Neighborhood-Level Factors Associated with Physical Dating Violence Perpetration: Results of a Representative Survey Conducted in Boston, MA

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ABSTRACT *Neighborhood-level characteristics have been found to be associated with different forms of interpersonal violence, but studies of the relationship between these characteristics and adolescent dating violence are limited. We examined 6 neighborhood-level factors in relation to adolescent physical dating violence perpetration using both adolescent and adult assessments of neighborhood characteristics, each of which was aggregated across respondents to the neighborhood level. Data came from an in-school survey of 1,530 public high school students and a random-digit-dial telephone survey of 1,710 adult residents of 38 neighborhoods in Boston. Approximately 14.3% of the youth sample reported one or more acts of physical aggression toward a dating partner in the month preceding the survey. We calculated the odds of past-month physical dating violence by each neighborhood-level factor, adjusting for school clustering, gender, race, and nativity. In our first 6 models, we used the adolescent assessment of neighborhood factors and then repeated our procedures using the adult assessment data. Using the adolescent assessment data, lower collective efficacy (AOR=1.95, 95% CI=1.09–3.52), lower social control (AOR=1.92, 95% CI=1.07–3.43), and neighborhood disorder (AOR=1.19, 95% CI=1.05–1.35) were each associated with increased likelihood of physical dating violence perpetration. However, when we used the adult version of the neighborhood assessment data, no neighborhood factor predicted dating violence. The implications and limitations of these findings are discussed.*

KEYWORDS *Neighborhood factors, Dating abuse, Dating violence, Partner violence, Collective efficacy, Youth violence*

INTRODUCTION

The influence of neighborhoods on children's wellbeing has been documented for a wide range of outcomes, including scholastic achievement, emotional and behavioral problems, sexual activity, and level of physical activity.^{1–4} These findings are part of the rapidly expanding evidence base about how social environmental factors affect the distribution of health problems and health-related behaviors, and is encouraging new interest in how health disparities may be addressed through neighborhood-level interventions.⁵ Importantly, neighborhood factors appear to influence the occurrence

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of violence as well; multiple studies have found that neighborhood characteristics such as poverty,⁶⁻⁹ unemployment,¹⁰ alcohol outlet density,^{11,12} commercial density,¹³ residential instability,^{6,14} and lack of collective efficacy^{15,16} are associated with the risk of violence in a community. However, the field lacks information about whether neighborhood factors are associated with dating violence perpetration, specifically.

Physical aggression against dating and sexual partners among adolescents is a prevalent public health problem. Estimates from the national Youth Risk Behavior Surveillance Survey (YRBSS) indicate that 10% of high school-attending youth in the United States are physically hurt on purpose by a dating partner each year.¹⁷ The consequences can be severe and long-lasting and may include death, injuries, and mental health disorders.¹⁸⁻²⁰ There is no clear agreement in the field about what constitutes "dating violence."^{20,21} According to the US Centers for Disease Control and Prevention, partner violence is an appropriate label for any violence between intimate partners, including "one hit that may or may not impact the victim to chronic, severe battering."²² Data from the National Violence Against Women Survey suggest that most physical assaults perpetrated against women and men by intimate partners consist of non-severe forms of violence such as hitting, pushing, or shoving.²³ The study of this "low-level" partner violence against adolescents is important for at least 4 reasons: (1) Injuries and fear may result from even a single act of physical violence; (2) a single act of low-level violence may contribute to peer norms about the acceptability of violence against partners, and peers' dating violence aggression is associated with dating violence perpetration;²⁴ (3) adolescent dating relationship behaviors may develop into more severe adult partner violence behaviors for a subset of offenders; and (4) even a single act of "low-level" physical aggression toward another person is a criminal behavior unless it can be established that the individual using violence was at risk for imminent physical harm (i.e., self-defense). Not surprisingly, therefore, numerous studies of adolescent dating violence define physical dating violence as *any* physical aggression against a partner.²⁵⁻²⁸

There have been only 3 published studies on the relationship between neighborhood factors and adolescent dating violence (DV), 2 of which used individual-level perceptions of neighborhood factors rather than aggregated neighborhood-level assessments as measures of neighborhood characteristics.²⁹ A limitation of this approach is the possibility of same-source bias, which is the possibility of a spurious association between the outcome and neighborhood characteristic because the same individuals are reporting on both, and their perception of the outcome may influence their report of the neighborhood characteristic.³⁰ The first of these found that high school students from North Carolina who reported living in neighborhoods characterized by disorganization (e.g., crime, fighting, graffiti), but not by community fear or low neighborhood connectedness, had increased odds of reporting that they had perpetrated DV in the preceding year.³¹ The second study, an analysis of data collected from 7th to 12th graders in Wisconsin, found that lifetime DV perpetration was related to lower perceived neighborhood monitoring and lower perceived neighborhood support.³² The third study used aggregated assessments of Chicago neighborhoods and found that neighborhood-level collective efficacy predicted DV victimization among adolescent males, but not females.²⁷ There are two additional studies that assessed DV and factors that could be related to neighborhood life, such as ever having witnessed someone being shot or stabbed.^{33,34} Both of these found that witnessing and/or knowing people who had been injured in violent incidents was associated with adolescent DV victimization.^{33,34} While the findings of these studies represent

important preliminary steps toward understanding whether, and how, neighborhoods may influence DV, additional information is needed to replicate and extend them. Therefore, the purpose of this study was to examine associations between 6 neighborhood-level factors and physical dating violence perpetration among a locally representative sample of high school-attending youth. To our knowledge, it is the first paper to compare adolescent and adult assessments of neighborhood characteristics to an outcome of interest.

METHODS

Sample

Data for this study came from 2 sources: (1) adolescents attending Boston Public Schools who were surveyed about their violence toward dating partners and about Boston neighborhoods; and (2) adult residents of Boston who served as an alternate source of information about Boston neighborhoods. The adolescent data came from the 2008 administration of the Boston Youth Survey (BYS), a biennial paper survey of high school students (9th–12th grades) in Boston Public Schools which has been described in detail elsewhere.^{35,36} Of the students selected for participation and not absent on the day of the survey ($n=2001$), 94% completed surveys ($n=1,878$). Of these, we obtained useable residential information for geocoding from 88% ($n=1,614$). Eighty-four students were missing information about violence toward dating partners and were eliminated from the sample, resulting in a final sample of 1,530 students. The demographic composition of the total sample was comparable to the population of Boston public high school students in terms of sex, nativity, race, ethnicity, and age.

Adult assessments of characteristics of Boston neighborhoods were collected via the 2008 Boston Neighborhood Survey (BNS). The BNS was a telephone survey of 1,710 adults, ages 18 and older, conducted by the opinion research firm Fact Finders, Inc. between January and September 2008. Neighborhoods are not always defined consistently across studies,³⁷ but are often defined as an aggregation of US census tracts.^{38,39} For this study, we worked with key informants throughout the city to identify 38 socially meaningful neighborhoods, each comprising multiple contiguous census blocks. The details of the neighborhood formulation process are described elsewhere.³⁵ Potential respondents were stratified by neighborhood, with sampling proportional to neighborhood population size. The survey was administered in English and Spanish. Of all individuals who spoke with an interviewer, 31% completed the survey.

Data Collection

Trained staff administered the BYS between January and April of 2008 during 50-minute class periods. Passive consent was sought from parents and students were read a statement regarding assent prior to survey administration. Trained staff administered the adult BNS survey by telephone. Participation in both surveys was voluntary and answers were confidential. The Human Subjects Committee at the Harvard School of Public Health approved all procedures, and protocols were approved by the Boston Public Schools.

Measures

Physical Violence Toward Dating Partners The use of non-playful physical aggression toward a dating partner was assessed via 2 survey questions that were

adapted from the revised Conflict Tactics Scales (CTS-2) and captured information about 7 different physically aggressive acts.¹⁸ Respondents were instructed to “think about someone you were or are dating” in the past 30 days, with the specification that “by dating, we mean a girlfriend or boyfriend, or someone who you were romantically or sexually involved with.” Respondents were further instructed “when answering these questions, do not include times when you or someone else was playing or joking around.” They were then asked to indicate the number of times in the past month that they: (a) pushed, shoved, or slapped him or her; or (b) hit, punched, kicked, or choked him or her. Respondents who indicated that they had done these things 1 or more times were classified as having used physical aggression against a dating partner in the past month.

Collective Efficacy, Social Cohesion, and Social Control These were assessed from both youth and adults using a 10-item scale with established reliability and validity in adults.⁴⁰ The collective efficacy scale score was computed as the mean of the 10 items that composed the social cohesion and control scales, while social control and social cohesion were computed as the mean of each subset of 5 items. Because these scales were designed to measure collective beliefs about a neighborhood, individuals’ responses were used to calculate neighborhood-specific mean scores. The mean scores were then assigned to every individual residing in that neighborhood. The variables were reverse-coded to facilitate interpretation such that a higher score on the scale indicated less collective efficacy. The scale demonstrated high internal reliability as evidenced by Cronbach’s alpha of >0.70 for the adolescent data and >0.87 for the adult data.

Neighborhood Disorder Neighborhood disorder was assessed using selected items from two instruments: (1) The physical and social disorder scales from the Project on Human Development in Chicago Neighborhoods community survey, and (2) a survey on neighborhood and block conditions.^{40–42} A score was computed as the mean score of 6 items. These items included, for example: “Thinking about your neighborhood, how much of a problem is...people selling drugs?...gunshots, shootings and gun violence?” Response options included “not a problem,” “kind of a problem,” and “a big problem.” This scale was also reverse-coded to facilitate interpretation and had high internal reliability (Cronbach’s alpha from adolescent data >0.70 and from adult data >0.84).

Gang Problems and Trust in Police Two original questions about neighborhood quality of life were asked on the BYS and BNS, with minor variations in wording between the two surveys. The BYS version of the questions was: “In general, how much do you trust the police in your community/neighborhood?” and “In general, how much do neighborhood gangs get in the way of you being able to do everyday things?” The BNS version of the questions was: “How much do you agree that the police are doing a good job in dealing with problems that really concern people in this neighborhood?” and “How much do neighborhood gangs get in the way of you being able to do everyday things, like going to the store or going out at night?” Higher scores on these 2 questions indicated lower trust in the police and more interference of gangs in daily activities, respectively. Because analyses confirmed a linear trend, we treated the gang problem and trust in police questions as linear variables. Mean values were aggregated from the individual responses to obtain mean values for each neighborhood that were then assigned back to individual youth residing in those neighborhoods.

Statistical Analysis

All analyses were performed using SAS version 9.2.⁴³ First, we assessed differences in DV by participants' gender, age, race, and nativity using Pearson chi-square tests. For all scales, individuals missing more than 20% of items were assigned a missing value for the scale score.

Next, we conducted 12 regression analyses that modeled DV by neighborhood-level exposures, controlling for gender, race, and nativity. The first 6 regression analyses utilized the adolescent assessment of neighborhood factors, and the second six utilized the adult assessment of these same factors. We found that students' DV responses were correlated for those attending the same schools, but not between students who resided in the same neighborhoods. Therefore, our multilevel logistic regression models accounted for clustering at the school level (Table 2).⁴⁴ We repeated our analyses restricting the sample to females and controlling for race, nativity, and school clustering (Table 2) because previous studies suggest that the context and meaning of DV by male and female adolescents may differ.^{45,46} There were an insufficient number of males who reported perpetration to repeat the analysis using males only. Adjusted odds ratios (AORs) indicate the effect size for a 0.5-unit increase in these independent variables.

RESULTS

Characteristics of the Youth Sample

Of the 1,530 youth in our sample, 54% were female, 43% Black Non-Hispanic, 34% Hispanic, and 9% White Non-Hispanic. Approximately 30% were foreign-born, of whom 10% had been in the United States for <5 years.

DV Perpetration

Approximately 14.3% of the sample reported that they had used physical aggression against a dating partner one or more times in the month preceding the survey (Table 1). Female and Black non-Hispanic students were significantly more likely to report having perpetrated past month physical DV than other students, and US-born students were more likely to report perpetration as compared to immigrant students ($p < 0.10$, Table 1).

Neighborhood Factors and DV

Multilevel regression analyses adjusting for school clustering but no other potential confounders produced statistically significant odds ratios (ORs) for all neighborhood factors and physical DV using the adolescent version of the neighborhood assessment data, except for the perception that gang problems get in the way of everyday activities (Table 2). However, repeating these analyses using the adult version of the neighborhood assessment data resulted in only 2 statistically significant odds ratios: for lower social cohesion (OR=1.42, 95% Confidence Interval [CI]=1.01–1.99) and for gang problems (OR=1.36, 95% CI=1.05–1.77). The adjusted analyses, which controlled for school clustering, gender, race, and nativity, found that 3 of the neighborhood factors were associated with DV using the adolescent version of neighborhood assessment data: lower collective efficacy (AOR=1.95, 95% CI=1.09–3.52), lower social control (AOR=1.92, 95% CI=1.07–3.43), and neighborhood disorder (AOR=1.19, 95% CI=1.05–1.35). Using the adult

TABLE 1 Prevalence of past month physical violence toward a dating partner ($N=1,530$)

	Total sample	Violence to partner	Chi-square
Demographic characteristics	<i>n</i>	% (<i>n</i>)	$\chi^2(df)$, <i>p</i> value
Total	1,530	14.3 (219)	
Gender			55.715(1), $p<0.001$
Males	685	7.4 (51)	
Females	841	21.2 (178)	
Age			1.347(4), $p=0.853$
≤ 14	128	14.1 (18)	
15	298	14.1 (42)	
16	410	14.1 (58)	
17	402	15.9 (64)	
≥ 18	283	16.6 (47)	
Race			12.536(3), $p=0.006$
White, non-Hispanic	131	9.2 (12)	
Black, non-Hispanic	638	18.3 (117)	
Hispanic	502	14.3 (72)	
Other/multi-race	225	10.7 (24)	
Nativity			5.243(2), $p=0.073$
Born in United States	1,060	16.0 (170)	
Immigrant (United States >4 years)	312	14.1 (44)	
Immigrant (United States ≤ 4 years)	145	9.0 (13)	

version of the neighborhood data, no neighborhood factor was associated with DV in these adjusted analyses.

When we restricted the sample to females only and repeated the analyses, we found that four neighborhood factors were associated with DV using the

TABLE 2 Adjusted odds of past month physical violence against a dating partner by 6 neighborhood-level factors, for full sample and for females ($N=1,530$)

Model	Full sample		Females only	
	OR (95% CI) ^a	AOR (95% CI) ^b	OR (95% CI) ^a	AOR (95% CI) ^c
Adolescent neighborhood assessment				
1 Collective efficacy	2.01 (1.18–3.43)	1.95 (1.09–3.52)	2.18 (1.15–4.13)	2.02 (1.03–3.97)
2 Social cohesion	1.69 (1.09–2.64)	1.58 (0.98–2.55)	1.65 (0.98–2.78)	1.47 (0.85–2.55)
3 Social control	1.90 (1.12–3.21)	1.92 (1.07–3.43)	2.28 (1.20–4.31)	2.29 (1.16–4.52)
4 Neighborhood disorder	1.22 (1.08–1.37)	1.19 (1.05–1.35)	1.17 (1.02–1.35)	1.18 (1.02–1.37)
5 Distrust in the police in community/neighborhood	1.44 (1.08–1.90)	1.36 (1.00–1.85)	1.40 (1.01–1.94)	1.32 (0.93–1.86)
6 Gangs get in the way of everyday things	1.29 (0.96–1.73)	1.19 (0.88–1.63)	1.33 (0.95–1.87)	1.24 (0.87–1.76)
Adult neighborhood assessment				
8 Collective efficacy	1.23 (0.90–1.69)	1.15 (0.82–1.61)	1.24 (0.86–1.80)	1.21 (0.82–1.77)
9 Social cohesion	1.42 (1.01–1.99)	1.28 (0.89–1.85)	1.44 (0.96–2.15)	1.38 (0.91–2.10)
10 Social control	1.09 (0.83–1.43)	1.05 (0.79–1.39)	1.10 (0.80–1.50)	1.08 (0.78–1.49)
11 Neighborhood disorder	1.12 (0.97–1.30)	1.09 (0.93–1.27)	1.08 (0.91–1.29)	1.07 (0.90–1.28)
12 Distrust in the police in community/neighborhood	1.23 (0.92–1.64)	1.13 (0.83–1.54)	1.20 (0.85–1.70)	1.13 (0.79–1.62)
13 Gangs get in the way of everyday things	1.36 (1.05–1.77)	1.32 (1.00–1.73)	1.30 (0.96–1.77)	1.32 (0.96–1.81)

Odds ratios for a 0.5-unit change in predictor variable

^aAdjusted for clustering within schools

^bAdjusted for clustering within schools, gender, race, and nativity

^cAdjusted for clustering within schools, race, and nativity

adolescent neighborhood assessment data and controlling only for school clustering: lower collective efficacy (OR=2.18, 95% CI=1.15–4.13), less social control (OR=2.28, 95% CI=1.20–4.31), neighborhood disorder (OR=1.17, 95% CI=1.02–1.35), and distrust in the police (AOR=1.40, 95% CI=1.01–1.94). When we adjusted for the additional potential confounders, the adjusted ORs for DV among females using adolescent neighborhood assessment data were statistically significant for collective efficacy (AOR=2.02, 95% CI=1.03–3.97), social control (AOR=2.29, 95% CI=1.16–4.52), and neighborhood disorder (AOR=1.18, 95% CI=1.02–1.37). In the analyses that used the adult version of the neighborhood assessment data, none of the 6 neighborhood characteristics were statistically significantly associated with DV perpetration for females either in crude or adjusted analyses (Table 2).

DISCUSSION

In this representative sample of Boston public high school-attending students, adolescents' perceptions of 5 neighborhood characteristics were each associated with elevated risk of past month physical DV perpetration. Three of the neighborhood factors—lower levels of collective efficacy and social control, and higher levels of neighborhood disorder—remained significant even after controlling for gender, race, and nativity, in addition to school clustering. However, when we used the adult version of the neighborhood assessment data, no statistically significant relationships with physical DV perpetration were detected in fully adjusted models.

An important contribution of this study is that the magnitude of the association between neighborhood factors and DV changed based on whether the factors were reported by youth or adults. Most studies of neighborhood characteristics, such as collective efficacy, gather these data from adults only. A strength of this study was that we had both adolescent and adult versions of the neighborhood data. Interestingly, adolescents' and adults' perceptions of their neighborhoods were not identical; as a result, when we used the adolescent perceptions, we observed a relationship with the adolescents' physical DV perpetration, but we did not when we used the adults' version of the neighborhood data. To our knowledge, this is the first study to use 2 different sources of neighborhood assessment data to analyze the relationship between neighborhood characteristics and a violence-related outcome. The fact that our results differed significantly depending upon which version of the neighborhood assessment data we used suggests that additional research into the relative merits of using adolescent vs. adult neighborhood assessment data for the purpose of studying the impact of neighborhood-level characteristics on adolescent behaviors is needed. A rationale for using adolescent assessment data is that adults and adolescents may not experience a neighborhood in the same way (and thus have divergent opinions of that neighborhood) and that it is logical to use the adolescent perceptions of the neighborhood when an adolescent phenomenon—such as dating violence—is the subject of the investigation. However, a counterargument to this idea is that only the adult perceptions of the neighborhood are valid because: (1) the measures were developed and validated for use with adults; (2) the concept of collective efficacy pertains mainly to the degree to which *adults* in a neighborhood cooperate, so the adult assessment of this may be more accurate; and (3) adolescent perceptions of features of a neighborhood, such as level of organization or trust in police, may be affected by their relative lack of experience observing different kinds of neighborhoods, whereas adult perceptions may be more accurate because,

presumably, adult raters are more seasoned. In sum, this research has raised an empirical question that deserves additional attention: whether adolescents should be used as sources of information on neighborhood characteristics and whether studies of adolescent phenomena should incorporate youth assessments of neighborhood features.

If we focus on the findings resulting from the analyses utilizing the adolescent version of the neighborhood data, our results are consistent with the majority of prior research that has demonstrated an association between neighborhood factors, including poverty and residential instability and adult partner violence,^{6-8,10,14} and with the wider body of literature that has detected effects of neighborhood factors on violent behavior overall.¹⁶ Similar to Jain and colleagues, who found that adult perception of collective efficacy was marginally associated with adolescent DV perpetration,²⁷ we found a statistically significant relationship between these 2 variables using adolescent ratings of neighborhood collective efficacy. However, consistent with at least 3 prior studies that found that neighborhood social control and social cohesion were not associated with adult partner violence victimization,⁴⁸⁻⁵⁰ we did not find support for a relationship between these neighborhood variables and physical DV using our adult version of the neighborhood assessment data. Thus, additional research that clarifies whether the neighborhood-partner violence relationship exists for either adults or adolescents is needed.

We can offer 3 possible explanations for why neighborhood characteristics may influence risk of physical DV perpetration among adolescent residents. First, in neighborhoods where adults exercise more social control, adolescents may be more likely to be admonished or punished for antisocial behavior. Second, in keeping with broken windows theory, it is possible that adolescents are more likely to behave in an antisocial manner in neighborhoods where others are doing the same.⁵¹ Third, adolescents residing in neighborhoods characterized by lower collective efficacy may have fewer supports and helping resources available to address their educational, employment, mental health, and substance use prevention needs,⁵² which may increase risk for dating violence given that school involvement, educational achievement, employment, and affiliation with non-violent peers are demonstrated as protective factors for DV perpetration.^{24,32,53,54} The lack of institutional resources may also limit the community's ability to implement social order in general.⁵⁵ Evidence that violent crime reductions result when communities develop a larger base of positive local institutions (e.g., youth centers), while preventing an influx of negative ones (e.g., bars), supports this possibility.⁵²

Limitations

We selected to define 1 or more acts of physical aggression toward a dating partner in the past month as "physical dating violence," which is how it has been defined in several other research studies.²⁵⁻²⁸ However, one criticism of this definition is that the underlying construct it represents is what the adult partner violence literature refers to as "common couple violence," as opposed to "intimate partner terrorism."⁵⁶ Common couple violence is generally used to describe less severe partner abuse, which does not escalate over time and does not result in one partner dominating the other. In contrast, intimate partner terrorism is a pattern of coercive control used by one partner against the other to maintain power. Defining partner abuse as one act of physical aggression, devoid of context or the intention of that act (e.g., to intimidate, to retaliate, in self-defense), could be one reason why more female than male students were classified as perpetrators in this sample. The fact

that more females than males reported physical dating violence perpetration did not surprise us, however, as more than 15 prior studies have also found female adolescents to report more dating violence perpetration than males.^{24,34,36,57–69} As stated in the [Introduction](#), it is our view that the prevention of “common” dating violence is important and merits research attention because of the potential for even non-severe physical violence to result in harm, and because it has the potential to normalize the use of physical assault in all types of interpersonal relationships.

A second limitation of this study is that our results are only generalizable to high school-attending youth. Adolescents who have dropped out, rarely attend school, or are institutionalized may be both at increased risk for interpersonal violence perpetration and more likely to reside in neighborhoods characterized by lower collective efficacy, greater police distrust, and worse gang problems. If this were true, and these adolescents were underrepresented among our study participants, our results would likely be underestimates.

Third, we were unable to control for neighborhood-level poverty in this analysis. The most recently available measure of neighborhood poverty was from the 2000 Census. Boston undertook significant public housing reorganization between 2000 and 2008, when these survey data were collected. Specifically, public housing units were replaced with mixed-income housing. As a result, the poverty data from 2000 was not an accurate indicator of neighborhood socioeconomic status in 2008. Nevertheless, we did experiment with adjusting our models for poverty using the 2000 Census data as a proxy and found that although the confidence intervals widened, the point estimates remained similar in magnitude and in the same direction. Future studies of the relationship between neighborhood factors and physical DV should attempt to clarify the nature of the linkages between poverty, neighborhood factors, and physical DV.

Finally, as this was a cross-sectional survey, we are unable to determine whether the detected relationships are causal and, if so, in which direction. While it is plausible that the amount of physical DV in a neighborhood could detrimentally influence the collective efficacy or neighborhood disorganization in that community, we propose that it is more likely that the collective efficacy or disorganization of a neighborhood might influence the prevalence of DV perpetration via the mechanisms described above. However, it was not possible to ascertain from these data whether one, both, or neither of these conditions were true. We note that it may be challenging to conduct longitudinal studies to assess this further; the features of a neighborhood may change over time. Methodological advances that permit causal inferences about neighborhood-level factors and interpersonal violence perpetration in communities are needed.

CONCLUSIONS

We found that potentially modifiable neighborhood characteristics were associated with self-reported physical violence toward a dating partner among a locally representative sample of urban public high school-attending youth using adolescents' assessment of neighborhood factors, but not using adults' assessment of these same factors. Additional research that further explores the relative merits of using adolescents' vs. adults' assessments of their neighborhoods, and the nature of the linkages between neighborhood factors and adolescent physical dating violence perpetration, is needed.

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