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# Social Capital, Opportunity, and School-Based Victimization

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This study extends the opportunity theory of victimization to consider the social capital of adolescents at school. We argue that social capital might act as a protective factor potentially encompassing both the concepts of guardianship and target attractiveness. Drawing on a sample of 5,395 adolescents interviewed in the context of the 2007 National Crime Victimization Survey (school crime supplement), we develop school-specific measures of social capital and opportunity indicators in predicting violent and theft victimization on school grounds. The results show that opportunity indicators are strong predictors of both violent and theft victimization and that social capital is especially important as a protective factor from violent victimization. More specifically, the results indicate that students who developed trust relationships with adults at school benefit from these relationships by avoiding violent encounters with potential offenders. Implications for opportunity theories of victimization are discussed.

**Keywords:** routine activity theory; opportunity theory; social capital theory; school violence; youth victimization

Once regarded as relatively structured and safe places, schools have started to be considered among potentially risky locations where violent crime and victimization may occur. Although the perception may have been fueled by a few tragic violent incidents, researchers have nonetheless started to realize the need to understand school-based victimization as a research problem in its own right (Astor, Benbenishty, Zeira, & Vinokur, 2002; Augustine, Wilcox, Ousey, & Clayton, 2002; Burrow & Apel, 2008; Garofalo, Siegel, & Laub, 1987; Hanke, 1996; Khoury-Kassabri, Benbenishty, Astor, & Zeira, 2004; Schreck, Miller, & Gibson, 2003; Wilcox, Tillyer, & Fisher, 2009). The challenge for research is twofold. First, to examine whether theories and predictors of adolescent victimization in general also hold when we consider victimization on school grounds specifically, or whether current theories should be extended or modified for the specific school context. Second, to develop measures which remain theoretically meaningful while being specific to the school environment.

This study contributes to these objectives by examining the predictors of theft and violent victimization among high school students in the United States. Our inquiry is guided by two research questions. Drawing from opportunity theories of victimization, the first question of interest is whether the routine activities of students at school influence



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their risk of victimization in the same way that they do outside of school grounds. More specifically, we examine whether students who participate in (structured) extracurricular activities are at lower or higher risk of victimization compared to those who do not. Although structured activities may be considered to be protective factors from victimization in the community through a decreased exposure to potential offenders, the reverse might be true when considering victimization on school grounds. The reason is straightforward: Students who participate in such activities actually increase their exposure time at school while becoming more attractive targets as they carry valuable items to those activities. Few studies have examined the contribution of such activities on theft and violent victimization in a school setting.

The second research question moves our concerns from *activities* to *relationships* that students develop with both adults and fellow students at their school. More specifically, we draw from social capital theory (Coleman, 1990; Lin, 2001) to analyze whether students who benefit from more social resources at school also benefit from additional protection from victimization. Students who are socially isolated (either from adults and/or from other students) may lack guardianship and may be perceived as more attractive (vulnerable) targets by potential offenders. Although a few studies have introduced the necessity of analyzing social relationships with significant others to understand victimization in general (Boulton, Trueman, Chau, Whitehand, & Amatya, 1999; Chen, 2009; Lauritsen, Sampson, & Laub, 1991; Schreck & Fisher, 2004; Tillyer, Tillyer, Miller, & Pangrac, 2011; Wilcox et al., 2009) or for marginalized youth (McCarthy, Hagan, & Martin, 2002), little research has paid attention to such relationships as they develop in schools and whether they can provide protection from victimization.

We argue that extending the opportunity perspective to consider the social capital of students is crucial because (a) social capital theory is better capable of specifying the mechanisms underlying the protective influence of social relations on victimization, and (b) social capital directly taps into the two "choice" factors of opportunity theory: guardianship and target attractiveness. We further develop on these ideas in the following text.

## THEORETICAL BACKGROUND

Both lifestyle/exposure and routine activity theories of victimization have been shown to effectively account for variations in victimization rates among general (e.g., Fisher, Sloan, Cullen, & Lu, 1998; Hindelang, Gottfredson, & Garofalo, 1978; Miethe & Meier, 1994; Miethe, Stanford, & Long, 1987; Mustaine & Tewksbury, 1998) and adolescent populations (Astor et al., 2002; Augustine et al., 2002; Burrow & Apel, 2008; Chen, 2009; Jensen & Brownfield, 1986; Schreck et al., 2003; Wilcox et al., 2009). The main propositions of routine activity and lifestyle/exposure theories of victimization can be summarized under the umbrella of the opportunity perspective on victimization (Cohen, Kluegel, & Land, 1981; Miethe & Meier, 1990; Sampson & Woolredge, 1987): "The risk of criminal victimization is . . . largely dependent on the lifestyle and routine activities of persons that bring them and/or their property into contact with potential offenders in the absence of capable guardians who could potentially prevent the occurrence of a crime" (Cohen et al., 1981, p. 507). Four factors assumed to increase risks of victimization have been derived from this proposition (Cohen et al., 1981; Miethe & Meier, 1990): (a) *exposure*—the physical accessibility and visibility of persons or objects to potential offenders; (b) *proximity*—the

physical distance between victims and high-crime areas; (c) *guardianship*—the effectiveness of persons or objects in preventing violations by presence alone or direct or indirect actions; and (d) *attractiveness*—the material or symbolic desirability of persons or objects to potential offenders. Sampson and Woolredge (1987) and Miethe and Meier (1990) later emphasized the importance of modeling both the macro and micro forces—the structural and choice components—of the theory in studies of individual patterns of victimization. The macro forces (exposure and proximity) help explain why certain individuals are more likely to come into contact with offenders, whereas the micro forces (guardianship and attractiveness) affect the likelihood of offenders choosing a particular target (Miethe & Meier, 1990).

Although there have been some direct and indirect efforts to test and adapt the opportunity perspective to school victimization (Augustine et al., 2002; Burrow & Apel, 2008; Schreck et al., 2003; Wilcox et al., 2009), no consensus exists on how to operationalize each of its elements in the school context or whether some factors are stronger predictors than others. Using the 1993 school component of the National Household and Education Survey, School Safety and Discipline (NHES-SSD), Schreck et al.'s (2003) study tested a series of opportunity indicators that may fit under each of the four factors, with an emphasis on what they conceptualize as "school" (various security measures implemented in schools) or "social" guardianship (measures of relative social isolation). Their results showed that the presence of school security measures had little effect on victimization, but that the lack of social guardianship (e.g., "alienation toward school") and exposure/proximity[1] to potential offenders (e.g., the presence of gangs at school) increased students' overall victimization risks. Attractiveness, measured as family income, was unrelated to victimization.

Using a large Kentucky high school survey, Wilcox et al. (2009) extended this analysis in at least two important ways. First, they examined the effect of sports and other activities, which were found to increase victimization risk through exposure to potential offenders. Second, Wilcox et al. paid close attention to the students' social relationships and tested the association between victimization and measures of attachment to parents, to school, and to peers. Their idea was similar to Schreck et al.'s (2003): Students who had stronger social bonds would be more likely to benefit from social guardianship and would more easily seek protection when threatened. Their findings suggest that girls, more than boys, seem to be afforded protection from victimization through stronger social bonds.

We follow the lead of these studies and examine the contribution of opportunity indicators in predicting school-based victimization. In doing so, we depart from previous studies in extending the opportunity perspective to consider the *social capital* of students *at school* as key in protecting students from victimization. We argue that social capital theory is better able than related theories (e.g., social bonds) to specify the mechanism through which students may be provided protection from potential offenders.

## Social Capital and Victimization

The concept of social capital has become increasingly used to understand a variety of social phenomena, including protection from victimization (McCarthy et al., 2002; Rosenfeld, Messner, & Baumer, 2001; Sampson, Morenoff, & Earls, 1999). The fundamental idea behind social capital is straightforward: Sociability and social networks can have positive benefits for individuals. Where *human capital* refers to the skills and knowledge embedded *within individuals* enhancing the probability of generating positive returns such as higher income levels (Becker, 1993), social capital is concerned with resources embedded *within*

*the social relations* of individuals. As such, social capital truly exists only when it is mobilized for action and when individuals reach to others in order to facilitate goals (Coleman, 1990; Lin, 2001).

The dual use of social capital as an attribute of collectivities and of individuals, combined with various views on its definition and measurement have created uncertainty regarding its use for research. When used as an asset of individuals (as in this study), social capital may be defined as the *ability* of actors to secure benefits by virtue of memberships in social networks or other social structures (Portes, 1998), or—with a slightly different focus—as the (sum of) actual or potential resources embedded in one's social network and used for purposive actions (Bourdieu & Wacquant, 1992; Lin, 2001). What these definitions (and others) have in common is that the value of a social network goes beyond mere potential. For such resources to become "capital," they have to be used for benefit. We argue that it is this feature of social capital that makes it more suitable than other concepts (e.g., attachment to peers or parents) to understand how social relations may protect individuals from victimization. Although attachment to peers or parents provides important information on the strength of relationship between adolescents and their social environment (i.e., a potential for social capital), social capital goes slightly further in making explicit how such relationships provide benefits for individuals.

In Lin's (2001) theory of social capital, resources embedded in social relations may be mobilized for two types of actions: (a) instrumental actions, where efforts are aimed at acquiring valued resources not yet at one's disposal; and (b) expressive actions, where efforts are aimed at maintaining or preserving valued resources already at one's disposal (Lin, 2001, p. 45). The outcomes expected from instrumental actions include the ones associated with earnings or job attainment, whereas the outcomes expected for expressive actions include maintaining one's health, well-being, and protection from adverse outcomes, such as victimization. One of the prime examples used by James Coleman (1990) to illustrate the use of social capital was for its potential to protect children from victimization in the context of family immigration. McCarthy et al. (2002) extended this argument in a study of 369 street youth living in two major Canadian cities. The authors examined whether youth who reported belonging to a "fictive street family"—their measure of social capital—were more likely to be violent crime victims than others. They also distinguished fictive families from other types of street group relationships not considered to be "family" and, thus, not as helpful for protection (i.e., not "social capital"). Not only did their results show that protection from victimization was more likely to be afforded by fictive street families as opposed to other groups but also that such social capital was one of the strongest protective factors from victimization. McCarthy et al. (2002) also used their qualitative material to further specify the mechanisms through which social capital provides protection. As best illustrated by one respondent, ". . . Like I say, it gives protection, gives you somebody to talk to, um, and you're not alone too. Cause if you're alone, there's a lot more things that can happen to you" (p. 849).

The logic of McCarthy et al.'s (2002) analysis goes beyond its application to street youth. The school context also provides opportunities for building social capital that may facilitate protection from victimization. Much like McCarthy et al., we distinguish between two types of relationships that carry potential for social capital: (a) adult-related social capital (heterophilous ties) and (b) peer-related social capital (homophilous ties). The homophily principle states that people with similar resources and characteristics have a higher likelihood of associating (Lin, 2001; McPherson, Smith-Lovin, & Cook, 2001). Homophilous ties are generally considered to be more common and require fewer

efforts to create and maintain than heterophilous ties. Lin (2001) predicts that homophilous ties will provide higher returns for expressive actions (such as protection from victimization), whereas heterophilous ties will be more helpful for instrumental actions (e.g., obtaining better jobs). According to Lin, homophilous ties reinforce the preservation of resources because it increases solidarity and trust more so than heterophilous ties. These hypotheses are meant to be general; it is possible that the school context leads to a different dynamic regarding victimization. For example, the homophily principle also applies to victimization, especially school-based victimization; potential offenders are likely to be other adolescents in the environment of potential victims, making the role of peer relations more ambiguous regarding protection. In addition, research on gangs and group delinquency has shown that membership to such social groups increase members' risk of victimization through their participation to between-group conflicts (Miller & Decker, 2001; Peterson, Taylor, & Esbensen, 2004; Rosenfeld et al., 2001). In other words, these adolescents benefit from a large social capital through gang membership, which, in turn, increases their risks of victimization.

This study extends the opportunity perspective to consider the role of social capital in school victimization. Students with high social capital are less likely to be alone and more likely to be in the presence of potential guardians, which should decrease victimization risks. In addition, more social capital is likely to impact attractiveness in making potential victims appear more resourceful and, thus, less vulnerable to attack. The link between social capital and attractiveness is likely to be more salient in the school context where potential victims and offenders know and interact with each other on a daily basis.

## DATA AND METHODS

This study draws from the 2007 National Crime Victimization Survey (NCVS): School Crime Supplement (SCS). The NCVS is a nationally representative survey of households conducted twice a year. All members aged 12 years old and older in the representative households are invited to the interview. The SCS has concentrated on adolescents' experiences, perceptions of crime, and safety at school since 1989, which invites persons aged 12–18 years old to participate in the supplementary interview. Both the NCVS and SCS are conducted by computer-assisted telephone interview or computer-assisted personal interview. Among the 11,161 NCVS respondents who were also eligible for the SCS in 2007, 6,503 of them voluntarily completed the SCS section. The completion rate is 58.1%.[2] After excluding those who were not enrolled in school, were homeschooled, were attending some courses from colleges or universities, and respondents with missing cases on variables of interest in the current study (less than 5%), 5,101 adolescents are selected.

***Dependent Variables.*** In this study, two dependent variables are examined separately: school-based violent victimization and theft victimization (see the Appendix). Previous studies using NVCS data often measure violent victimization as a combination of completed and attempted robbery, rape, aggravated assault, or threatened assault with weapon or injury (Burrow & Apel, 2008; Hashima & Finkelhor, 1999; Van Dorn, 2004). However, these index offences are more serious and rarely occur in a school environment. In this study, we use a broader measure of violent victimization using a three-item measure that asked the respondents whether they were (a) pushed, shoved, tripped, or spat on; (b) threatened with harm; or (c) forced to do things they did not want to. The reliability analysis

reported a high Cronbach's alpha score (.948), which suggested that all three items measure the same underlying factor. Higher score of this measure suggests more violent victimization experiences (from 0 = *nonvictimization* to 3 = *experienced three types of violence*). Seven hundred fifty (15%) respondents reported they had suffered at least one type of violent victimization in their schools and close to 5% reported multiple types of violent victimization. Theft victimization is a single item that asked the respondents how many times something belonging to them had been stolen at school in the last 6 months (from 0 = *never* to 3 = *more than three times*). One hundred ninety-seven (3.9%) adolescents reported school-based theft victimization. This prevalence rate is consistent with the previous studies using the same survey (Burrow & Apel, 2008).

***Independent Variables.*** Routine activities are considered major predictors of victimization because they affect exposure time to potential offenders (Cohen & Felson, 1979; Cohen et al., 1981). Both structured and unstructured activities are measured in this study. Extracurricular activity is a scale that indicates how many clubs or groups, including athletic teams, spirit groups, arts groups, academic clubs, student government, service clubs, and other clubs, the respondents have engaged in after regular classes (from 0 = *no participation* to 7 = *all of these activities*). Approximately 31% of the respondents reported that they never participated in any structured school clubs or activities, and the rest of them indicated they were members of at least one student group. Few purely unstructured activities are likely to occur on school grounds. Skipping class is one such activity fitting the criteria. Skipping classes is measured by a single item that asked respondents, "During the last 4 weeks, did you skip any classes?" (0 = *no* and 1 = *yes*). Only a relatively small number of students reported doing so[3] (4.4%, see Table 1).

**TABLE 1. Description of Variables**

| | *M* | *SD* | Min | Max | *N* |
|---|---|---|---|---|---|
| Violent victimization | 0.200 | 0.529 | .00 | 3.00 | 5,101 |
| Theft victimization | 0.046 | 0.247 | .00 | 3.00 | 5,101 |
| Age | 14.787 | 1.823 | 12.00 | 18.00 | 5,101 |
| Gender | 0.517 | 0.500 | .00 | 1.00 | 5,101 |
| Ethnicity | 0.792 | 0.406 | .00 | 1.00 | 5,101 |
| Public school | 0.916 | 0.277 | .00 | 1.00 | 5,101 |
| Urban | 0.737 | 0.440 | .00 | 1.00 | 5,101 |
| Extracurricular activities | 1.258 | 1.191 | .00 | 6.00 | 5,101 |
| Skip classes | 0.044 | 0.204 | .00 | 1.00 | 5,101 |
| Gangs at school | 0.222 | 0.416 | .00 | 1.00 | 5,101 |
| Adults at school | 6.707 | 1.410 | 1.00 | 9.00 | 5,101 |
| Friends at school | 4.788 | 1.059 | .00 | 6.00 | 5,101 |
| Security | 1.345 | 0.716 | .00 | 2.00 | 5,101 |

Social capital has been defined as resources embedded in social networks and used for purposive actions, such as protection from police detection (Bouchard and Nguyen, 2010) or, in our case, protection from victimization. For youth in the school yards, teachers, adults, and friends are the most important individuals who can offer supportive resources and protection (Astor et al., 2002; Schreck et al., 2003). Social capital of adults and friends at school is measured separately in this study. Relationship with adults is a three-item measure that asked respondents whether (a) "teachers care about students," (b) "there is an adult I can talk to," and (c) "there is an adult who helps me with practical problems." Each question is scaled from 0 = *strongly disagree* to 4 = *strongly agree*. The Cronbach's alpha score of this variable is .85. A higher score on this scale indicates a larger adult-related social capital at school. The peer-related social capital has also been constructed from a Likert scale of that included two questions regarding whether or not respondents have friends at school who (a) care about their feelings and (b) can help them when they have problems (Cronbach's alpha = .88). A higher score on the peer-related social capital scale is expected to increase protection from school victimization. In accordance with social capital theory, we argue that such measures tap into both the concept of guardianship and of target attractiveness.

Proximity to offenders is measured by a single indicator of whether respondents report that gangs are present at their school. Previous studies showed gang presence at school was one of the strongest predictors of school victimization (Burrow & Apel, 2008; Wynne & Joo, 2011). Respondents were asked whether there were gangs at their schools (0 = *no* and 1 = *yes*). Approximately 22% of them reported that gangs were present at their school.[4] We also control for "physical guardianship" at school with a two-item measure that asked respondents whether their schools had (a) security guards or assigned officers and (b) security cameras to monitor the school. Seven hundred thirty-two (14%) respondents reported they had neither guards nor cameras at school.

***Control Variables.*** Demographic characteristics are controlled for in this study, including age, gender, ethnicity (White/nonwhite), school types (public/private), and living area (urban/rural).[5] Age is normally distributed from 12 to 18 years old and the mean age is 14.8 years (see Table 1). Although age is usually positively associated with victimization, it has been shown to be inversely related to victimization in the school context (Burrow & Apel, 2008). Males (52% of the sample) and minorities (21%) are usually considered to be at higher risks for being victimized. Most respondents are attending public schools (92%) and around one quarter of them are from rural area (26%).

***Analytical Strategy.*** The dependent variables in this study are highly skewed with a large percent of respondents who reported no victimization experience in their schools. This positive skewed distribution violates the fundamental assumption of ordinary least squares (OLS) regression that requires normality distribution of variables (Tabachnick & Fidell, 2007). Violent and theft victimization in this study can be considered as count variables because they are measured by the number of occurrences of each event. Poisson regression[6] has been designed for count discrete models and allows nonnormality distributions (Long, 1997). The basic assumption of Poisson distribution is that its mean and variance are equal. When the variance exceeds the value of the mean, overdispersion occurs, which may affect the accuracy of the models (Hilbe, 2007). To identify overdispersion, the values of the Pearson (chi-square) divided by the degrees of freedom are examined. For both violent and theft victimization, the likelihood ratios are greater than 1 (violent: 1.313 and theft: 1.312). According to Hilbe (2007), if the ratio is greater than 1.25, a correction should be made, normally by specifying negative binomial models (an extension of the

Poisson model). Negative binomial regression models significantly reduced overdispersion in all models run for the purpose of this study below the 1.25 threshold.

A series of multilevel negative binomial models will be run to predict the number of violent and theft victimization incidents. The first model examines the association between control variables and our dependent variables. Structured and unstructured routine activities (exposure) will be added in the second model, along with the proximity indicator (gang presence). In the third model, physical guardianship (security) and social capital measures will be added to determine whether students benefitting from social resources at school successfully avoid victimization. Finally, note that by opting for negative binomial regression instead of logistic regression allowed for the consideration (in multivariate models) of those students who were victimized multiple times, instead of grouping them together with those who were victimized only once. Such a strategy respects the structure of the data and makes a better use of the full extent of victimization information about the respondents.

## RESULTS

Table 2 examines the association between violent victimization, social capital, and opportunity indicators in the school context. The first column in each model is the negative binomial coefficient, and the second column is the standard error of each predictor. To interpret the strength of the association, we employ the standardized coefficient *bk*, by multiplying coefficient *bk* by the standard deviation *Sk* (Haynie, 2001; Maume & Lee, 2003). After transformation ($[e^{bk \times Sk}] - 1 \times 100$), the standardized coefficient allows us to interpret a one-unit increase in the independent variable as a percentage increase in the dependent variable. The third column of each model presents the standardized coefficient. Model 1 displays the basic relationship between sociodemographic variables and violent victimization. Consistent with the previous research (Augustine et al., 2002; Schreck & Fisher, 2004), younger males attending public school in rural areas are more likely to be victims of violence on school grounds.

Proximity and exposure to potential offenders are examined in Model 2. Not surprisingly, the existence of school gangs is positively associated with violent victimization. Having gangs at school is related to a 37% increase of experiencing a violent incident ($\exp [.319] = 1.37$ in Model 2). This effect is the strongest one among all opportunity indicators. In other words, it matters more to know whether adolescents attend a school in which gangs are active than whether it is a public or private school. Structured and unstructured activities are also examined in Model 2. Findings indicate that skipping classes is associated with the increase of violent victimization. The standardized coefficient indicates that adolescents who skip classes have a 20% higher rate of being violent victims. Interestingly, scores on the structured (extracurricular) activities scale is also positive and significant. The more activities students participate to, the higher the risks of victimization.[7]

Model 3 introduces our two measures of social capital. Although structured and unstructured activities remain significant predictors, social capital appears to be a stronger predictor than routine activities. Having an adult who cares and can help with problems at school is negatively associated with violent victimization. After transformation, each increase of one unit on the social capital scale contributes to a 21% decrease in violent victimization. Physical guardianship and peer-related social capital appear to have no effect on victimization. Controlling for social capital affects the association between victimization and public school, which is no longer significant.

**TABLE 2. Negative Binomial Regression of Violent Victimization at School ($N$ = 5,101)**

| | Model 1 | | | Model 2 | | | Model 3 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Coeff. | *SE* | *b* | Coeff. | *SE* | *b* | Coeff. | *SE* | *b* |
| Age | −.165** | (.0196) | −.300 | −.215** | (.0208) | −.391 | −.221** | (.0214) | −.407 |
| Gender | .207** | (.0698) | .104 | .203** | (.0718) | .101 | .210** | (.0726) | .105 |
| Ethnicity | .105 | (.0898) | .043 | .151 | (.0915) | .061 | .170 | (.0922) | .069 |
| Public school | .514** | (.1510) | .143 | .303* | (.1539) | .084 | .247 | (.1567) | .069 |
| Urban | −.277** | (.0758) | −.122 | −.396** | (.0782) | −.175 | −.415** | (.0790) | −.182 |
| Extracurricular activities | — | | | .063* | (.0310) | .075 | .082** | (.0315) | .098 |
| Skip classes | — | | | .991** | (.1369) | .203 | .970** | (.1379) | .215 |
| Gangs | — | | | .768** | (.0777) | .319 | .718** | (.0790) | .299 |
| Adults at school | — | | | — | | | −.161** | (.0286) | −.231 |
| Friends at school | — | | | — | | | .053 | (.0384) | .057 |
| Security | — | | | — | | | .015 | (.0526) | .011 |
| Log likelihood | −2700.400 | | | −2622.001 | | | −2605.131 | | |

*$p < .05$. **$p < .01$.

Table 3 displays the multilevel analyses for theft victimization. Among demographic characteristics, only public school is positively associated with theft victimization in Model 1. It suggests that adolescents who attend public school are more likely to report theft. Model 2 indicates that both structured and unstructured activities are positively associated with theft victimization, suggesting that adolescents who engage in more extracurricular activities and skip classes are more likely to become theft victims. Interestingly, structured activities are the strongest risk factor for theft victimization and remain so in Model 3. Similar to what has been observed for violence, the presence of gangs at school is significantly and positively associated with theft victimization. Importantly, Model 3 suggests that contrary to the results found for violent victimization, social capital measures are not associated with theft victimization. The idea of "protection" offered by adults at school are more suitable for violence as opposed to property victimization.

### Additional Analyses

The previous results suggest that school-specific opportunity indicators are related to school victimization, including variations in adult social capital for violent victimization. The strongest predictor of violent victimization, however, is the presence of gangs at school—our proxy for proximity to offenders. We ran two additional models to examine whether opportunity indicators, including school-specific social capital, behaved similarly in a risky school environment where gangs are present. When restricting the analysis to students attending schools where gangs are present ($N = 1{,}159$)[8], we find that extracurricular activities remain a risk factor for theft victimization, but they are no longer a risk for violent victimization. It appears that the exposure time that those activities provide mainly affect theft victimization. Skipping classes, on the other hand, remains a strong predictor of both types of victimization—stronger in this risky context than what was found in previous models. Table 4 also shows that adult social capital preserves its importance as a protective factor for violent victimization in schools where gangs are present and is not significant regarding theft victimization. Peer-related social capital is, again, unrelated to either type of victimization.

## DISCUSSION

A key conclusion of McCarthy et al.'s (2002) study of street youth and violent victimization is that "only some relationships become social capital and, thus, only some increase protection" (p. 859). This study extends this conclusion to violent victimization in the school context. Comparing the role of adult and youth social relations in protecting adolescents from victimization on school grounds, we found that (a) only the former had a protective function, and (b) this protective function was strictly centered on violence, as opposed to theft victimization.

The first result reminds us that the role of social relations in preventing victimization is not simply a function having ties or not being socially isolated. Only certain ties have the specific characteristics to influence the victimization outcome. The fact that it is the relations with adults and not with peers is intriguing. First, because Lin's (2001) general predictions were that homophilous ties—rather than heterophilous—would provide larger returns for expressive outcomes.[9] Second, because the results of past research were mixed regarding types of social relations in the form of "attachment." The results of Wilcox et al.

**TABLE 3. Negative Binomial Regression of Theft Victimization at School ($N$ = 5,101)**

| | Model 1 | | | Model 2 | | | Model 3 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Coeff. | *SE* | *b* | Coeff. | *SE* | *b* | Coeff. | *SE* | *b* |
| Age | −.011 | (.0369) | −.020 | −.048 | (.0383) | −.088 | −.058 | (.0393) | −.107 |
| Gender | .115 | (.1345) | .057 | .206 | (.1380) | .103 | .203 | (.1391) | .101 |
| Ethnicity | −.118* | (.1644) | −.048 | −.117 | (.1657) | −.047 | −.097 | (.1664) | −.040 |
| Public school | .802* | (.3442) | .222 | .783* | (.3478) | .217 | .707* | (.3520) | .196 |
| Urban | −.201 | (.1489) | −.088 | −.213 | (.1520) | −.094 | −.237 | (.1535) | −.104 |
| Extracurricular activities | — | | | .253** | (.0532) | .301 | .264** | (.0543) | .314 |
| Skip classes | — | | | .677** | (.2599) | .138 | .656* | (.2606) | .134 |
| Gangs | — | | | .400** | (.1529) | .166 | .364* | (.1548) | .151 |
| Adults at school | — | | | — | | | −.068 | (.0552) | −.096 |
| Friends at school | — | | | — | | | .008 | (.0748) | .009 |
| Security | — | | | — | | | .104 | (.1032) | .074 |
| Log likelihood | −955.307 | | | −939.061 | | | −937.657 | | |

*Notes.* *$p < .05$. **$p < .01$.

**TABLE 4. Negative Binomial Regression—Restricted Sample With Gangs at School ($N$ = 1,159)**

| | Violent Victimization Model 1 | | | Theft Victimization Model 2 | | |
|---|---|---|---|---|---|---|
| | Coeff. | *SE* | *b* | Coeff. | *SE* | *b* |
| Age | −.238** | (.0382) | −.435 | −.138 | (.0772) | −.251 |
| Gender | .061 | (.1240) | .030 | .689* | (.2700) | .344 |
| Ethnicity | .159 | (.1418) | .065 | −.139 | (.2740) | −.056 |
| Urban | −.512** | (.1515) | −.225 | −.448** | (.3106) | −.197 |
| Extracurricular activities | .015 | (.0556) | .018 | .277* | (.1021) | .331 |
| Skip class | .914** | (.1788) | .187 | .790 | (.3514) | .162 |
| Adults at school | −.116** | (.0439) | −.163 | .002 | (.0893) | .002 |
| Friends at school | .040 | (.0597) | .043 | −.013 | (.1190) | −.013 |
| Security | −.045 | (.0980) | −.032 | −.043 | (.2007) | −.030 |
| Log likelihood | −828.645 | | | −264.107 | | |

*$p < .05$. **$p < .01$.

(2009), for example, suggest that attachment to school (a six-item measure that includes an item in relations with teachers) was unrelated to theft and violent victimization in their sample of Kentucky students. Khoury-Kassabri et al. (2004), on the other hand, found that a scale measuring perception of students regarding teacher support was a significant protective factor from general victimization. Schreck et al. (2003) reported that alienation from school (a two-item measure, which included an item on perception of mutual respect between students and teachers) was unrelated to violent victimization, but that it was positively associated to theft victimization. Although not focused on school but on general adolescent victimization, the study of Schreck et al. (2004) presented results that are closest to the ones presented in this study. Examining various measures related to adolescents' relations with peers and with parents, they found that only parental contexts indicators were significantly associated to violent victimization. Even adolescents who describe a caring friendship network would not get the protective benefits provided by parental care.

As to the mechanisms underlying the protective effect of adult social capital, many interpretations are possible. One interpretation that we find reasonable touches on the kind of behaviors and decisions that are likely to reinforce and maintain trust relationships with adults at school compared to peers. Students who are closest to teachers are more likely than others to respect school rules and to focus and value learning activities and least likely to engage into behaviors that may lead to violent outcomes on school grounds. They are also likely to be less attractive targets for potential school offenders, both in terms of vulnerability to aggression and in terms of risks of being detected. Teachers also appear to clearly perceive their role in preventing school violence. In a study of teacher's perceptions

of their role in dealing with school violence (Finley, 2003), one teacher stressed how teacher–student relationships help prevent violent incidents, adding, "It's not always the kids we would think who need help; we need to be there and notice things about the quiet ones too" (p. 54). Future research may find it useful to examine the differences between students who have adult social capital at school and those who don't, how that mutual connection was formed and maintained, and what potential other benefits such social capital may provide. In the meantime, the implications of the current results are nonetheless clear: teachers and other adults at school have a role in the well-being of students that go beyond academic matters. In other words, investment in programs reinforcing student–teacher relationships is likely to have a positive impact on several areas, including protection from victimization (see Finley, 2003).

The role of trust relationships with fellow students is likely to be much more ambiguous. In our view, the nonsignificant relationship uncovered between peer social capital and victimization might be the combined result of two opposing forces, what Portes (1998) and later McCarthy et al. (2002) would have called "good" and "bad" social capital. According to this view, most students embedded in friendship networks would be subject to the influence of peers, but such influence may vary in nature. A tendency toward unstructured activities and delinquency may lead to more victimization, although the opposite might be true for students who steer away from delinquency. The important point for our purposes is that students embedded in both types of networks may be just as close to their friends and find them just as cooperative when they require their help and support, although such support is not likely to be required for similar reasons. Directions for future research include separate analyses for adolescents embedded in friendship networks, which include most delinquent friends to determine whether variations in social capital for this group is related to less victimization incidents.

This study also has implications for opportunity theories of victimization. One of the findings of this study is that exposure and proximity to offenders are just as important in the school context as outside. First, it was shown that the proximity to offenders' concept (living in proximity to high crime areas) can be successfully transferred in the school context as attending a school in which gangs are present (what others have subsumed under a more general measure of school disorder; see Burrow & Apel, 2008). Although gangs have been shown to be a risk factor for both theft and violent victimization, the results were strongest for violence.

Second, we found that both school-specific structured and unstructured activities were risks factors for school victimization, much like they are for general victimization (e.g., Mustaine & Tewksbury, 1998). Interestingly, the results showed that unstructured activities (i.e., skipping classes) were most strongly related to violent victimization, whereas structured activities were the strongest predictor of theft victimization. This result, consistent with recent studies on both high school (Burrow & Apel, 2008; Popp & Peguero, 2011; Wilcox et al., 2009) and college victimization (Fisher et al., 1998), suggests that different mechanisms may be at play. Structured activities may be more likely to increase theft victimization through a combination of (a) longer exposure time at school and (b) carrying valuable items to school for the purpose of undertaking these activities. Skipping classes, on the other hand, does not necessarily increase exposure time at school, but it effectively removes any guardianship that adults at school may provide and directly exposes students to others in a similar unstructured context. What happens next is subject to similar unstructured interactions outside of the school context; it becomes a function of opportunities (Osgood, Wilson, O'Malley, Bachman, & Johnston, 1996). Risks of victims reporting the

incident are lower (their own deviant behavior led to the incident in the first place) and potential victims more vulnerable given the absence of adults (although the line between offenders and victims is likely to be especially blurred in those contexts).

Overall, this study suggests, as others have done before (Mustaine & Tewksbury, 1998), that *where one goes* and *what one does* is just as crucial in understanding victimization in a relatively closed environment such as schools, as it is outside. Given the findings of this study, we would add that *with whom* students are interacting and *for how long* are additional key questions to understand victimization. Specifying the causal mechanism underlying social capital and victimization (Is it a function of target attractiveness, of social guardianship, or both?) should become a priority in the research agenda of victimization researchers within and outside of the school context.

## NOTES

1. Although Schreck et al. (2003) use gangs at school as a measure of exposure, we prefer to see gang presence as a structural measure of proximity to offenders, which stays closer to Cohen et al.'s (1981) conceptual definition (i.e., a characteristic of the area, as opposed to the potential victim).

2. The relatively low response rate deserves attention. A recent unit nonresponse bias analysis of the 2007 NCVS/SCS survey conducted by Fleury Devoe et al. (2010) showed that race/ethnicity was associated to nonresponse, and that low income households were more likely to be part of the nonresponse group. Additional analyses, however, showed that this affected the NCVS level rather than the SCS level.

3. It could be argued that absence from classes may not be related to school victimization if students leave school property when they skip classes. However, many students will remain on school property (and attend the next class, for example) and skipping classes, in all cases, leads to at least a minimum amount of time at school devoid of the supervision of adults.

4. In the raw dataset, the variable of "gang at school" has a third category for students who are unsure about the gang situation at their school (13.2%). Because no knowledge of gang activities are likely to indicate that the school environment is, for our purposes, not perceived as "risky" because of gangs, we coded those who don't know as "no." Note that doing so had no influence on the substantive results for any of the analyses presented.

5. We initially included socio-economic status using household income. However, there were too many missing cases (20%), and we felt that imputation could lead to misleading results, especially given the importance of this variable as a measure of attractiveness in past victimization studies (although it is inconsistently found to be associated to victimization). Note also that preliminary analyses showed that household income was unrelated to victimization in every model we ran. Living in a family on welfare was also considered but was a reality for only 90 participants. Because social capital may be a better indicator of attractiveness in the first place, we decided to exclude this variable from the final analyses presented.

6. Logistic regression is another possible analysis to resolve this problem, which has no specific requirement on distribution of variables. However, logistic regression will collapse together students who were victimized multiple times with those who were victimized once, which may affect the results.

7. An anonymous reviewer suggested that we differentiate between athletic and nonathletic activities. Doing so showed that participation to athletic activities alone was not significantly associated to violent victimization. Results for property crime were similar among the different type of structured activities. Although the current was interested in cumulative time spent at school and victimization as opposed to the role of specific activities, a more detailed investigation of the reasons why certain type of school activities may be more conducive to violent victimization than others should be undertaken in the future.

8. The variable of public school is excluded from this analysis because only three respondents attending a private school reported both (a) the presence of gangs at their school and (b) violent victimization. It was even more important to exclude this variable for theft victimization where no such students experienced theft victimization in the last 6 months.

9. A similar finding has been uncovered in the context of youth offending. Examining the role of ties with adults versus ties with peers as predictors of protection from police detection, Bouchard and Nguyen (2010) found that young offenders who were embedded in criminal networks comprised by most adults were less likely to be detected than others.

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**APPENDIX. Variable Definitions**

| Variables | Definitions |
|---|---|
| Theft victimization | Number of times something belonging to the student had been stolen at school in the last 6 months (from 0 = *never* to 3 = *more than three times*) |
| Violent victimization | Three-item scale: Whether or not students were a victim of being (a) pushed, shoved, tripped, or spat on; (b) threatened with harm; or (c) forced to do things they did not want to do (from 0 = *nonvictimization* to 3 = *experienced three types of violence*) |
| Age | Student age in the interview year |
| Gender | = 1 if student was male |
| Ethnicity | = 1 if student was White |
| Public school | = 1 if student was attending public school during the interview year |
| Urban | = 1 if school located in urban setting |
| Adult social capital | Three-item scale: Degree of agreement for (a) teachers care about students; (b) there is an adult at school who cares about youth's feelings; and (c) there is an adult at school who helps youth and gives good suggestions and advice |
| Peer social capital | Two-item scale: Degree of agreement for (a) a friend who cares about his or her feelings and (b) a friend who helps and gives good suggestions and advice |
| Extracurricular activities | Seven-item scale: Whether or not students participated in (a) athletic teams, (b) spirit groups, (c) arts, (d) academic clubs, (e) student government, (f) service clubs, or (g) other groups |
| Skip class | = 1 if students skipped classes during the last 4 weeks |
| Gangs at school | = 1 if students reported there were gangs at their school |
| Security | Two-item scale for the number of security measures students reported in their schools: (a) security guards or assigned police officers and (b) one or more security cameras |