a predilection for such activity should also elevate the risk of victimization.

In accord with Felson's (1986, 1998) reasoning, we also propose that social bonds should structure daily activity (see, also, Horney, Osgood, & Marshall, 1995). That is, strong ties with informal authority figures should lead individuals to spend more time in the presence of capable guardians. What evidence exists indicates that one common social tie, marriage, reduces the amount of time people spend with delinquent peers (Warr, 1998), which suggests that strong social ties would also lessen the risk of victimization by limiting proximity to likely offenders. In short, we propose that strong social ties should decrease vulnerability to crime indirectly through their effect on one's activity and lifestyle patterns.

The final pathway in this causal scheme links self-control and social ties. Gottfredson and Hirschi (1990) posited that social ties are a function of self-control, which the empirical evidence supports (e.g., Evans, Cullen, Burton, Dunaway, & Benson, 1997; Nagin & Paternoster, 1994). The explanation for the self-control-social tie

linkage is straightforward in that those with low self-control tend not to make good friends and are often less able to sustain much investment in conventional pursuits (Gottfredson & Hirschi, 1990). The research indicates that, at least for delinquency, social ties and self-control have independent effects on criminal behavior (e.g., Nagin & Paternoster, 1994; Polakowski, 1994; Wright, Caspi, Moffitt, & Silva, 1999). For the present, we assume that the independence of self-control and social ties will persist in respect to victimization, although social ties are, to a significant degree, an outcome of self-control.

Summary of Research Hypotheses

On the basis of the conceptual scheme outlined in Figure 1, we test the following hypotheses using multivariate analysis. First, there should be a direct inverse relationship between self-control and violent victimization—as self-control increases, the level of violent victimization should decrease. Second, strong social ties should reduce the level of risk for personal violence. Third, the amount of time spent engaged in risky lifestyles, as well as contact with delinquent peers, should directly increase the level of violent victimization, net of all other controls. For now, we treat the relative share of predictive power of the core concepts as an empirical issue; however, each should have a meaningful effect size in relation to the control variables. Fourth, self-control should indirectly affect activities through social ties and should also influence violent victimization through both ties and activities. Fifth, strong social ties may also reduce the level of risky activities and, in turn, indirectly decrease the level of personal violence. The remainder of this article describes the study, analytic strategy, and results of the tests of these hypotheses.

METHODS

Characteristics of the Sample

This study used data from a sample of 1,139 students attending four junior and senior high schools on May 5-8, 1997, in Fayetteville, Arkansas.[2] High school students are highly desirable for theory testing because their risk of victimization is much greater than that for other age groups (Bureau of Justice Statistics, 1997), and they are more likely to have higher levels of risky activities and contact with delinquent peers (Lauritsen et al., 1991; Sampson &

[2] We drew our information about the data collection from a technical report of the Fayetteville study (Hirschi & Adams, 1997) and the Ph.D. dissertation of the on-site field representative of the Tucson Youth Study (Chapple, 1999).

Lauritsen, 1990). The respondents were 9th-, 10th-, and 11th-grade students. The demographic characteristics of the sample are presented in Table 1. The investigators who collected the Fayetteville data intended their study to replicate Hirschi's (1969) Richmond Youth Project. Britt, Costello, Hirschi, and Gottfredson (1999) assessed the validity of the Fayetteville data by comparing them with the data from the Richmond project collected in 1964-65 and found an impressive degree of correspondence between the two data sets. They indicated that the Fayetteville data are valid.

Table 1. Sample Demographic Characteristics

Variable	*N*	Percentage
Sex		
Male	543	49.0
Female	558	50.3
Race		
White	963	86.8
Hispanic	38	3.4
Black	57	5.1
Asian	27	2.4
Native American	32	2.9
Age		
14 or younger	100	9.0
15	371	33.5
16	371	33.5
17	230	20.7
18 or older	34	3.1
Grade		
9	413	37.2
10	366	33.0
11	318	28.7
Family Income		
< $10,000	79	7.1
$10,000-$25,000	157	14.2
$26,000-$39,000	244	22.0
$40,000-$65,000	241	21.7
> $66,000	274	24.7

Note: Totals may vary owing to missing or invalid cases.

We screened the cases for illegitimate responses (i.e., responses outside the possible range, as identified on the survey instrument) and deleted those that coded more than one question improperly. The purpose of this procedure was to eliminate respondents who randomly filled in responses, a process that obviously makes their information invalid. The screening procedure left us with 1,054 cases. For cases with only one illegitimate response, we treated the problematic item as we did other missing data. For individual cases in which no more than one item per scale was missing, we replaced the missing value with the item mean. Cases with more than one

missing item in any scale did not have any missing data replaced and were subject to listwise deletion in the analyses.

Data Analysis

We use Joreskog and Sorbom's LISREL 8.14 to create a structural equation model. Standard regression procedures assume that the independent variables are directly observed and therefore are precise indicators of whatever concept the research intends them to measure. This assumption is inappropriate insofar as there are differences in accuracy across the measures, which is an issue with self-report research (e.g., Hindelang, Hirschi, & Weis, 1981). Consequently, standard regression estimates of the effects of less accurately measured items or scales also receive less weight. Structural equation modeling (SEM), on the other hand, allows the researcher to control for unreliability and measurement error. Moreover, SEM is highly suitable in that it allows the researcher to treat both outcome *and* explanatory scales as ordinal level. Almost all the measures used in this study, described next, consist of ordinal data. We accounted for ordinal data by using the PRELIS procedure to estimate polychoric correlations and asymptotic covariance matrices and used the diagonally weighted least squares criterion to control for the varying degrees of accuracy across the polychoric correlations.

Measures

Our primary dependent variable is personal violence.[3] The three items in the violence index roughly approximate the predatory crimes of simple assault, robbery, and aggravated assault.[4] Among the general population, personal violence is rare (see, for example, Bureau of Justice Statistics, 1997); however, high school students are in the age range with the greatest risk. Our descriptive results confirm this expectation: 44.2 percent of the sample reported property taken by threats or force, 31.5 percent were victims of beatings, and 15.3 percent were threatened with weapons.

The central explanatory variable is self-control. The most common measure of self-control is a series of personality inventory items derived from psychological checklists. Currently, the standard measure is Grasmick et al.'s (1993) 24-item scale, which contains several items for each of the following elements of low self-

[3] Descriptive statistics and coding information for the individual items in the primary scales are presented in the appendix.

[4] The Fayetteville survey also contains a property-victimization item: theft. A single item for theft does not allow us to say much about property victimization, which may include being the victim of a burglary, grand theft auto, and so on. Consequently, we decided to omit this variable from the analysis.

control: impulsivity, simple tasks, risk seeking, physical activities, self-centeredness, and temper (see also, Hirschi & Gottfredson, 1993). The Fayetteville data set, however, is limited by a much smaller array of appropriate items; the physicality dimension, for instance, is not represented at all.[5] Nine items in the Fayetteville data appear to derive from Grasmick et al.'s scale. Although these items seem to tap the remaining dimensions of self-control, the small number of relevant items makes the data set unsuitable for investigating the dimensionality of self-control (as in, for example, Longshore, Turner, & Stein, 1996). Principal components factor analysis and the scree discontinuity test, however, indicate that the Fayetteville self-control measure is unidimensional, which is consistent with the bulk of research (e.g., Gibbs & Giever, 1995; Grasmick et al., 1993; Piquero & Rosay, 1998).

There are disadvantages with the present self-control measure, although two considerations partially mitigate the problems. First, we used SEM to analyze the data. The presence of fewer items is less of a problem for SEM because it corrects scale unreliability (see Bollen, 1989). Second, established scales may overlap to some degree with the dependent variable or the other explanatory variables. For example, the Gibbs and Giever (1995) self-control construct overlaps with school ties (e.g., "Most classes are boring" and "When I consider all the things in life that are really important to me, my performance in school is right near the top") and lifestyle (e.g., "My social life is really important to me" and "Most days I make a list of things to do"). The current scale does not suffer from this problem. Nevertheless, readers need to be aware that the self-control measure used in this study is not standard.

We measured two types of social ties using measures employed in Hirschi's (1969) test of social bonding theory: attachment to family and commitment to school. To minimize the possibility of confounding self-control and social ties, since personality traits and social ties are presumably both manifestations of latent self-control, measures for social ties should indicate a specific external source (mother, father, or school), whereas self-control should be global in focus and not reference ties to others. The selection process left five items for family ties and six items for school ties. The family-ties items measured admiration for and intimacy with parents. The school ties items measured both feelings toward school ("How much do you like school?") and rational investments like grade point average and educational plans.

---

[5] This omission is less problematic in that research indicates that the physicality dimension apparently has a nonsignificant relationship with criminal acts (see Longshore et al., 1996; Piquero & Rosay, 1998).

The research on routine activities-lifestyles has produced an impressively diverse set of indicators (e.g., Cohen et al., 1981; Kennedy & Forde, 1990; Miethe et al., 1990; Mustaine & Tewksbury, 1998). Although the Fayetteville data set lacks the range of content of lifestyles evident in many of these studies, it has measures of routine activity indicative of time spent engaged in "unstructured, unmonitored socialization with peers" (see Osgood et al., 1996). Osgood et al. (1996) related activities with these characteristics with delinquency; however, they should also be relevant for victimization. Informal authority figures, who would be socially obligated to monitor behavior, would also presumably be well situated to act as guardians. The more often a person spends time away from these figures of authority, the more often he or she will be away from protectors. We used two items to measure risky lifestyle: occurrences when the respondent went looking around at night for someone to hang out with and the number of hours per week spent driving around with friends. We measured delinquent peer association with an item asking respondents how many of their close friends had been arrested by the police. This measure does not guarantee that the close friends who were arrested actually committed a delinquent offense, but the measure resembles those employed in other studies that have attempted to control for the effect of peers (e.g., Evans et al., 1997).[6]

We also included a control for the respondent's sex, as well as three items tapping some of the characteristics of the respondent's family. These variables, as far as the causal model outlined in Figure 1 is concerned, were treated as exogenously affecting all the primary variables except self-control. *Sex* was coded (1) if the respondent was male and (0) if female. The family status items included the number of biological parents living with the child, the number of additional siblings in the household, and the receipt of welfare. The *number of biological parents living at home* item has three response options—none, one, or two. The modal number of parents is two, although 43 percent of the sample had either zero or one biological parent living with them. The *number of siblings* in

[6] Other research has also used measures of "deviant lifestyle" (e.g., Jensen & Brownfield, 1986; Lauritsen et al., 1991; Sampson & Lauritsen, 1990) as a situational predictor of victimization. We decline to use this measure for theoretical reasons. Hirschi and Gottfredson (1993) observed that delinquent activity is an index of self-control; an analysis that simultaneously combines separate indicators of self-control (measured with a personality inventory and a scale for "analogous behaviors") is theoretically estimating self-control while controlling for self-control. Although Schreck (1999) included both a self-control personality scale and a "criminality" scale, the criminality scale was intended as a crude measure of proximity to delinquent friends. Since we were able to control for delinquent friends and risky lifestyle with more direct indicators, it is unclear what a significant effect for delinquent lifestyle would mean, apart from being an artifact of collinearity.

the household is a dummy-coded variable assigned a value of 1 if the respondent had more than two other siblings, zero otherwise. This coding scheme strengthens the bivariate correlation between siblings and victimization. Slightly more than a third of the sample had more than two other siblings in their households. *Welfare receipt* is an item asking the respondent to report whether the family has received public assistance like welfare. The response categories are (1) has never received benefits, (2) has received benefits in the past, and (3) is now receiving assistance. Only 16.4 percent of the sample was either receiving public assistance or had once received it.

RESULTS

The diagnostic statistics produced in LISREL suggest satisfactory model fit (Satorra-Bentler $\chi^2 = 1193.93$, $df = 360$, GFI = 0.97). Although the χ^2 value indicates a statistically significant ($p = .000$) lack of model fit, which may be due to a misspecification of the model (i.e., important omitted variables), significance can also be a reflection simply of a large sample size. In this case, the researcher may turn to the critical N statistic produced in LISREL to assess this possibility. Hoelter (1983) indicates that a critical N of 200 or more is a sign of an acceptable model fit. Since our critical N is 422, there is reason to believe that the significant χ^2 value is an artifact of sample size.

Before we turn to the multivariate results, we note the baseline bivariate relationships presented in Table 2. After correcting for measurement error, each of the primary explanatory variables relates well with violent victimization, and these relationships are in the expected direction. It is also obvious from the table that the explanatory variables share a high degree of intercorrelation. In particular, self-control is strongly related to family and school ties. Although the individual items in these three latent scales were constructed to eliminate overlap in content, at the empirical level these variables are collinear. This strong degree of association supports Akers's (1994) contention that the presence of strong social bonds may reasonably be treated as an index of high levels of self-control (and thus be omitted from future analyses or integrated into the self-control scale). We continue to consider social ties, however, because of the theoretical reasons mentioned earlier, that the presence of strong relationships may affect the risk of victimization even net of self-control.

The results of the multivariate analysis are presented in Table 3. The data make clear that both situational *and* individual factors contribute to the risk of violent victimization. In accord with

Table 2. Standardized Bivariate Correlations, Corrected for Measurement Error

	Male	Siblings (*N*)	Parents (*N*)	Receipt of Welfare	Self-Control	Delinquent Peers	Family Ties	School Ties	Risky Lifestyles	Violent Victim
Male	1.00									
Number of siblings	.01	1.00								
Number of parents	−.04	−.48	1.00							
Receipt of welfare	−.11	.30	−.47	1.00						
Self-control	−.35	−.06	.16	−.16	1.00					
Delinquent peers	.07	.10	−.26	.27	−.49	1.00				
Family ties	−.16	−.11	.28	−.35	.68	−.38	1.00			
School ties	−.30	−.08	.26	−.32	.75	−.50	.60	1.00		
Risky lifestyles	.28	.13	−.29	.20	−.39	.54	−.23	−.48	1.00	
Violent victimization	.25	.28	−.30	.23	−.52	.43	−.40	−.48	.42	1.00

Note: Estimates produced in LISREL.

Table 3. Standardized Coefficients for Structural Parameters

	Controls						Social Bonds			
Dependent variables	Male	Siblings (*N*)	Parents (*N*)	Welfare Receipt	Self-Control	Delinquent Peers	Family	School	Risky Lifestyles	Explained Variance
Delinquent peers	−.09*	−.04	−.15*	.13*	−.48*	—	—	—	—	.30
Family ties	.05	.04	.10	−.22*	.66*	.02	—	—	—	.54
School ties	−.10*	.05	.06	−.18*	.61*	−.13*	—	—	—	.62
Risky lifestyles	.19*	.02	−.14*	.01	−.03	.42*	.18*	−.26*	—	.42
Violent victimization	.07	.20*	−.05	.01	−.30*	.14*	−.04	−.05	.14*	.40

Note: * $p < .05$ (one tailed).

Schreck's (1999) findings, the presence of high self-control leads to significantly fewer encounters with personal violence. Moreover, self-control has the largest effect size on victimization of any of the variables in the analysis. Since the effect of self-control on violent victimization is independent of risky lifestyles and delinquent peers, a reasonable interpretation may be that those with less self-control are more likely to become targets of violence even in situations that are otherwise relatively safe (with guardians present, for example). At the same time, individuals who spend a lot of time driving around with friends or looking for someone to hang out with at night tend to have a higher risk, regardless of their level of self-control. The respondents who have many close friends with arrest records also tended to share higher risks, supporting the belief that the delinquent peer group victimizes fellow members and/or draws retaliation because of delinquent activities against others. Besides its direct influence on victimization, the peer effect also operates indirectly through risky lifestyles (see Table 4). Both the peer and risky lifestyle effects are of a similar magnitude. In short, the evidence supports our argument that self-control and situational factors each directly and independently affect the level of victimization. Family and school ties, however, do not relate to violent victimization, either directly or indirectly, net of the other variables.

Table 4. Decomposition of Standardized Structural Effects

	Violent Victimization		
	Direct	Indirect	Total
Self-control	−.29*	−.16	−.46*
Delinquent peers	.14*	.07*	.21*
Family ties	−.04	.03	−.01
School ties	−.05	−.04	−.09

Note: * $p < .05$ (one tailed); Lifestyles is omitted because the causal model does not specify any indirect effects on violent victimization.

Other variables also influence how often respondents experience violence. Although table 2 indicates that males are subject to a greater share of personal violence than are females (see, for example, Bureau of Justice Statistics, 1997), this relationship loses significance in the multivariate analysis. A disquieting finding is the tendency for children in families where there are many brothers and sisters to experience violence. Hirschi (1991) argued that families with a large number of siblings are more apt to have delinquent children, since the presence of many children dilutes the parents'

ability to provide resources and supervision. This result would indicate that the number of siblings in the household may actually be another proxy measure for high exposure to would-be offenders.

Turning to the sources of variation among family and school ties, self-control plays the most important role of any that we considered. The receipt of welfare also matters for shaping these ties, since the respondents whose families had never received public assistance were closer to their families and schools. In some respects, this finding is consistent with Cohen et al.'s (1981) speculation that those with less income have weaker ties (and consequently less guardianship); however, the results do not show any support for an indirect effect of receiving public assistance on victimization. Finally, gender influences the respondent's investment in the school, with males having weaker school ties.

Finally, we turn to the antecedents of the situational variables. Consistent with Gottfredson and Hirschi's (1990) predictions, self-control predicts significantly less contact with delinquent peers. Other predictors of greater association with delinquent peers are being female (net of controls, sex reversed direction from Table 2), having fewer biological parents, and the receipt of welfare. In regard to a risky lifestyle, the respondents who had close friends with arrest records tended to spend more time engaged in unsupervised, unstructured leisure activity with a peer group. Self-control does not directly affect lifestyles to a significant degree; however, the analysis reports a significant indirect effect of self-control on lifestyles through contact with delinquent peers and family and school ties. Strong bonds with the school also lead to less time spent engaged in unstructured and unsupervised leisure pursuits with peers; however, strong ties to the family result in more time spent in such activities. The latter finding is unexpected and may be an artifact of collinearity with the school ties measure, as suggested in Table 2.

CONCLUSION

We began with the observation that the routine activities and lifestyles theories were exciting ideas that spawned great interest in the field of victimization. These theories, although more than two decades old, have remained the centerpiece of mainstream research on victimization. Their longevity and influence, however, may have overshadowed thinking about other likely antecedents of victimization. We believe that this is a mistake.

We proposed that personal traits, specifically self-control and social ties, may also influence the risk of personal violence in addition to situational factors. There are theoretical reasons to justify

this approach to explaining victimization. First, the concept of self-control seems to lend itself well to accounting for variation in the risk of individual victimization, and the theory made predictions about victimization that existing evidence supports. Second, and very important, the authors of the general theory explicitly stated that self-control and situational theories were logical complements (Gottfredson & Hirschi, 1990, p. 22-25). In light of this statement, an exclusive focus on situational antecedents would reveal only part of the reason why some people are more likely to become victims.

Consistent with our expectations, situational and personal trait variables each significantly and meaningfully influenced the level of personal violence experienced by members of the sample. The results therefore support the first and third hypotheses outlined earlier. Self-control did have a stronger effect magnitude on the risk of violence than did activities and peers. We should note, however, that there is no theoretical reason for self-control necessarily to take empirical precedence over situational variables. The results did not consistently support the second hypothesis—neither family nor school ties significantly contributed to the risk of victimization. The fourth hypothesis, that high self-control would indirectly reduce violence, was not supported by the data.

Readers should be aware of certain limitations to this study. With the Fayetteville data set, we could not control for the full range of situational influences on the risk of victimization, such as whether one spends time in an area with a high crime rate. Ecological context is an important situational variable that research has shown is a predictor of exposure to violence (e.g., Mustaine & Tewksbury, 1998; Sampson & Lauritsen, 1990). The consequence of this omission is the possibility that the variance of the measures included in this study may, at least in part, be a reflection of where a respondent was situated. Even if relevant measures were available in the Fayetteville data, however, the amount of statistical variation in the ecological context would probably be relatively minimal, since the youths were selected from a local sample. However, Sampson and Lauritsen's (1990) finding that ecological *and* individual deviance variables in most cases both contributed to the increased risk of victimization suggests that a measure for context should not necessarily challenge the pattern of findings in this study.[7]

[7] For the sake of accuracy, we note that Sampson and Lauritsen interpreted deviant activity in situational terms. That is, actual participation in deviance implies proximity with other would-be offenders, as well as the risk of retaliation. The two authors did not claim that an individual propensity toward deviance (which does not require actual deviance) is a risk factor in and of itself.

In addition, we designed the causal scheme outlined in this study with Gottfredson and Hirschi's (1990) general theory of crime in mind. Nevertheless, self-control theory makes assumptions about causal ordering and causal priority that are a matter of intense debate (e.g., Sampson & Laub, 1995). Because of the cross-sectional nature of the data, we could not show that the causal ordering is as the general theory suggests. Although changing the causal ordering would affect how one might interpret the findings, revision of the pathways would not change the results as far as violent victimization is concerned—individual and situational factors would still have the same degree of direct influence on victimization. Put another way, regardless of how one respecifies the pathways, our study indicates that the field can no longer afford to ignore nonsituational explanations of the risk of victimization.[8]

Finally, the analysis relied on certain measures that are not standard or extensively used in research. For example, the self-control measure is not the usual 24-item Grasmick et al. (1993) scale. Another limitation is the relative lack of lifestyle measures. Thus, we could not fully investigate in detail the role that specific routine activities play in promoting the risk of victimization, net individual factors. Nevertheless, the results suggest that personal characteristics may be important determinants of victimization.

It is intriguing to speculate about the policy implications of these findings. It appears that the same recommendations that self-control theorists have offered to reduce delinquent behavior—related to effective parental supervision and discipline within the home (Gottfredson & Hirschi, 1990) and targeting the activities of teenagers that carry lots of opportunities for crime—could ultimately insulate adolescents from violent victimization as well. In this fashion, policy initiatives that are designed to increase the self-control of youths and to restrict their activities may prove doubly beneficial to families.

REFERENCES

Akers, R. L. (1994). *Criminological theories: Introduction and evaluation,* Los Angeles: Roxbury.

Bollen, K. (1989). *Structural equations with latent variables.* New York: John Wiley & Sons.

[8] An anonymous reviewer correctly observed that with a little revision of the causal model and the analytic strategy, we could test a social learning theory of victimization. Although space limitations prohibit us from presenting an adequate treatment of social learning theory here, we believe that following this suggestion would further energize the study of victimization and thus that the suggestion deserves further investigation.

Britt, C. L., Costello, B. J., Hirschi, T., & Gottfredson, M. R. (1999, November). Causes of delinquency II: A full replication. Paper presented at the annual meeting of the American Society of Criminology, Toronto.

Bureau of Justice Statistics. (1997). *Criminal victimization in the United States, 1994*. Washington, DC: U.S. Government Printing Office.

Chapple, C. L. (1999). *Testing the boundaries: Dating violence and the general theory of crime. Dissertation Abstracts International, 60* (04), 1337A. (UMI No. 9927518).

Cohen, L. E., & Felson, M. (1979). Social change and crime rate trends: A Routine activity approach. *American Sociological Review, 52,* 170-183.

Cohen, L. E., Kluegel, J. R., & Land, K. (1981). Social inequality and predatory criminal victimization: An exposition and test of a formal theory. *American Sociological Review, 46,* 505-24.

Esbensen, F. A., Huizinga, D., & Menard, S. (1999). Family context and criminal victimization in adolescence. *Youth and Society, 31,* 168-98.

Evans, T. D., Cullen, F. T., Burton, V. S., Dunaway, R. G., & Benson, B. L. (1997). The social consequences of self-control: Testing the general theory of crime. *Criminology, 35,* 475-501.

Felson, M. (1986). Linking criminal choices, routine activities, informal control, and criminal outcomes. In D. B. Cornish & R. V. Clarke (Eds.), *The reasoning criminal: Rational choice perspectives on offending* (pp. 119-128). New York: Springer-Verlag.

Felson, M. (1998). *Crime and everyday life*. Thousand Oaks, CA: Pine Forge Press.

Finkelhor, D., & Dziuba-Leatherman, J. (1994). Victimization of children. *American Psychologist, 49,* 173-183.

Fisher, B. S., Sloan, J. J., Cullen, F. T., & Lu, C. (1998). Crime in the ivory tower: The level and sources of student victimization. *Criminology, 36,* 671-710.

Forde, D. R., & Kennedy, L. W. (1997). Risky lifestyles, routine activities, and the general theory of crime. *Justice Quarterly, 14,* 264-294.

Garofalo, J. (1987). Reassessing the lifestyle model of criminal victimization. In M. Gottfredson & T. Hirschi (Eds.), *Positive criminology* (pp. 23-42). Newbury Park, CA: Sage.

Gibbs, J. J., & Giever, D. (1995). Self-control and its manifestations among university students: An empirical test of Gottfredson and Hirschi's general theory. *Justice Quarterly, 12,* 232-255.

Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. Stanford, CA: Stanford University Press.

Grasmick, H. G., Tittle, C. R., Bursik, R. J., & Arneklev, B. J. (1993). Testing the core implications of Gottfredson and Hirschi's general theory of crime. *Journal of Research in Crime and Delinquency, 30,* 5-29.

Hindelang, M. S., Gottfredson, M. R., & Garofalo, J. (1978). *Victims of personal crime*. Cambridge, MA: Ballinger.

Hindelang, M. S., Hirschi, T., & Weis, J. (1981). *Measuring delinquency*. Beverly Hills, CA: Sage.

Hirschi, T. (1969). *Causes of delinquency*. Berkeley: University of California Press.

Hirschi, T. (1991). Family structure and crime. In B. J. Christensen (Ed.), *When families fail—The social costs* (pp. 43-65). Lanham, MD: University Press of America.

Hirschi, T (1995). The family. In J. Q. Wilson & J. Petersilia (Eds.), *Crime* (pp. 121-140). San Francisco: ICS Press.

Hirschi, T., & Adams, D. J. (1997). *Technical report: Fayetteville School Survey*. Unpublished manuscript, Fayetteville, AK.

Hirschi, T., & Gottfredson, M. (1993). Commentary: Testing the general theory of crime. *Journal of Research in Crime and Delinquency, 30,* 52-53.

Hoelter, J. (1983). The analysis of covariance structures: Goodness of fit indices. *Sociological Methods Research, 11,* 325-344.

Horney, J., Osgood, D. W., & Marshall, I. H. (1995). Criminal careers in the short-term: Intra-individual variability in crime and its relation to local life circumstances. *American Sociological Review, 60,* 655-673.

Jensen, G. F., & Brownfield, D. (1986). Gender, lifestyles, and victimization: Beyond routine activity theory. *Violence and Victims, 1,* 85-99.

Karmen, A. (2001). *Crime victims: An introduction to victimology* (4th ed.). Belmont, CA: Wadsworth.

Kennedy, L. W., & Forde, D. R. (1990). Routine activities and crime: An analysis of victimization in Canada. *Criminology, 28,* 137-152.

Lauritsen, J. L., Sampson, R. J., & Laub, J. H. (1991). Addressing the link between offending and victimization among adolescents. *Criminology, 29,* 265-291.

Longshore, D., Turner, S., & Stein, J. A. (1996). Self-control in a criminal sample: An examination of construct validity. *Criminology, 34,* 209-228.

Matsueda, R., & Anderson, K. (1998). The dynamics of delinquent peers and delinquent behavior. *Criminology, 36,* 269-308.

Meier, R. F., & Miethe, T. D. (1993). Understanding theories of criminal victimization. *Crime and Justice: A Review of Research, 17,* 459-499.

Miethe, T. D., Stafford, M. C., & Long, J. S. (1987). Social differentiation in criminal victimization: A test of routine activities/lifestyles theories. *American Sociological Review, 52,* 184-194.

Miethe, T. D., Stafford, M. C., & Sloane, D. (1990). Lifestyle changes and risk of criminal victimization. *Journal of Quantitative Criminology, 6,* 357-376.

Mustaine, E. E., & Tewksbury, R. (1998). Predicting risks of larceny theft victimization: A routine activity analysis using refined activity measures. *Criminology, 36,* 829-858.

Nagin, D. S., & Paternoster, R. (1994). Personal capital and social control: The deterrence implications of a theory of individual differences in criminal offending. *Criminology, 32,* 581-606.

Osgood, D. W., Wilson, J. K., O'Malley, P. M., Bachman, J. G., & Johnston, L. D. (1996). Routine activities and individual deviant behavior. *American Sociological Review, 61,* 635-655.

Piquero, A. R., & Rosay, A. B. (1998). Reliability and validity of Grasmick et al.'s self-control scale: A comment on Longshore et al. *Criminology, 36,* 157-173.

Polakowski, M. (1994). Linking self- and social control with deviance: Illuminating the structure underlying a general theory of crime and its relation to deviant activity. *Journal of Quantitative Criminology, 10,* 41-78.

Sampson, R. J., & Laub, J. H. (1993). *Crime in the making: Pathways and turning points through life.* Cambridge, MA: Harvard University Press.

Sampson, R. J., & Laub, J. H. (1995). Understanding variability in lives through time: Contributions of life-course criminology. *Studies on Crime and Crime Prevention, 4,* 143-158.

Sampson, R. J., & Lauritsen, J. L. (1990). Deviant lifestyles, proximity to crime, and the offender-victim link in personal violence. *Journal of Research in Crime and Delinquency, 27,* 110-139.

Schreck, C. J. (1999). Criminal victimization and low self-control: An extension and test of a general theory of crime. *Justice Quarterly, 16,* 633-654.

Sellers, C. S. (1999). Self-control and intimate violence: An examination of the scope and specification of the general theory of crime. *Criminology, 37,* 375-404.

Singer, S. I. (1981). Homogeneous victim-offenders populations: A Review and some research implications. *Journal of Criminal Law and Criminology, 72,* 779-788.

Von Hentig, H. (1941). Remarks on the interaction of perpetrator and victim. *Journal of Criminal Law, Criminology, and Police Science, 31,* 303-309.

Warr, M. (1998). Life-course transitions and desistance from crime. *Criminology, 36,* 183-216.

Wright, B. R. E., Caspi, A., Moffitt, T. E., & Silva, P. A. (1999). Low self-control, social bonds, and crime: Social causation, social selection, or both? *Criminology, 37,* 479-514.

Appendix. Simple Statistics and Factor Loadings, Grouped by Scale

Item	Mean	*SD*	Minimum	Maximum	Factor Loading
School Bonds					
I try hard in school.*	3.92	.99	1	5	.75
In general, do you like or dislike school?*	1.98	.67	1	3	.60
How important is getting good grades to you?*	3.44	.69	1	4	.76
What kind of grades do you get?*	4.02	.93	1	5	.73
Do you care what teachers think of you?*	2.04	.75	1	3	.59
How much education do you plan to get?	4.53	.99	1	5	.52
Coding for School Bonds: "try hard": 1 = strongly agree, 2 = agree, 3 = undecided, 4 = disagree, 5 = strongly disagree; "like school": 1 = like it, 2 = like it and dislike it about equally, 3 = dislike it; "good grades": 1 = very important, 2 = somewhat important, 3 = fairly unimportant, 4 = completely unimportant; "grades": 1 = mostly As, 2 = mostly Bs, 3 = mostly Cs, 4 = mostly Ds, 5 = mostly Fs; "care teachers": 1 = I care a lot, 2 = I care some, 3 = I don't care much; "educational plans": 1 = some high school, 2 = high school, 3 = trade school, 4 = some college, 5 = college.					
Family Bonds					
I talk over future plans with my parents.*	3.70	1.13	1	5	.66
My mother seems to understand me.*	3.28	1.31	1	5	.82
I would like to be the kind of person my mother is.*	3.00	1.26	1	5	.79
I would like to be the kind of person my father is.*	3.00	1.34	1	5	.58
I share my thoughts and feelings with my mother.*	3.23	1.32	1	5	.77
Coding for Family Bonds: 1 = strongly agree, 2 = agree, 3 = undecided, 4 = disagree, 5 = strongly disagree.					
Self-Control					
I am usually pretty cautious.*	3.95	.95	1	5	.46
I don't devote much thought and effort to preparing for the future.	3.68	1.23	1	5	.56
I lose my temper easily.	3.01	1.28	1	5	.48
I see no need for hard work.	4.13	1.03	1	5	.66
I sometimes take a risk just for the fun of it.	2.38	1.10	1	5	.48
In general, I try hard.*	3.84	.94	1	5	.51
I try to get things I want even when I know that it's causing problems for other people.	3.36	1.06	1	5	.64
There is no good reason for one person to hit another.*	3.41	1.34	1	5	.44

Note: * denotes reverse-coded items.

Item	Mean	*SD*	Minimum	Maximum	Factor Loading
Most things people call delinquency don't really hurt anyone.	3.17	1.00	1	5	.46
Coding for Self-Control: 1 = strongly agree, 2 = agree, 3 = undecided, 4 = disagree, 5 = strongly disagree.					
Risky Lifestyles					
How many hours per week do you spend riding around in a car with friends?	2.54	1.29	1	5	.82
Have you ever gone looking for someone to hang around with at night?	2.23	1.11	1	5	.82
Coding for Lifestyles: "hours riding": 1 = none, 2 = 1-2, 3 = 3-4, 4 = 5-6, 5 = 7 or more; "hanging out": 1 = never, 2 = once or twice, 3 = several times, 4 = many times.					
Violent Victimization					
Have you ever had something taken from you by force?	1.53	.74	1	3	.79
Have you ever been beaten up or physically hurt on purpose?	1.40	.73	1	3	.80
Have you ever been assaulted by someone using a weapon?	1.21	.58	1	3	.73
Coding for Violent Victimization: 1 = never, 2 = once or twice, 3 = three or more times.					

Note: * denotes reverse-coded items.