

Neighborhood Predictors of Dating Violence Victimization and Perpetration in Young Adulthood: A Multilevel Study

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Intimate partner violence (IPV), a serious public health problem worldwide, often begins as adolescent dating violence.¹ In the United States, more than 25 million women and 7 million men have experienced partner violence during their lifetimes.² Young adults have the highest risk for IPV.³ Despite an expansion of studies on IPV in the past 2 decades, prior literature has mainly focused on identifying individual- and relationship-level predictors of violence against women.^{4–7} Limited studies have considered the social context of youth within which dating violence is embedded.^{8,9} Given that patterns of IPV typically emerge during adolescence and levels increase over time,^{1,2} it is important to examine whether neighborhood resources can be leveraged to prevent dating violence during young adulthood.

NEIGHBORHOODS AND DATING VIOLENCE

Despite mounting evidence that neighborhoods matter for a number of adolescent behaviors,^{10–12} few studies have explored whether the structural and social processes of neighborhoods affect youth dating violence. Those studies that have considered the contextual determinants of IPV,^{13–18} most of which have been in line with the social disorganization theory,¹¹ have found that neighborhoods have significant effects, above and beyond the individual's race, socioeconomic status, social support, and relationship variables. Overall, structural features of neighborhoods such as immigrant concentration,^{13,16} residential instability,^{13,16} and density¹³ are not strongly associated with reported rates of partner violence. Research has documented higher rates of IPV in poorer neighborhoods, especially regarding homicides,^{13–18} although most studies looked at violence against married women.^{13–15,17}

Previous studies have been limited by (1) using a cross-sectional study design; (2) using census tract boundaries, which may not accurately

Objectives. We examined whether social processes of neighborhoods, such as collective efficacy, during individual's adolescent years affect the likelihood of being involved in physical dating violence during young adulthood.

Methods. Using longitudinal data on 633 urban youths aged 13 to 19 years at baseline and data from their neighborhoods (collected by the Project on Human Development in Chicago Neighborhoods), we ran multilevel linear regression models separately by gender to assess the association between collective efficacy and physical dating violence victimization and perpetration, controlling for individual covariates, neighborhood poverty, and perceived neighborhood violence.

Results. Females were significantly more likely than were males to be perpetrators of dating violence during young adulthood (38% vs 19%). Multilevel analyses revealed some variation in dating violence at the neighborhood level, partly accounted for by collective efficacy. Collective efficacy was predictive of victimization for males but not females after control for confounders; it was marginally associated with perpetration ($P=.07$). The effects of collective efficacy varied by neighborhood poverty. Finally, a significant proportion (intraclass correlation = 14%–21%) of the neighborhood-level variation in male perpetration remained unexplained after modeling.

Conclusions. Community-level strategies may be useful in preventing dating violence. (*Am J Public Health.* 2010;100:1737–1744. doi:10.2105/AJPH.2009.169730)

reflect residents' perceptions of their neighborhood; (3) inconsistently measuring IPV (e.g., including only minor acts or relying on police reports, which are widely considered to underestimate actual incidence^{14,15}); (4) not focusing on adolescents, among whom IPV is most prevalent² and most likely to be spatially concentrated¹³; and (5) not controlling for other neighborhood adversities (e.g., community violence).¹⁹

THE ROLE OF COLLECTIVE EFFICACY

Collective efficacy is a well-documented social process¹¹ that captures community cohesiveness and residents' willingness to intervene for the common good; it has been associated with lower levels of community violence,²⁰ child abuse,²¹ gun carrying by adolescents,²² mental health problems,²³ and IPV among adult women.^{16,24} For example, Browning¹⁶ found that collective efficacy explained 14% of the variance of IPV among adult women. Zolotor and Runyan²⁵ found a 30% reduction in the odds of

domestic violence for each unit increase in social capital, a similar social process that measures the degree of cooperation in communities.²⁶

Although empirical evidence documenting the association between collective efficacy and youth dating violence is limited, there is a strong theoretical basis for our study.^{27,28} Social disorganization theory,²⁰ initiated by Shaw and McKay,²⁹ and the collective socialization models of Jencks and Mayer³⁰ note that socially organized neighborhoods tend to have greater mutual trust and cohesion among its residents, thus enhancing informal and formal social control measures to monitor and regulate crime and deviance among its youths. Building on these perspectives, Sampson et al.^{20,31} introduced the collective efficacy theory, further suggesting that efficacy in a neighborhood is task specific—that is, whether adults in a neighborhood exercise informal social control against IPV may partly be dependent on their shared value that abuse in adolescent relationships is unacceptable.³²

Previous studies have shown that adolescent males and females are equally likely to be perpetrators and victims of dating violence.^{9,33,34} However, the context, meaning, and severity of youth dating violence may be different for males and females.^{34,35} Thus, in our study all analyses were stratified by gender.

Our aims were to (1) assess neighborhood-level variation in dating violence perpetration and victimization among an urban sample of young adults; (2) determine the contextual effect of collective efficacy on youth dating violence, above and beyond individual- and neighborhood-level covariates; (3) examine whether neighborhood effects on youth dating violence differ by gender; and (4) assess whether the effect of collective efficacy varies by the level of concentrated poverty in a neighborhood.

METHODS

Data for this study were collected from 1995 through 2002 by the Project on Human Development in Chicago Neighborhoods (PHDCN), a multilevel, longitudinal cohort study of adolescents and their families, combined with an in-depth study of their neighborhoods. Sampling began by defining 343 neighborhood clusters based on aggregated census tracts that were grouped together because they were geographically contiguous and homogenous in terms of race/ethnicity, socioeconomic status, family structure, and housing density. Among a random sample of 8872 residents (aged >18 years) from 343 neighborhood clusters, a community survey was conducted at baseline; this survey provided data for neighborhood social processes in the neighborhoods where the cohort participants lived. The 1990 US Census provided data on neighborhood structural variables. From 80 neighborhood clusters, randomly selected from the 343 neighborhood clusters, approximately 6000 children and youths in 7 age cohorts (birth to 18 years) were randomly selected with a multistage probability design and followed for 7 years on average as part of the Longitudinal Cohort Study of Adolescents. Detailed descriptions of the methods employed by the PHDCN have been published elsewhere.³⁶ In our study, the final sample consisted of 633 participants from cohorts 15 (n=338) and 18

(n=295) who were asked about IPV in Wave 3 of the study (i.e., in 2002, 7 years after baseline), with response rates of 71.3% and 67.4%, respectively. Of the original sample of 790 youths in cohorts 15 and 18, 150 youths were excluded because they were not in an intimate relationship during the past year at Wave 3 and another 7 had missing responses to all items from the Revised Conflict Tactics Scale (CTS2).^{37–39} There were no significant differences between respondents and nonrespondents.

Measures

Main dependent variables. The main outcome variables for this study were measured exclusively at Wave 3. To measure physical dating violence victimization and perpetration, 7 items from the Revised Conflict Tactics Scale (CTS2) were summed: whether the partner or respondent had (1) shoved or pushed, (2) thrown something, (3) slapped, (4) kicked, (5) slammed against a wall, (6) punched or hit with something hard that could hurt, or (7) used a knife or gun against his or her significant other. For each act, respondents indicated how many times the abuse occurred in the past year (0, 1, 2, 3–5, 6–10, 11–20, >20) and more than 1 year ago (coded as zero). Both scales (victimization and perpetration) were dichotomized with 1 or more acts of abuse constituting presence of youth dating violence. The Cronbach α for the victimization (range=0–35) and perpetration scales (range=0–26) were 0.87 and 0.81, respectively. Because both scales were modestly correlated ($r=0.65$; $P<.001$), they were kept as separate measures.

The scales had highly skewed distributions and were summed across unequal intervals; we therefore recoded the responses using weighted frequencies of abuse based on the median for each category (i.e., 0=none or more than a year ago, 1=once, 2=twice, 4=3–5 times, 8=6–10 times, 15=11–20 times, 25=more than 20 times). However, use of a weighted response in the models yielded estimates similar to those obtained when an unweighted response variable was used. Moreover, when youth dating violence was coded in terms of prevalence and chronicity as suggested by Pagelow,⁴⁰ results were not substantially different. Thus, for brevity and to use the full sample, a continuous scale was used.

Independent variables. Neighborhood-level confounders were as follows: concentrated poverty, kept as continuous variable, was the principal component based on the percentage of persons unemployed, receiving public assistance, and living below the federal poverty level from the 1990 census; the percentage of Black persons was used to represent the concentration of residents that identified themselves as African American or Black within neighborhood clusters; and perceived violence in the community was a sum of 5 items assessing how often the respondent had witnessed a robbery or mugging, a fight among neighbors, a fight with a weapon, sexual assault or rape, or a gang fight in the last 6 months. We controlled for level of violence in a neighborhood because it has been shown to be associated with IPV^{16,19} and with collective efficacy (Table A, available as a supplement to the online version of this article at <http://www.ajph.org>).

Neighborhood-level predictors were as follows: collective efficacy²⁰ was a summary scale of social cohesion and informal social control. The social cohesion scale was a sum of 5 items assessing community residents' willingness to help and trust each other and to get along and whether they shared the same values and perceived the community as close-knit. Informal social control assessed the likelihood of neighbors intervening if children were skipping school, hanging out on a street corner, or spray-painting graffiti. The Cronbach α was 0.89.

All continuous neighborhood variables were standardized. We also recoded all neighborhood variables into quartiles to better assess distribution of outcomes across neighborhoods, as some were nonlinear. For testing effect modification, poverty was dichotomized (i.e., those in fourth quartile coded as 1), since a significantly higher percentage of victims and perpetrators lived in the neighborhoods with the highest poverty.

Individual-level confounders included age, gender, parental education, and race/ethnicity as assessed at baseline. By Wave 3, more than half the sample had moved from the original 80 neighborhoods, so that there were now a total of 198 neighborhoods, 12% of which were outside the city; however, movers did not differ significantly from nonmovers by collective efficacy and youth dating violence,

so moving was not included in the models. Mean value was imputed for the missing responses of demographic variables, and a variable indicating imputation was added to all models.

Statistical Analysis

All analyses were conducted with SAS version 8.0.⁴¹ The χ^2 test and *t* test were performed to assess differences between victims and perpetrators. Multivariate correlations among all variables were examined. Multilevel regression models were run and dating violence was regressed upon individual- and neighborhood-level predictors in a sequential order. Assuming that youth dating violence was partly dependent on contextual and compositional characteristics, responses were modeled by partitioning the neighborhood- and individual-level sources of variation.⁴² Data were structured with youth variables at level 1 nested within neighborhood variables at level 2. Separate models were run for perpetration and victimization, and for males and females. A *P* value of .05 or lower was considered significant.

RESULTS

Among the final sample of 633 youths aged 18 to 25 years at Wave 3 (Table 1), there were significantly more females than males (56% vs 44%), and more Blacks (37%) and Hispanics (44%) than Whites (16%). Victims and perpetrators were more likely to be female (52% and 73% of victims and perpetrators, respectively) and to be Black (50% and 48%), with widely varying socioeconomic status. Victims and perpetrators came from neighborhoods with significantly lower collective efficacy and higher concentrated poverty.

Table 2 displays the prevalence of physical youth dating violence in the past year by gender. Young women were significantly more likely to be perpetrators than were young men (38% vs 17%) and less likely to be victims of youth dating violence than were young men (24% vs 28%), for both minor and severe acts of violence. More than 75% of the victims reported also being a perpetrator.

Multilevel Models

Collective efficacy and dating violence victimization. Multilevel logistic regression

TABLE 1—Characteristics of Young Adults Who Were Victims or Perpetrators of Physical Dating Violence in the Past Year: Project on Human Development in Chicago Neighborhoods, 1995–2002

	All Youths (n = 633)	Victims (n = 164)	Perpetrators (n = 184)
Individual-level variables			
Age, y, at Wave 3, ^a mean (SD)	21.2 (1.6)	21.2 (1.6)	21.0 (1.6)
Gender, no. (%)			
Female	352 (55.6) ^{b,c}	85 (51.8) ^f	134 (72.8)
Male	281 (44.4) ^{b,c}	79 (48.2) ^f	50 (27.2)
Race/ethnicity, no. (%)			
Black	230 (36.5) ^{b,c}	82 (50.0)	89 (48.4)
Hispanic	275 (43.6) ^{b,c}	52 (31.7) ^f	66 (35.9)
White	100 (15.8) ^c	24 (14.6)	23 (12.5)
Other ^d	25 (4.1) ^{b,c}	5 (<1)	5 (<1)
Unknown	3 (0.5)	3 (<1)	3 (<1)
Parental education, no. (%)			
Less than 9th grade	108 (17.1) ^b	21 (12.8) ^f	30 (16.3)
Some high school	112 (17.7)	32 (19.5)	37 (20.1)
High school graduate	119 (18.8) ^b	37 (22.6)	37 (20.1)
Some college	207 (32.7)	52 (32.7)	57 (31.0)
College graduate	87 (13.8)	22 (13.4)	23 (12.5)
Moved from original neighborhood, no. (%)	317 (50.1)	81 (49.4)	97 (52.7)
Neighborhood-level variables			
Collective efficacy, ^e mean (SD)	0.0 (1.0)	-0.1 (1.0)	-0.1 (1.0)
Concentrated poverty, ^{f,g} mean (SD)	0.0 (1.0)	0.2 (1.1)	0.2 (1.0)
Perceived violence, ^h mean (SD)	0.0 (1.0)	0.1 (1.0)	0.1 (1.0)

Note. Sample includes youths in cohorts 15 (n = 338) and 18 (n = 295) at baseline who were in an intimate relationship in the past year at Wave 3. Victims and perpetrators include those who had been a victim or perpetrator of 1 or more act of abuse on the physical dating violence victimization or perpetration scales, respectively. The number of neighborhoods in the analysis = 77.

^aRange = 18 to 25 y.

^b*P* < .05 versus victims.

^c*P* < .05 versus perpetrators.

^d"Other race" includes non-Hispanic Asian, Pacific Islanders, and Native Americans.

^eRange, -1.9 to 2.5.

^fPrincipal component of percentage of residents living in poverty, percentage unemployed, and percentage on public assistance.

^gRange, -1.4 to 3.9.

^hRange, -1.8 to 2.7.

models showed that collective efficacy remained a significant independent predictor of dating violence victimization for all youths, above and beyond all individual- and neighborhood-level controls (Table 3). The intraclass correlation (ICC) ranged from 0 to 0.8%, suggesting that most of the victimization could be explained by factors at the individual level rather than between neighborhood clusters. For each standard deviation increase in collective efficacy, the youth dating violence victimization score decreased on average by 0.48 units (*P* < .05). Individual variables remained

non-significant in all models. For males, collective efficacy remained a significant independent negative predictor of youth dating violence victimization (*b* = -0.76; *P* = .04) after control for all confounders, but it had no association with victimization specifically among females (*b* = -0.34; *P* = .23).

Collective efficacy and dating violence perpetration. Collective efficacy was not significantly associated with perpetration of youth dating violence (*b* = -0.37; *P* = .07), above and beyond all confounders (Table 3). None of the neighborhood variables were significant

TABLE 2—Prevalence of Physical Dating Violence in the Past Year Among Individuals Aged 18 to 25 Years at Wave 3 of Study, by Gender: Project on Human Development in Chicago Neighborhoods, 2002

	Physical Dating Violence Victimization ^a			Physical Dating Violence Perpetration ^a		
	Total	Minor	Severe	Total	Minor	Severe
Youths, % ^b (no.)						
All youths (n=633)	25.9 (164)	23.9 (151)	13.9 (88)	29.1 (184)	27.3 (173)	14.7 (93)
Females (n=352)	24.2 (85)	22.7** (80)	13.1 (46)	38.1** (134)	25.3** (71)	14.9** (42)
Males (n=281)	28.1 (79)	35.5 (125)	19.9 (70)	17.8 (50)	17.1 (48)	8.2 (23)
Mean score (SD)						
All youths	1.7 (4.2)	1.1 (2.6)	0.6 (1.9)	1.6 (3.8)	1.1 (2.5)	0.5 (1.6)
Females	1.5 (4.0)	1.0 (2.5)	0.5 (1.8)	2.3** (4.6)	1.6** (2.9)	0.7** (2.0)
Males	1.9 (4.4)	1.3 (2.7)	0.6 (2.0)	0.7 (2.2)	0.5 (1.6)	0.2 (0.8)

^aTo measure physical dating violence victimization and perpetration, 7 items from the Revised Conflict Tactics Scale (CTS2) were summed: whether the partner or respondent had (1) shoved or pushed, (2) thrown something, (3) slapped, (4) kicked, (5) slammed against a wall, (6) punched or hit with something hard that could hurt, or (7) used a knife or gun against the other. For each act, respondents indicated how many times the abuse occurred in the past year (0, 1, 2, 3-5, 6-10, 11-20, >20) and more than 1 year ago (coded as zero for the purposes of this study). Total refers to all 7 acts, the first 3 acts were considered minor, and the last 4 acts were considered severe.

^bPercentage of all youths who scored 1 or more on the victimization or perpetration scales (i.e., were involved in at least 1 act of victimization or perpetration).

** $P < .05$, for the difference between males and females.

predictors in the final adjusted models. Being Black ($b=0.99$; $P<.001$) and female ($b=1.55$; $P<.001$) remained independent predictors of perpetration after control for neighborhood context.

The ICC for male perpetration models remained unusually high, ranging from 20.9% in the null model to 14.4% in the final model—suggesting that much of the variation in youth dating violence perpetration can be theoretically explained by neighborhood differences. However, none of the neighborhood variables examined in this study were significant. For females, much of the variation was explained at the individual level (ICC=0.08%). Collective efficacy and other neighborhood variables were not significant predictors.

Interaction between collective efficacy and concentrated poverty. We further tested whether collective efficacy affected male perpetration differently in neighborhoods of low- to mid-level poverty versus high-level poverty (Figure 1). The interaction term was not significant in victimization or perpetration models for females or all youths, but it was for males. After control for other confounders, higher collective efficacy lowered the risk of male perpetration in neighborhoods of low- to mid-level poverty ($b=-0.32$; $P=.02$), but not

in the neighborhoods of highest-level poverty ($b=1.29$; $P=.26$); in fact, there was a positive association between collective efficacy and perpetration of youth dating violence. Future studies should focus on further explaining male perpetration rates by testing additional theory- and empirically based neighborhood-level variables.

DISCUSSION

The concept of collective efficacy, despite its high appeal for researchers and practitioners alike, particularly within the context of urban neighborhoods, has rarely been applied toward youth dating violence. Our study concurs with others reporting that physical dating violence during young adulthood is pervasive. The rate of victimization among 18- to 24-year-olds (26%) was similar to those in other studies that have shown past-year rates of physical abuse among youths to be 25% to 30%.⁴³⁻⁴⁶ Most studies focusing on this age group have used a sample of predominantly White college students; they suggest that 1 in 3 intimate relationships during college are violent.^{43,44} Regarding perpetration, 1 study⁴⁴ showed that college women had a higher rate of perpetration than college men (25% vs 10%), and among Black

college women, rates of perpetration seem to be much higher (48%).^{45,47} In a recent study among university students, Straus found that rates of perpetration, including minor and severe acts, ranged from 16% to 38% for males and from 17% to 48% for females.⁴⁶ Using a community-based sample of lower socioeconomic status and more ethnically diverse than were the aforementioned college samples, our estimates of perpetration of 38% by women and 17% by men agree with the estimates of those studies. Since the rates of self-victimization and perpetration are highly underreported by young adults by up to 65%,^{48,49} actual rates of youth dating violence are likely higher in our sample.

We found that compared with young men, young women were less likely to be victims and more likely to be perpetrators of dating violence. CTS2 research has repeatedly found that compared with adolescent males, adolescent females have higher rates of perpetration of physical dating violence and lower rates of victimization.^{9,50,51} This suggests that adult-like gendered patterns of partner violence in which males perpetrate greater violence toward women have not yet emerged.⁴⁶ It may be partly explained by the fact that young men tend to underreport violence in intimate relationships more than women, and sexual abuse or abuse resulting in injury, which is more commonly perpetrated by men, was not considered in our study.^{48,50} In addition, the emerging possibility that girls within urban neighborhoods are becoming more aggressive⁵² may partly explain higher rates of female perpetration in our sample. Nonetheless, recognizing that the context, meaning, and consequences of physical dating violence are different for young men versus women,^{9,34} and not yet captured by CTS2 or another such scale,³⁸ we agree with Miller and White³⁴ that the role of gendered power dynamics and gender inequalities, particularly within adolescent relationships in urban settings, needs to be further explored.

Neighborhood Effects on Later Dating Violence

Our study is one of the first to provide empirical evidence that neighborhood context matters for youth dating violence, above and beyond individual characteristics. Longitudinal studies documenting the lasting effects of neighborhoods, particularly during the critical

TABLE 3—Associations Between Dating Violence Victimization and Perpetration Among Individuals Aged 18 to 25 Years and Neighborhood Characteristics During Adolescence: Project on Human Development in Chicago Neighborhoods: 1995–2002

	All Youths (633 in 77 Neighborhood Clusters)			Males (281 in 69 Neighborhood Clusters)		Females (352 in 74 Neighborhood Clusters)	
	Model 1, b (SE)	Model 2, b (SE)	Model 3, b (SE)	Null, b (SE)	Final Model, b (SE)	Null, b (SE)	Final Model, b (SE)
Victimization models^a							
Intercept	1.68† (0.17)	1.87*** (0.67)	1.85*** (0.67)	1.93† (0.26)	0.49 (1.04)	1.48† (0.21)	2.22*** (0.79)
Female		-0.45 (0.33)	-0.45 (0.33)	
Age		0.05 (0.10)	0.05 (0.10)		0.09 (0.16)		0.02 (0.13)
Parental education		-0.01 (0.14)	-0.00 (0.14)		0.32 (0.23)		-0.22 (0.18)
Non-Hispanic Black		0.47 (0.52)	0.44 (0.52)		0.81 (0.82)		0.30 (0.68)
Hispanic		-0.17 (0.49)	-0.16 (0.49)		0.26 (0.75)		-0.41 (0.65)
Concentrated poverty		0.18 (0.24)	0.19 (0.24)		0.34 (0.36)		-0.02 (0.33)
Perceived violence		-0.26 (0.25)	-0.29 (0.25)		-0.41 (0.39)		-0.20 (0.33)
Collective efficacy		-0.48** (0.22)	-0.73** (0.30)		-0.76** (0.36)		-0.34 (0.28)
Collective efficacy × gender			0.42 (0.33)				
Perpetration models							
Intercept	1.60† (0.15)	0.88 (0.59)	0.88 (0.59)	0.74† (0.18)	0.72 (0.53)	2.32† (0.25)	2.56*** (0.89)
Female		1.55† (0.29)	1.55† (0.29)	
Age		-0.14(0.09)	-0.14 (0.09)		-0.04 (0.08)		-0.24* (0.15)
Parental education		-0.13 (0.13)	-0.13 (0.13)		-0.07 (0.11)		-0.20 (0.20)
Black		0.99** (0.46)	0.99** (0.46)		0.83* (0.44)		1.20 (0.76)
Hispanic		-0.25 (0.44)	-0.25 (0.44)		-0.14 (0.38)		-0.25 (0.73)
Concentrated poverty		0.03 (0.21)	0.03 (0.22)		0.29 (0.21)		-0.15 (0.37)
Perceived violence		-0.23 (0.22)	-0.23 (0.22)		-0.18 (0.24)		-0.32 (0.37)
Collective efficacy		-0.37* (0.20)	-0.39 (0.26)		-0.21 (0.23)		-0.47 (0.32)
Collective efficacy × gender			0.05 (0.29)				

Note. Final models were adjusted for age at Wave 3 in 2002 (centered at mean), sex (0 = male), race/ethnicity (0 = White and others), parental education (0 = college graduate), and perceived violence and concentrated poverty in the neighborhood. The reference category is a White male aged 21 years with highly educated parents living in a neighborhood of average poverty and violence. The dependent variable is a continuous score from 0 to 35 on the victimization or perpetration scales reflecting frequency of physical abuse in the past year at Wave 3.

^aIntraclass correlations for all victimization models were zero. Intraclass correlations for perpetration models were 0.7% (null model), 0% (models 2–4), 20.9% (male null model), 14.0% (male final model), 0.8% (female null model), and 0% (female final).

* $P < .10$; ** $P < .05$; *** $P < .01$; † $P < .001$.

transitional period from late adolescence into young adulthood,⁵³ are rare. None of the individual predictors besides race/ethnicity in gender-specific models were significant. This is in line with previous research that achieved only limited explanatory power at the individual level in predicting youth dating violence.¹⁶ We found a positive association between concentrated poverty and youth dating violence, but much of this association disappeared when individual controls or collective efficacy were included as has been reported previously.^{17,18}

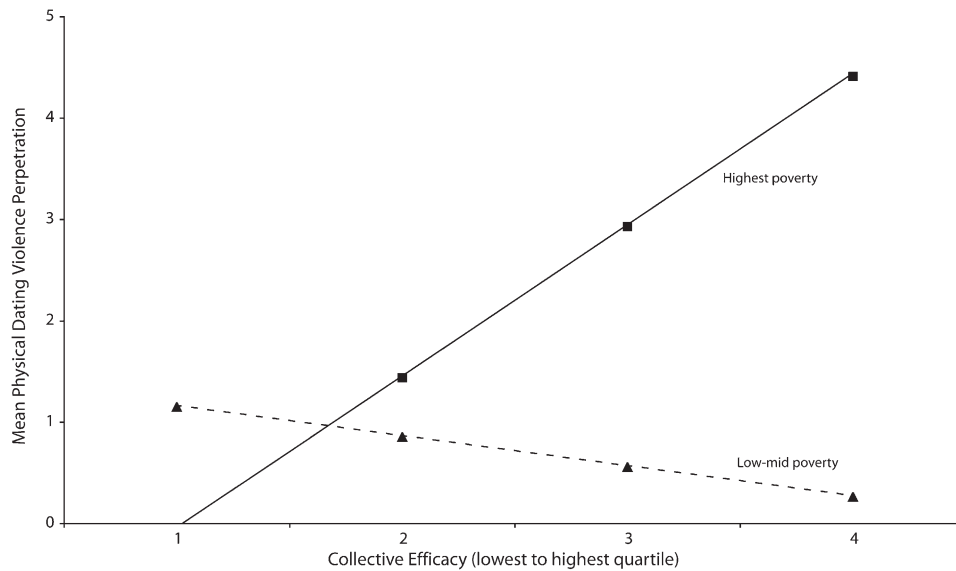
Collective Efficacy and Dating Violence

For all youths, collective efficacy was more salient for dating violence victimization than it was for perpetration. This further confirms that

being a victim of violence is quite different from being a perpetrator,⁴⁸ although many victims become perpetrators. A cohesive community is indeed more likely to intervene to help a victim of violence than to help a batterer, and similarly, a victim is more likely to access community resources, referral services, or shelter than is a batterer.⁵⁴ Nonetheless, higher levels of collective efficacy did reduce the risk of perpetration ($P < .10$), especially for males in neighborhoods of low- to mid-level poverty.

The protective effects of collective efficacy on youth dating violence varied by gender. Even though young females were more likely to perpetrate dating violence, none of the neighborhood variables were significant predictors for female victimization or perpetration. ICC was quite low for multilevel linear

regression models for females, suggesting that much of the variation is at the individual level. This finding agrees with others, who have suggested that relationship variables (e.g., quality of communication, perception of caring) may be of greater importance for young women than they are for young men.^{4,34} Studies have also reported less exposure to neighborhood environment by females than by males,^{10,12} although Browning¹⁶ found that collective efficacy was significantly associated with severe physical victimization among adult women. Collective efficacy may influence younger women differently than it does older ones, and may be more relevant for severe victimization. For instance, for a young Black woman, experiencing minor acts of violence may not be reason enough to access community services or



Note. Both models are adjusted for all covariates.

FIGURE 1—Differential effects of collective efficacy on young male adult perpetration of dating violence, by level of neighborhood poverty: Project on Human Development in Chicago Neighborhoods, 1995–2002.

to report it as abuse.⁵⁵ Jackson has shown that girls consider some abuse in relationships to be “a sign of commitment and playful interactive style.”^{48(p236)} Further exploration of how neighborhoods may affect severe dating violence among a diverse group of young women deserves greater attention, particularly as it may be mediated or moderated by more proximal factors in the peer group or family.

For males, collective efficacy was associated with victimization and—in neighborhoods of low- to mid-level poverty—with perpetration. Most studies have focused on extrapolating individual predictors; a few have investigated neighborhood predictors of adult male perpetration. We found an unusually high intraclass correlation (20.9%) in the male perpetration models, suggesting that a significant proportion of variation in dating violence among young men is explained by neighborhood factors. Neighborhood effects are generally small to modest, accounting for 5% to 10% of the variance in adolescent health behaviors.^{10,11} None of the neighborhood variables considered in the study were significant predictors of male perpetration. Nonetheless, collective efficacy did lower the risk of male perpetration in neighborhoods of low- to mid-level poverty. In the poorest neighborhoods, however, higher

levels of collective efficacy increased the risk of young males perpetrating dating violence. A growing body of literature has documented the protective effects of collective efficacy towards adolescent violent behavior only in certain conditions,²⁰ suggesting that it ceases to be protective in highly disadvantaged neighborhoods.⁵⁶ The current study suggests that the benefits of collective efficacy evidently cross over to intimate partner relationships,¹⁹ but it also highlights the downside of collective efficacy in most disadvantaged neighborhoods, which may result in higher gang affiliation or violent perpetration. Inquiry into other contextual determinants that may explain neighborhood-level variation in male perpetration is needed to help illuminate why young men become batterers and to help develop appropriate community interventions.⁵⁷

Limitations and Strengths

Our study included only measure of physical abuse, not sexual assault or other types of abuse, which may have led to an underestimate of the extent of violence in dating relationships. Youth dating violence was based on self-reports, so there is likely to be reporting bias due to social desirability, differentially by gender (i.e., in favor of men). Future studies

may consider triangulating the incidents of youth dating violence with objective measures available from police reports, such as phone calls to police by residents, arrests, or homicides. Recall bias based on frequency of abuse is also exaggerated since we used a continuous measure. There may also have been other relevant confounders not mentioned here. Finally, the findings are not generalizable to youths in rural or suburban areas or to married couples.

Study strengths include: (1) the use of multilevel perspective and methods; (2) a longitudinal study design with neighborhood characteristics measured at baseline and outcomes measured 7 years later, which helped control for temporal ambiguity; and (3) a community-based, ethnically diverse sample of young women and men across a range of social class.

Implications for Practice and Research

Despite the magnitude, severity, and cost of dating violence, there continues to be a lack of comprehensive IPV prevention efforts at the community level^{28,47,57}; the existing ones focus on crisis intervention strategies targeting primarily adult married women.^{54,58,59} Our results indicate that in urban neighborhoods,

community residents can collectively exercise informal social control among its youths to reduce dating violence. Thus, community capacity-building efforts should be expanded to measure and prevent youth dating violence.^{27,57} Dating violence during adolescence may be more amenable to community-level change than is adult IPV, which is more private and out of the community's reach, as youths continue to engage in routine activities with peers and parents and at school, and thus may have more venues for disclosure.⁵⁸ Moreover, fewer resources (e.g., job, housing) are required since they have fewer structural or economic barriers to escape a violent relationship.⁵⁴ Future studies should explore how communities, families, and peers may interact to influence youth dating violence differentially—for example, communities may moderate exposure to family violence or peer interactions. For IPV, neighborhoods should be placed within the larger macrolevel contexts, including gender norms. Finally, neighborhood factors that may explain the large neighborhood-level variation in male perpetration should be identified, preferably using longitudinal study designs. ■

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Contributors

S. Jain conceptualized and designed the study and led the data analysis, interpretation, and writing of the article. S.L. Buka and S.V. Subramanian provided input on the study methodology, data analysis, and interpretation and reviewed earlier drafts of the article. B.E. Molnar supervised all aspects of the study design, analysis, and interpretation and reviewed all drafts.

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Human Participant Protection

The study was reviewed and approved by the institutional review board of the Harvard School of Public Health. A parent or guardian provided written consent before each assessment, and each young person assented as well.

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