Avoiding Violent Victimization Among Youths in Urban Neighborhoods: The Importance of Street Efficacy

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The violent victimization of youths is of great public concern, when one considers the high rates of exposure to violence faced by youths and the many negative consequences that can follow from victimization. The National Crime Victimization Survey reports that young people aged 12 to 18 years are at the highest risk of becoming victims of violence,[1] and the 2007 National Survey of Children's Exposure to Violence found that more than 60% of youths aged 0 to 17 years were exposed to some violence in the past year, with 39% reporting 2 or more episodes of violence directed toward them.[2] Research has also shown that exposure to violence can lead to severe, long-lasting, and diverse problems, including impairment of social relationships, poor academic performance, mental health problems, drug use and abuse, aggression, and violence.[3–7]

A growing body of research has sought to understand the causes and consequences of exposure to community violence experienced by youths in urban environments,[8] who are particularly likely to witness or hear about violence perpetrated against others, and to personally experience violence perpetrated by strangers, acquaintances, and peers.[4,8–12] Although important in drawing attention to this social problem, with a few exceptions,[13] most of these studies have neglected how youths living in urban, socially disadvantaged, and violent neighborhoods can reduce their risk of becoming victims of violence. Instead, it is largely assumed that exposure to violence is a routine and inescapable part of growing up in impoverished communities.

We challenged this assumption and explored the possibility that adolescents can be efficacious in reducing their exposure to violence in communities. We focused on youths growing up in areas characterized by high rates of poverty, segregation, and social disadvantage because such environments increase the risk of not only exposure to violence, but also delinquency, perpetration of violence, substance

Objectives. We investigated how street efficacy—the perceived ability to avoid dangerous and unsafe situations—is related to violent victimization across different levels of neighborhood disadvantage.

Methods. We used 2 waves of self-report data collected between 1995 and 1999 from 1865 youths in the 9-, 12-, and 15-year-old cohorts of the Project on Human Development in Chicago Neighborhoods to measure violent victimization, street efficacy, and risk factors for violent victimization. We also analyzed data from the 1990 US Census to measure categories of neighborhood concentrated disadvantage for which the cohorts of youths reside. We used logistic regression models to examine the association between street efficacy and violent victimization while we controlled for demographic, family and parenting, self-control, and behavioral and lifestyle variables.

Results. Logistic regression results showed that street efficacy had its strongest association with violent victimization in the most disadvantaged neighborhoods (odds ratio = 0.700; 95% confidence interval = 0.55, 0.89).

Conclusions. Our findings support the need to teach youths ways to successfully navigate potentially violent situations in environments that pose moderate to high risks for exposure to violence. (*Am J Public Health.* 2014;104:e154–e161. doi:10.2105/AJPH.2013.301571)

use, mental health problems, and cognitive deficits.[13–20] Such neighborhoods clearly pose significant threats to the healthy development of children, and more research needs to be directed toward identifying factors that are associated with the harmful effects of residing in high-risk communities.[21]

In fact, it is recognized that some youths are resilient to the risks associated with disadvantaged communities,[21–26] but very little research has investigated the potential for individuals living in high-risk communities to avoid threats of violence and victimization.[27] Even in the broader victimization literature, there has been little investigation of how an individual might reduce his or her chances of victimization. Yet, the potential for doing so exists. Although youths have little control over where their families reside and little power to change the structural and social conditions of their neighborhoods that lead to violence, they can learn how to navigate potentially dangerous and unsafe situations, even in violent urban environments. According to Sharkey,[26] although children can do little to change their "imposed"

environment, they can alter their "selected" environment—the people, behavior, activities, and places that comprise their everyday lives—and do so in ways that minimize their exposure to violence.

This perspective recognizes that neighborhood residence is influential but not deterministic. Even youths living in disadvantaged neighborhoods have the ability to positively shape their futures by drawing upon their self-efficacy to make wise decisions regarding whom they befriend, which role models they aspire to, which behaviors they choose to engage in, and how to improve their capacity to avoid potentially violent and unsafe encounters. The belief that one can "avoid violent confrontations and find ways to be safe" has been termed "street efficacy" by Sharkey.[26] Using data from the Project on Human Development in Chicago Neighborhoods, Sharkey[26] found that adolescents with high levels of street efficacy were less likely to select environments conducive to violence; that is, they were less likely to spend time with peers who

engaged in delinquency and to perpetrate violent behavior.

In our study, we expanded upon Sharkey's[26] work, as well as literature investigating the epidemiology of violent victimization, to understand how individual variation in street efficacy is associated with violent victimization in high-poverty and lower-poverty urban neighborhoods. Although Sharkey's[26] study was important in demonstrating that street efficacy can reduce participation in violent behavior, his research did not examine the association between street efficacy and violent victimization in highly disadvantaged and less-disadvantaged communities. Thus, the study was unable to establish if youths living in the most high-risk neighborhoods, where exposure to violence is typically highest, can still draw upon street efficacy to reduce their risk of becoming victims of violence. Investigation of this issue can help provide insight into strategies that may be used by youths to reduce their overrepresentation as victims.

Our study draws upon information from the 1990 US Census and self-reported data from the 9-, 12-, and 15-year-old cohorts participating in the Project on Human Development in Chicago Neighborhoods. We hypothesized that the relationship between street efficacy and violent victimization would be greatest in the most disadvantaged neighborhoods, as rates of violence are more common in these areas and, thus, the need to protect oneself and avoid situations conducive to violence are most salient here. Although youths living in such neighborhoods may be at risk for direct and indirect violent victimization in their homes, the goal of our research was to focus on the relationship between street efficacy and violent victimization that occurs outside the home. To our knowledge, ours is the first study to apply street efficacy to the understanding of risk of violent victimization in urban neighborhoods differing in levels of concentrated disadvantage.

METHODS

We analyzed data from the 9-, 12-, and 15-year-old cohorts collected during waves 1 and 2 of the Project on Human Development in Chicago Neighborhoods longitudinal cohort study that began in 1995. This interdisciplinary data collection effort was designed to explore how structural and social dimensions of neighborhoods contribute to the behavioral and psychological development of children and adolescents. To collect reliable data from residents across all neighborhoods in Chicago, the city's 865 census tracts were collapsed to create 343 neighborhood clusters (aggregations of 1 to 3 homogenous and contiguous US census tracts containing approximately 8000 people each) based on similarities in socioeconomic conditions, family structure, race, and geographical boundaries.[27] A random sample of 80 neighborhood clusters, stratified by 7 racial/ethnic and 3 socioeconomic status (SES) categories, and representative of the diverse racial and socioeconomic conditions in Chicago, was selected for the longitudinal cohort study.[28]

Sampling for the longitudinal study began with a random selection of block groups from within each neighborhood cluster. From these, a list of dwellings and identified eligible households were collected; potential homes had to have at least 1 child within 6 months of the following age categories: 0, 3, 6, 9, 12, and 18 years. Of the 8347 eligible respondents, 6228 (a 75% response rate) completed in-home interviews conducted by trained research staff during 1995–1996 (wave 1). These individuals were followed over time, with 2 subsequent waves of data collected in 1997–1998 (wave 2) and 1999–2001 (wave 3), with overall response rates of 86% and 78%, respectively. At each time, extensive in-home interviews were conducted with youths and their primary caregivers (93% of whom were women) to obtain information regarding behavioral problems, criminal involvement, health, psychological conditions, family life and parenting, and other developmental processes.

Our analysis focused on the 9-, 12-, and 15-year-old cohorts participating during waves 1 and 2, because this developmental period is when individuals are most at risk for exposure to violence and victimization. At wave 1, 3166 screened eligible children and their primary caregivers were identified for the 9-, 12-, and 15- year-old cohorts. Of these, 2344 (74%) participated and completed the in-home interviews. At wave 2, 85% of the 9-, 12-, and 15-year-old cohort participants from wave 1 participated. Our analysis sample consists of 1865 children and adolescents from the 9-, 12-, and 15-year-old cohorts, and their primary caregivers who participated in interviews at waves 1 and 2. As shown in Table 1, the analysis sample at wave 1 was approximately 15% White, 34% African American, 47% Hispanic, and 4% other race or ethnicity. Male youths represented 50% of the analysis sample and the average age at wave 1 was approximately 12 years (range: 8–17) with approximately 35%, 36%, and 29% consisting of 9-, 12-, and 15-year-old cohorts, respectively.

Measures

All measures used in the analysis are described briefly in this section. See Table 2 for scale construction, items, and coding procedures.

Violent victimization. We created the measure of violent victimization at wave 2 from 7 items asking respondents if, in the past year, they had ever been hit, slapped, or beaten up; attacked with a weapon; chased; shot at; shot; sexually assaulted; or threatened with serious harm. Because the majority of our analysis sample (70%) reported no violent victimization experiences, we created a dichotomous measure to reflect the prevalence of violent victimization, rather than a count of the number of violent victimizations experienced.

Street efficacy. Consistent with Sharkey,[26] our measure of street efficacy was a 5-item scale that measures participants' attitudes regarding their ability to avoid or successfully navigate dangerous and unsafe places and situations in their neighborhoods during wave 2. For example, participants were asked, "Some kids feel they can figure out ways to do things safely in the neighborhood with their friends [statement 1, representing more street efficacy], BUT other kids feel no matter what they do, they can NOT do things with their friends in the neighborhood safely [statement 2, less street efficacy]." Participants chose which parallel statement best applied to them and whether it was true or very true. We then summed responses to each of the 5 sets of items and standardized them to produce a scale so that higher scores represented more street efficacy.

Concentrated disadvantage. Originally constructed by Sampson et al.[27] and shown to be

TABLE 1—Descriptive Statistics for 1865 Youths in the 9-, 12-, and 15-Year-Old Cohorts of the Project on Human Development in Chicago Neighborhoods, 1995 and 1999

Variables	Full Sample	Low Disadvantage (n = 496), % or mean (SD)	Moderate Disadvantage (n = 909), % or mean (SD)	High Disadvantage (n = 404), % or mean (SD)	χ^2 or F-value
Violent victimization	30	29	28	32	2.53
Male	50	50	50	51	0.04
Age, y	11.97 (2.42)	12.13 (2.48)	11.97 (2.41)	11.79 (2.38)	2.20
Race/ethnicity					
White	15	39	9	2	352.09***
African American	34	6	29	76	548.35***
Hispanic	47	49	60	20	198.08***
Other	4	6	3	3	7.67*
Family and parenting factors					
Family SES	-0.10 (1.42)	0.51 (1.45)	-0.37 (1.40)	-0.22 (1.24)[a,b]	65.57***
Family attachment	0.01 (0.97)	0.08 (0.87)	-0.03 (1.03)	0.01 (0.95)	2.12
Parental warmth	0.03 (0.95)	0.06 (0.91)	0.04 (0.98)	-0.03 (0.92)	1.17
Parental supervision	0.03 (0.96)	-0.15 (1.07)	0.09 (0.94)[c]	0.10 (0.86)[a,b]	11.89***
Low self-control	-0.01 (0.98)	-0.05 (0.97)	-0.05 (1.01)	0.12 (0.91)[a,b]	4.92**
Behavioral and lifestyle factors					
Delinquent peers	-0.02 (0.97)	-0.26 (0.83)	0.01 (0.99)[c]	0.17 (1.02)[a,b]	24.68***
Previous violence	33	29	31	42	24.72***
Unstructured time	0.01 (2.66)	0.24 (2.58)	-0.11 (2.67)[c]	-0.00 (2.74)	2.90
Street efficacy	0.00 (1.00)	0.31 (0.96)	-0.13 (0.99)[c]	-0.07 (0.99)[a]	33.08***

Note. SES = socioeconomic status. Percentages are reported for binary variables; χ^2 values are reported for binary measures and F-values for composite scales. We standardized each composite measure to have a mean of 0 indicating the average score for the full analysis sample (individual scores above the mean indicate that a participant scored higher than the mean on a particular variable). Additional correlation analyses for categorical measures showed that African Americans, Hispanics, and those reporting greater participation in violence were significantly more likely to reside in high-disadvantage neighborhoods.
[a](Bonferroni post hoc test) = high disadvantage significantly different from low disadvantage ($P < .05$).
[b](Bonferroni post hoc test) = high disadvantage significantly different from moderate disadvantage ($P < .05$).
[c](Bonferroni post hoc test) = moderate disadvantage significantly different from low disadvantage ($P < .05$).

reliable and strongly associated with neighborhood violent crime, our measure of neighborhood concentrated disadvantage was based on 6 variables from the 1990 US Census: the percentage of residents living below the poverty level, receiving public assistance, unemployed, and aged younger than 18 years, and the percentage of female-headed households and African American residents. These variables were combined and standardized to create a continuous measure in which greater values represent more concentrated disadvantage.

Control variables. We included controls for a range of variables shown to be associated with violent victimization, all measured at wave 1 except for unstructured time spent with peers, which was measured at wave 2. Demographic variables included sex, age, race/ethnicity (White, African American, Hispanic, and other), and family SES. We measured

family attachment with a 6-item standardized scale based on youths' reports of how much emotional support their family provides.[29] Parental warmth was a standardized 9-item index derived from observations made by trained staff of parents talking, praising, and showing affection for children during the in-home interviews. Supervision was a standardized 13-item parent-report scale measuring how parents directly and indirectly monitor their children, including knowing the child's whereabouts, familiarity with the child's friends, and setting curfews.

We measured low self-control with a standardized 17-item scale, in which primary caregivers reported on their children's impulsivity, inhibitory control, decision-making, risk and sensation seeking, and diligence in completing tasks; higher scores reflect lower self-control.[30,31] We assessed peer delinquency

with a standardized scale based on youths' reports of the proportion of their peers (from 1 = none of them to 3 = all of them) who engaged in 11 violent and property offenses.[32] We measured past violent offending with a dichotomous indicator that captured whether participants self-reported engaging in at least 1 of 7 violent acts in their lifetime (e.g., hitting or threatening others or using a weapon). We measured unstructured socializing with peers with a standardized 4-item scale administered at wave 2 that asked participants to report their "routine activities"[33]—specifically, activities they engaged in with their peers that often take place without adult supervision and guardianship.

Analyses

We conducted multivariate logistic regressions with Stata version 11.0 (StataCorp LP,

TABLE 2—Description of Variables From the Analyses of How Street Efficacy Is Related to Violent Victimization Across Different Levels of Neighborhood Disadvantage: 9-, 12-, and 15-Year-Old Cohorts of the Project on Human Development in Chicago Neighborhoods, 1995 and 1999

Variables	Description	Data Collected
Dependent: violent victimization	A dichotomous measure based on 7 items from the Exposure to Violence instrument[29] asking youths if, in the past year, they had ever been hit, slapped, or beaten up; attacked with a weapon; chased; shot at; shot; or sexually assaulted; and whether someone had threatened to seriously hurt them. Items were summed and dichotomized to differentiate those reporting 1 or more violent victimizations and no violent victimizations in the past year.	Wave 2
Neighborhood-level: concentrated disadvantage	A standardized scale based on 6 items from the US Census: percentage of residents living below the poverty level, receiving public assistance, unemployed, aged younger than 18 years, and percentage of female-headed households and African American residents. Higher scores reflected more disadvantage. Three additional variables were created to represent "low disadvantage" neighborhood clusters, representing the lowest 25th percentile of scores on the continuous variable; "high disadvantage" neighborhoods in the highest 25th percentile; and "moderate disadvantage" neighborhoods that fell between the two.	1990 US Census
Independent: street efficacy	A standardized scale based on 5 items assessing youths' ability to avoid or successfully navigate dangerous places and situations in their neighborhoods.[26] Participants were asked if they feel safe alone or with friends, are able to travel safely to school or around their neighborhoods, and can avoid gangs and fights in their neighborhoods. For each item, participants were given 2 parallel statements and asked which best applied to them and whether it was true or very true. We summed and standardized responses to each of the 5 sets of items; higher scores reflect more street efficacy.	Wave 2
Control		
Demographics	Sex, age, race/ethnicity (White, African American, Hispanic, and Other)	Wave 1
Family SES	A standardized scale based on a principal components analysis of caregiver reports of household income, maximum education level of themselves and their partner, and the type of employment of the primary caregiver and his or her partner. Higher scores represent greater SES.	Wave 1
Family attachment	A standardized scale based on 6 summed items from the Provision of Social Relations instrument.[30] Youths rated on a 3-point scale (from not true to very true): I know my family will always be there for me; sometimes I'm not sure I can rely on family (reverse coded); my family tells me they think I am valuable; my family has confidence in me; my family helps me find solutions to problems; and I know family will always stand by me.	Wave 1
Parental warmth	A standardized scale based on 9 summed items rated by research staff using the Home Observation for Measurement of the Environment.[31] During in-home interviews, staff recorded whether they observed caregivers talking to children at least twice, answering children's questions, encouraging children, mentioning children's skills, praising children at least twice, using a nickname for children, voicing positive feelings for children, caressing or kissing the children, and responding positively to interviewers' praise of children.	Wave 1
Parental supervision	A standardized scale based on summed responses by caregivers to 13 dichotomous items on the Home Observation survey[31] including whether they set curfews, ensured children had supervision after school, had contact with children's friends and teachers, set rules about homework, and spoke to their children about drugs and alcohol.	Wave 1
Low self-control	A standardized scale[32] based on summed responses by caregivers to 17 items on the Emotionality, Activity, Sociability, and Impulsivity Temperament survey,[33] each rated on a 5-point Likert scale. Sample items included children's trouble controlling their impulses or resisting temptation and their tendency to act on the spur of the moment, give up easily, or get bored easily.	Wave 1
Peer delinquency	A standardized scale based on youths' responses to 11 items from the Deviance of Peers instrument.[34] Participants reported the proportion of their peers (1 = none of them; 2 = some of them; 3 = all of them) who engaged in 11 violent and property offenses in the past year, including fighting, attacking others with weapons, robbery, theft, property damage, motor vehicle theft, and drug sales.	Wave 1
Previous violence	A dichotomous variable indicating whether youths reported ever engaging in at least 1 of 7 violent acts reported on the Self-Report Delinquency Questionnaire,[34] including hitting others, attacking someone with a weapon, being involved in a gang fight, using a weapon or force to get money or things from people, throwing objects at people, and threatening to physically hurt others.	Wave 1
Unstructured time	A standardized scale based on 4 items taken from the Routine Activities survey[35] asking youth how often they ride around in a car or motorcycle for fun, hang out with friends, go to parties, and go out after school or at night. Responses were based on a 5-point Likert scale (from "never" to "almost every day").	Wave 2

Note. SES = socioeconomic status.

College Station, TX) to assess the association between street efficacy and a dichotomous measure of self-reported violent victimization with adjustment for control variables. We report odds ratios (ORs) to show the strength of the associations, 95% confidence intervals (CIs), and robust standard errors to account for the nonindependence of observations attributable to clustering of youths within neighborhoods.

We estimated logistic regressions for youths residing in 3 different neighborhood contexts

categorized by low, moderate, and high levels of concentrated disadvantage. We categorized neighborhoods that were in the lowest 25th percentile on the concentrated disadvantage variable as "low disadvantage," neighborhoods in the highest 25th percentile as "high disadvantage," and neighborhoods that fell in between the lowest and highest 25th percentiles as "moderate disadvantage." We performed coefficient comparison tests to determine if street efficacy's association with violent victimization significantly varied across categories of neighborhood disadvantage. Finally, we plotted the predicted probabilities of violent victimization across levels of concentrated disadvantage to graphically illustrate the relationship between street efficacy and risk of violent victimization.

RESULTS

Table 1 shows descriptive statistics for the analysis sample and statistical tests comparing all variables by levels of neighborhood concentrated disadvantage. Race/ethnicity, SES, parental supervision, low self-control, delinquent peers, violent offending, and street efficacy significantly differed across levels of neighborhood disadvantage. More African American and Hispanic youths, as well as those from lower-SES families, resided in high-disadvantage neighborhoods compared with other neighborhood categories. Youths with significantly more supervision, lower self-control, more delinquent peer affiliations, lower street efficacy, and greater participation in violent offending resided in high-disadvantage neighborhoods compared with low-disadvantage neighborhoods. Some significant differences were also found when we compared youths living in low- and moderate-disadvantage neighborhoods. Specifically, youths living in moderate- versus low-disadvantage neighborhoods had significantly more parental supervision, more delinquent peer affiliations, less

unstructured time with peers, and less street efficacy. Although the prevalence of violent victimization was greatest in high-disadvantage neighborhoods, this difference was not statistically significant. In sum, and especially given that disadvantaged neighborhoods in Chicago have high violent crime rates, these results suggest that youths residing in the most disadvantaged neighborhoods are most likely to be exposed to various risk factors related to violent victimization.

Table 3 shows the results from logistic regression models that examined the association between street efficacy and violent victimization for youths living in neighborhoods characterized by low, moderate, and high levels of neighborhood concentrated disadvantage. The results indicated that the relationship between street efficacy and violent victimization varied significantly by neighborhood context.

As shown in model 1 of Table 3, in neighborhoods with low levels of concentrated

TABLE 3—Results of Multivariate Analysis of Street Efficacy Predicting Violent Victimization by Neighborhood Concentrated Disadvantage Among 1865 Youths in the 9-, 12-, and 15-Year-Old Cohorts of the Project on Human Development in Chicago Neighborhoods, 1995 and 1999

Variables	Model 1: Low Disadvantage (n = 496)		Model 2: Moderate Disadvantage (n = 909)		Model 3: High Disadvantage (n = 460)	
	OR (95% CI)	RSE	OR (95% CI)	RSE	OR (95% CI)	RSE
Male	1.47 (0.98, 2.21)	0.31	1.05 (0.77, 1.44)	0.17	1.67* (1.09, 2.56)	0.36
Age	1.05 (0.94, 1.16)	0.06	1.11** (1.05, 1.18)	0.04	1.13 (0.99, 1.28)	0.073
Race/ethnicity						
African American	1.89** (1.16, 3.07)	0.47	1.16 (0.66, 2.04)	0.33	1.61 (0.97, 2.70)	0.423
Hispanic/White[a]	1.36 (0.81, 2.28)	0.36	1.29 (0.68, 2.45)	0.42	0.38 (0.05, 2.72)	0.383
Other	0.64 (0.24, 1.77)	0.33	1.41 (0.54, 3.71)	0.695	1.60 (0.40, 6.47)	1.140
Family and parenting factors						
Family SES	1.00 (0.85, 1.16)	0.08	1.07 (0.94, 1.22)	0.07	0.94 (0.77, 1.16)	0.10
Family attachment	0.89 (0.65, 1.21)	0.14	0.94 (0.79, 1.13)	0.09	1.19 (0.91, 1.57)	0.17
Parental warmth	1.09 (0.87, 1.36)	0.13	0.97 (0.83, 1.13)	0.08	0.96 (0.71, 1.30)	0.15
Parental supervision	1.07 (0.86, 1.32)	0.12	1.03 (0.86, 1.23)	0.09	1.04 (0.79, 1.37)	0.145
Low self-control	1.37** (1.07, 1.74)	0.17	1.31** (1.12, 1.53)	0.10	1.11 (0.88, 1.39)	0.13
Behavioral and lifestyle factors						
Delinquent peers	1.32 (0.98, 1.80)	0.21	1.15 (0.99, 1.33)	0.09	1.18 (0.96, 1.46)	0.13
Previous violence	1.36 (0.85, 2.16)	0.322	1.47* (1.02, 2.11)	0.273	1.40 (0.83, 2.37)	0.38
Unstructured time	1.135* (1.03, 1.23)	0.05	1.14*** (1.07, 1.21)	0.04	1.11** (1.02, 1.22)	0.05
Street efficacy	0.84 (0.64, 1.08)	0.11	0.83* (0.71, 0.98)	0.07	0.70*** (0.55, 0.89)	0.09

Note. CI = confidence interval; OR = odds ratio; RSE = robust standard error; SES = socioeconomic status. Model 1 χ^2 = 1118.69***; model 2 χ^2 = 252.94***; model 3 χ^2 = 207.07.*** Model 1 log likelihood = −270.49; model 2 log likelihood = −494.84; model 3 log likelihood = −260.35. Model 1 pseudo R^2 = 0.10; model 2 pseudo R^2 = 0.08; model 3 pseudo R^2 = 0.10.
[a]Because of collinearity between African American and Hispanic in the high-disadvantage neighborhoods analysis, Hispanic is the reference category instead of White for this regression model only. Doing so does not change the substantive results compared with when White is used as the reference category.
*P < .05; **P < .01; ***P < .001.

disadvantage, street efficacy was not significantly associated with whether participants reported being a victim of violence. In the low-disadvantage neighborhoods, African American (compared with White) youths (OR = 1.89; 95% CI = 1.16, 3.07; $P < .01$), those with low self-control (OR = 1.37; 95% CI = 1.07, 1.74; $P < .001$), and those who reported spending more time in unstructured activities with peers (OR = 1.13; 95% CI = 1.03, 1.23; $P < .05$) were significantly more likely to report being victims of violence.

Model 2 of Table 3 shows the results for youths living in moderate-disadvantage neighborhoods. Participants with more street efficacy were significantly less likely to report being victims of violence (OR = 0.83; 95% CI = 0.71, 0.98; $P < .05$). In addition, participants who were older (OR = 1.11; 95% CI = 1.05, 1.18; $P < .01$), had lower self-control (OR = 1.31; 95% CI = 1.12, 1.53; $P < .01$), engaged in violent offending (OR = 1.47; 95% CI = 1.02, 2.11; $P < .05$), and spent more time in unstructured activities with peers (OR = 1.14; 95% CI = 1.07, 1.21; $P < .001$) had significantly higher risks of being violently victimized.

Model 3 of Table 3 shows that in the high-disadvantage neighborhoods, street efficacy had the largest statistically significant association with violent victimization, substantially lowering the odds of being victimized (OR = 0.70; 95% CI = 0.55, 0.89; $P < .001$). This difference was confirmed by coefficient comparison tests showing that in the high-disadvantage neighborhoods, street efficacy's coefficient was significantly larger compared with low- and moderate-disadvantage neighborhoods ($Z = 2.95$ and $Z = 3.69$, respectively). Model 3 also shows that being male (OR = 1.67; 95% CI = 1.09, 2.56; $P < .05$) and spending more unstructured time with peers (OR = 1.12; 95% CI = 1.02, 1.22; $P < .01$) were the only control variables significantly related to violent victimization in the high-disadvantage neighborhoods; both increased exposure to violence.

We conducted supplementary analyses to examine the relationship between street efficacy and 2 additional measures of violent victimization. First, we computed a variety index of the types of violent victimizations reported, which ranged from 0 to 5, with 7% of
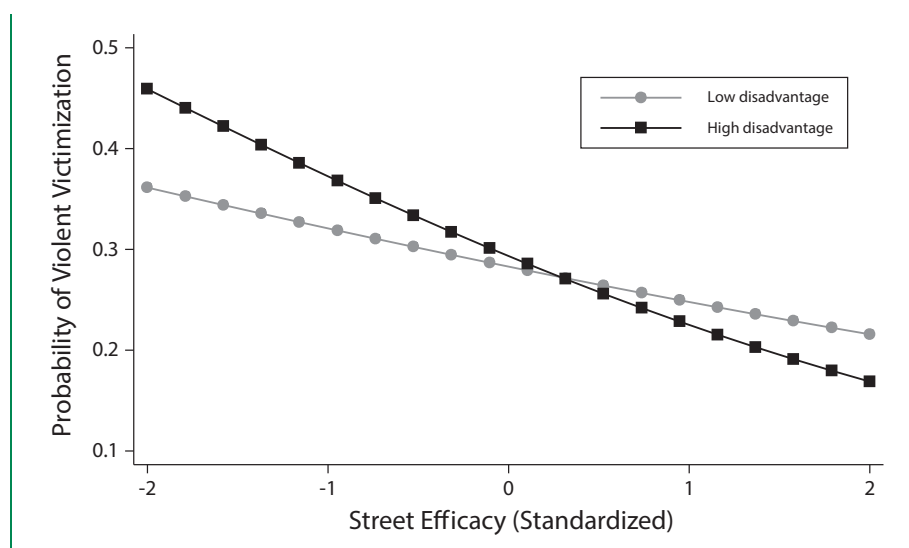

FIGURE 1—Predicted probabilities of violent victimization: the influence of street efficacy by low and high concentrated disadvantage, among 1865 youths in the 9-, 12-, and 15-year-old cohorts of the Project on Human Development in Chicago Neighborhoods, 1995 and 1999.

the sample reporting 2 types of victimizations, 2.35% reporting 3 types, less than 1% reporting 4 or 5 types, and no participants reporting 6 or 7 types. Second, on the basis of follow-up questions asking how often victimizations occurred, we computed a frequency measure using the 3 most frequently reported types of violent victimizations (hit, slapped, and beaten up; chased; or threatened), which ranged from 0 to 11. Results produced the same substantive findings regarding the associations between street efficacy and violent victimization as those in Table 3.

Figure 1 provides an illustration of street efficacy's influence in low- and high-disadvantage neighborhoods; the graph is based on predicted probabilities of violent victimization adjusting for all control variables. The black line shows the probability of being a victim of violence among youths living in high concentrated disadvantage neighborhoods. The gray line represents the likelihood of violent victimization for youths in low-disadvantage neighborhoods. For adolescents living in high-risk, high-disadvantage neighborhoods, those reporting the lowest levels of street efficacy had a 46% chance of being victimized (compared with a 36% chance for those living in low-disadvantage neighborhoods), but those reporting the highest level

of street efficacy had a 17% chance of being victimized (compared with a 21% chance for those living in low-disadvantage neighborhoods).

DISCUSSION

This investigation of children and adolescents growing up in a diverse sample of Chicago neighborhoods provides the first evidence of how children's and adolescents' perceived ability to navigate or avoid potentially violent and unsafe situations may minimize their risk of violent victimization, especially among those residing in the most economically disadvantaged neighborhoods. We found, confirming and adding to the literature on street efficacy,[26] that street efficacy had a statistically significant and negative association with violent victimization for youths residing in neighborhoods characterized by moderate and high levels of poverty and segregation (i.e., high concentrated disadvantage), whereas street efficacy was unrelated to violent victimization experiences for youths living in the least disadvantaged neighborhoods. The association between street efficacy and violent victimization was the strongest in the most disadvantaged neighborhoods.

Understanding and preventing youths' exposure to violence are major goals of the US

Attorney General's Defending Childhood Initiative,[36] and this study contributes to those aims. Our research suggests that the prevention of violent victimization is possible and that adolescents, even those living in environments that are prone to crime and disorganization, may be capable of making decisions that help them avoid becoming victims of violence. Teaching youths effective strategies to avoid unsafe encounters and increasing their street efficacy and belief that they can be successful in implementing such methods should be considered for preventive interventions. Although we did not identify the specific actions that should be taken by youths to reduce violent victimization, focusing on individual-level attributes offers more promise than attempting to change less malleable structural characteristics associated with victimization, such as neighborhood conditions. Important next steps that can further enhance youths' ability to avoid violent victimization are to identify factors that promote street efficacy and explore its developmental progression, so that interventions can be provided when they have the greatest likelihood of success.

Despite its strengths, our study has several limitations. First, because our sample consisted of children and adolescents residing in urban neighborhoods, the results may not be generalizable to those living in other communities; the influence of street efficacy on violent victimization in rural or suburban areas remains unexplored. Second, we measured street efficacy through a self-report methodology, which makes it more challenging to disentangle street efficacy from individual characteristics such as self-confidence. Third, longitudinal research is needed to determine if street efficacy is malleable and how this may influence violent victimization over time. We explored these issues by incorporating data regarding levels of street efficacy reported at wave 3, which was available only for the 9- and 12-year-old cohorts. In these exploratory analyses, street efficacy was not highly stable from wave 2 to wave 3 (r = 0.37), which suggests that it is a malleable construct. Further, wave 3 street efficacy was associated with reduced victimization at wave 3, and this contemporaneous relationship appeared to be stronger than the impact of wave 2 street efficacy on wave 3

victimization, which suggests that the protective effects of street efficacy may be felt more strongly in the short term than the long term. An additional analysis showing that the impact of wave 2 victimization on wave 3 street efficacy was not significant further supports a contemporaneous, not long-term, relationship between these constructs. However, some caution is in order because of the smaller sample utilized for these analyses and the fact that some residential mobility likely occurred by wave 3 of this study. Fourth, our findings may not apply to violent victimization experienced within the home, and may only be applicable to violence experienced in a child's school or neighborhood. Future research should employ different operationalizations to examine how additional contexts and types of victimization may affect the relationship between street efficacy and exposure to violence.

We conclude by acknowledging that vulnerability to violent victimization is affected by a constellation of individual attributes, social relationships, and neighborhood conditions. To paint an even more complete picture, individual attitudes regarding one's capacity to avoid violence need to be more fully incorporated into future research on victimization. Understanding the actions that at-risk adolescents believe they can take to avoid violence in their own neighborhoods will be an important next step for understanding exposure to violence and the psychological, behavioral, and health-related collateral damages it can cause. ∎

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This article was accepted July 11, 2013.

Contributors

All authors contributed to the writing, editing, and final review of the article. C. L. Gibson and A. A. Fagan contributed to the interpretation of study findings. C. L. Gibson conducted all statistical analyses.

Human Participant Protection

The data were collected in accordance with ethical standards and principles of human research. The original data were collected as part of the Project on Human Development in Chicago Neighborhoods (Felton J. Earls, MD, Harvard Medical School, PI). The data in this study were made available by the Inter-University Consortium for Political and Social Research.

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