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# **Neighborhood Factors and Dating Violence Among Youth:**

**A Systematic Review** 

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#### Abstract

**Context**—The purpose of this review is to summarize the empirical research on neighborhood-level factors and dating violence among adolescents and emerging adults to guide future research and practice.

**Evidence acquisition**—In 2015, 20 articles were identified through a search of the literature using PubMed. Eligible articles included those that: (1) had been published in a peer-reviewed journal since 2005; (2) reported a measure of association between at least one neighborhood-level factor and dating violence; and (3) had a study population of youth aged <26 years. We abstracted information about the studies, including measurement of dating violence and neighborhood factors, and measures of effect.

**Evidence synthesis**—Results were summarized into three categories based on the aspect of neighborhood which was the focus of the work: demographic and structural characteristics (n=11), neighborhood disorder (n=12), and social disorganization (n=8). There was some evidence to suggest that neighborhood disadvantage is associated with dating violence, but very little evidence to suggest that residence characteristics (e.g., racial heterogeneity) are associated with dating violence. Results do suggest that perceived neighborhood disorder is associated with physical dating violence perpetration, but do not suggest that it is associated with physical dating violence victimization. Social control and community connectedness are both associated with dating violence, but findings on collective efficacy are mixed.

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**Conclusions**—Existing research suggests that neighborhood factors may be associated with dating violence. However, there is a limited body of research on the neighborhood context of dating violence and more rigorous research is needed.

#### Context

Dating violence (DV) is a common problem among adolescents and emerging adults, and it has multiple adverse consequences. <sup>1–4</sup> Although researchers have identified risk factors for DV at multiple levels (e.g., individual, peer, family), <sup>5–7</sup> few studies have examined factors at the neighborhood level. <sup>5,8,9</sup> This is unfortunate, because characteristics of neighborhoods may influence relationship violence. <sup>10</sup> Young people often initiate intimate relationships in their neighborhoods, and the neighborhood context could impact how those relationships are developed and sustained. <sup>10–14</sup> We conducted a systematic review to address this gap. Our goals were to:

- 1. summarize the existing research on neighborhood-level factors and DV;
- 2. highlight important gaps in knowledge; and
- **3.** inform the continued development and refinement of multilevel prevention strategies.

We focused on adolescents and emerging adults (i.e., aged 18–25 years) because relationships among these populations are markedly different from adult intimate relationships. Specifically, partners are less likely to cohabitate, be married, or have children together, and relationships tend to be shorter than adults' relationships.

### **Neighborhood Context and Dating Violence**

To facilitate the synthesis of results, we classified all neighborhood factors examined in association with DV into three groups: (1) demographic and structural characteristics; (2) neighborhood disorder; and (3) social disorganization. Below, we describe how each of these categories of neighborhood-level factors has been conceptualized and measured historically, and how they might relate to DV.

Before describing how neighborhood factors are measured, it is instructive to explain how neighborhoods have been operationalized. Briefly, many social scientists use geographic boundaries defined by the Census Bureau or other administrative agencies (e.g., postal codes, police districts) to delineate neighborhood boundaries. <sup>10,16,17</sup> Alternatively, in much of the survey research on neighborhoods and health, respondents are asked to answer questions about "their neighborhood," without being presented with a definition of what neighborhood means. <sup>18</sup>

#### **Demographic and Structural Characteristics**

Neighborhoods can be described in terms of their demographic and structural characteristics, particularly by population characteristics such as rates of employment, home ownership, poverty, or educational attainment. Composition by age, race, Hispanic ethnicity, sex, family structure (e.g., "female-headed" households, number of families with children), and residential stability (e.g., residential mobility, vacant housing) are also common

descriptors. <sup>19</sup> Historically, information about the demographic and structural characteristics of neighborhoods has come from the Census. <sup>16</sup>

Demographic and structural characteristics may influence DV through their impact on social processes, levels of physiologic and psychological stress, family well-being, and access to helping resources, which could impact the likelihood of perpetrating or experiencing DV. For example, a neighborhood with a high residential turnover may have lower levels of social cohesion or connectedness, which may result in youth behaving more violently toward others because of weakened social control.<sup>20</sup> Similarly, low neighborhood-level SES may translate to poorly maintained institutions (e.g., schools, parks), resulting in fewer opportunities for prosocial and health-promoting educational and recreational opportunities. Consequently, youth might have more unstructured time and higher levels of stress—and this could influence the risk for DV.<sup>16</sup> Notably, higher levels of neighborhood poverty are associated with higher rates of adult intimate partner violence (IPV).<sup>21</sup>

Another structural aspect of neighborhoods is alcohol outlet density. The presence and number of alcohol outlets in a neighborhood is associated with neighborhood disorder, violence, and adult IPV.<sup>22</sup> High alcohol outlet density may impact violence by increasing the availability of alcohol, which influences violence perpetration. Alternatively, the number of alcohol outlets may not be directly influential, but may be a proxy for social norms supportive of drinking and "loosened social restraints," including disinhibition of violence perpetration.<sup>22</sup>

### **Neighborhood Disorder**

Neighborhood disorder is the term used to describe neighborhoods with visibly high levels of social disorder (e.g., violent crime and other illegal or deviant behavior, such as prostitution, drug selling, and public drug use) and physical disorder (e.g., vandalism, rodents, and abandoned buildings).<sup>23</sup> The "broken windows" theory suggests that neighborhood disorder sends a message that no one is in charge, which increases fear among neighborhood residents, weakens community controls, and invites criminal behavior and incivilities.<sup>24</sup> According to this theory, it is possible that youth in neighborhoods with high levels of disorder may conclude that they will not be held accountable for perpetrating DV.

Neighborhood violence is within the purview of neighborhood social disorder, and usually refers to gang violence, firearm violence, homicide, and youth violence. It may have particular relevance to DV because long-term, chronic exposure to violence could serve as a "training ground" for subsequent violence perpetration among youth. Exposure to violence may disrupt the development of empathy, increase anger and frustration, normalize and disinhibit violent behavior, desensitize youth to violence, and teach youth to respond to perceived provocations with violence.<sup>15</sup>

Assessing neighborhood disorder, including perceived neighborhood violence, usually involves surveying residents to capture their overall perceptions.<sup>23–25</sup> Often, neighborhood violence is assessed more directly with items that ask about specific violent events that a respondent witnessed.<sup>18</sup> Alternatively, neighborhood crime rates from local law enforcement records are sometimes used to quantify neighborhood violence.<sup>20,26</sup>

### **Social Disorganization**

Social disorganization has been described as the inability of a community to realize common values and address community problems. Theoretically, it is impacted by negative structural forces (e.g., limited availability of jobs due to deindustrialization), which degrade the sense of community and the collective ability to manage problems.<sup>27</sup> Subsequently, social disorganization leads to violence and other types of social disorder.

Much of public health research examines "collective efficacy," which is a specific conceptualization and extension of social disorganization theory. Collective efficacy is defined as "social cohesion among neighbors combined with their willingness to intervene on behalf of the common good." It has two components: social cohesion and informal social control. Social cohesion refers to a community's ability to advocate for itself, uphold civic institutions (e.g., schools, houses of worship), and maintain strong social networks and high levels of trust and social support. Informal social control refers to a community's ability to collectively monitor youth and appropriately sanction problem behavior. <sup>29,30</sup> Most research on social disorganization involves the use of surveys to assess perceptions. <sup>30,31</sup> The most widely used measure of social disorganization is Sampson, Raudenbush, and Earls' 10-item scale, which assesses collective efficacy and its two component constructs. <sup>28,32</sup>

High levels of social disorganization are associated with violence and insufficient monitoring of youth, <sup>15,29</sup> both of which may have implications for DV. Adolescents in neighborhoods where adults have a shared goal of keeping youth safe may be less likely to engage in violence in general, and DV in particular. Conversely, youth in neighborhoods where adults do not work together to uphold prosocial norms may infer that they will not face consequences for violence perpetration.

### The Current Study

In this article, we review the literature on neighborhood-level factors and DV victimization, perpetration, or both. We summarize what is known and what remains to be learned about the link between neighborhood-level factors and DV.

### **Evidence Acquisition**

Using guidelines outlined in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Statement,<sup>33</sup> we systematically reviewed research articles examining the association between neighborhood-level factors and DV that had been published in peer-reviewed academic journals since January 1, 2005. We reviewed articles that included at least one neighborhood factor, an assessment of DV, and a measure of association between the two.

We searched for articles using PubMed, which accesses the MEDLINE database. To identify candidate articles, we first conducted a text word search for terms relevant to:

- 1. dating (i.e., dating, courtship, partner, intimate, and interpersonal relations);
- **2.** violence (i.e., *violence*, *abuse*, *aggression*, *perpetration*, *victimization*, *fighting*, *assault*, *dating violence*, and *domestic violence*); and

**3.** neighborhood factors (i.e., neighborhood, community, residence characteristics, socioeconomic factors, social environment, social cohesion, social capital, collective efficacy, violent crime, alcohol outlet, social disorganization, neighborhood disorder, and social epidemiology).

Second, we conducted a search combining those sets of terms. We only included articles in which 60% of the study population was aged <26 years, or in which the mean age of participants was <27 years. We excluded articles with samples based outside of the U.S. or that were published in languages other than English.

To identify additional articles, we conducted similar searches in Web of Science and PsycINFO. The Web of Science database includes articles from 23,000 scientific journals in the social sciences, sciences, and humanities. PsycINFO is a database of research in behavioral sciences and mental health, which indexes >2,500 journals. The searches of all three databases (i.e., PubMed, Web of Science, and PsycINFO) were conducted twice to ensure that eligible articles were included.

Once candidate articles were identified through a PubMed search, we screened titles and then abstracts for eligibility. Our initial PubMed search generated 4,914 articles given the broad nature of the search terms (e.g., "socioeconomic factors"). Most articles (98.5%) were irrelevant and were excluded based on a title review. An additional 43 were excluded after an abstract review. Common reasons for excluding articles based on an abstract review included a focus on adults (aged >25 years) or no assessment of DV. Thirty-one articles were reviewed for inclusion, and 16 were subsequently included. Similar searches were conducted in Web of Science and PsycINFO, yielding four additional articles. In total, 20 articles were included in this review. <sup>6,8,9,20,34–49</sup> Articles were collected and reviewed in 2015. Details about the screening process are presented in Figure 1.

We defined DV as physically, sexually, or psychologically aggressive behavior among current or former intimate, romantic, sexual, or dating partners. Measurement of DV was generally consistent across studies, and we accepted the definition of DV that underlying studies used in most cases. However, we excluded one article that used the term "dating violence," but operationalized it as sexual violence without specifying the nature of the perpetrator–victim relationship.

Using a standard form, we abstracted information about the sample, study design, measurement of DV and neighborhood factors, prevalence of DV, and measures of effect. When available, we present crude (i.e., unadjusted) measures of the association between neighborhood-level factors and DV, and the level of statistical significance for the measure of association. We present adjusted measures of association if crude measures were not presented. To facilitate synthesizing findings, we describe results using the following three categories of neighborhood-level factors: demographic and structural characteristics, neighborhood disorder, and social disorganization.

# **Evidence Synthesis**

A brief summary of findings is presented in Table 1. Additionally, a description of the methodology and results of the 20 articles in this review are presented in detail in Appendix Table 1. Fourteen of the included studies used a cross-sectional design, 11 included male and female participants, nine included youth from both urban and non-urban settings, and seven addressed a form of DV in addition to physical aggression (i.e., psychological or sexual aggression). Six studies focused on adolescents, nine focused on emerging adults, and respondents from five of the studies spanned both age groups. Fifteen of the 20 studies recruited participants from school settings, although some of those also recruited from non–school based settings. To assess DV, five studies used modified versions of the Conflict Tactics Scales, 8,38,40,43,48 four used the Safe Dates Scale, 6,37,39,49 and nine used one- or two-item queries about aggressive acts. 9,34–36,42,44–47 The remaining two studies used the Abusive Behavior Inventory and the Abuse Assessment Screening Tool. Eleven studies examined demographic and structural characteristics, 8,20,37,38,43–49 12 examined neighborhood disorder, 6,8,9,20,35,36,39–43,49 and eight examined social disorganization. 6,8,9,34,35,43,48,49

# **Demographic and Structural Characteristics**

All 11 studies in this category used Census data to assess neighborhood-level factors, and several used composite variables. For example, Foshee et al.<sup>37</sup> operationalized "neighborhood disadvantage" as a composite of the following five Census variables: % below poverty, % unemployed, % non-white, % renter occupied, and % with a female head of household. Notably, many of the reported measures of effect (i.e., representing associations between demographic and structural characteristics and DV) had been statistically adjusted for other variables.

Overall, there was insufficient evidence to suggest an association between neighborhood-level poverty and DV. Of the 11 studies that examined this topic, 8,20,37,38,43–49 just three reported statistically significant associations. 38,48,49 In Chang and colleagues, 49 Census block-level poverty was significantly associated with physical DV perpetration among adolescent girls (but not boys) in two rural North Carolina counties. Edwards et al. (2014) conducted a study with a convenience sample of emerging adults in 16 rural counties and found that county-level poverty was associated with physical DV victimization and perpetration. Longmore and colleagues 38 concluded that, among men and women in Toledo, Ohio, those who reported physical DV victimization were more likely to have grown up in Census tracts with significantly higher levels of poverty than those who did not report DV victimization. The measures of association between poverty and DV in the remaining seven studies were adjusted for key risk factors, so it is difficult to draw conclusions about whether poverty was independently associated with DV.

Eight studies investigated the association between DV and residence characteristics (i.e., residential stability, vacant housing, and population composition), and results do not suggest an association. <sup>20,37,43–47,49</sup> Just one of the eight studies reported a statistically significant association in the theoretically expected direction. Specifically, Chang et al. <sup>49</sup> found that residential instability had a statistically significant association with physical DV perpetration

among adolescent boys, but not girls. By contrast, Li and colleagues<sup>20</sup> used data from a study of young women seeking care at prenatal clinics in Alabama and found, counter to expectations, that residential stability was associated with an increased risk for DV victimization.

Four studies investigated neighborhood-level alcohol outlet density and physical and sexual DV victimization<sup>44,46</sup> and perpetration.<sup>45,47</sup> Data for those four studies are from Wave III of the National Longitudinal Study of Adolescent Health (AddHealth); respondents were aged 18–26 years. Results showed that alcohol outlet density was associated with perpetration of physical DV among women<sup>47</sup> and with victimization and perpetration of physical DV among men.<sup>45,46</sup>

### **Neighborhood Disorder**

Of the 12 studies assessing neighborhood disorder in association with DV, just one examined the association between violent crime rates at the Census tract level and DV victimization.<sup>20</sup> In that study, which was based at a health clinic in Jefferson County, Alabama, there was no association between crime and sexual or physical DV victimization. Thus, there is insufficient information to assess the association between violent crime rates and DV.

In the 11 remaining studies, neighborhood disorder was assessed via survey research, that is, using questions about perceived deviant behavior, neighborhood problems, and neighborhood safety and crime. In all of those studies, authors used multiple items to inquire about perceived disorder. 6,8,9,35,36,39–43,49 No modal index was used, and authors used different terms and concepts for neighborhood disorder, including "community violence" and "deviant behavior."

Results suggest that perceived neighborhood disorder may be associated with physical DV perpetration, but not with physical DV victimization. Ten studies assessed the association between neighborhood disorder and physical DV perpetration,  $^{6,8,9,35,39-43,49}$  and six reported statistically significant associations.  $^{6,9,35,41,42,49}$  By contrast, four studies assessed the association between perceived neighborhood disorder and physical DV victimization,  $^{8,20,34,35}$  and only one reported a statistically significant association.  $^{34}$ 

### **Social Disorganization**

Eight studies examined the link between social disorganization and DV.<sup>6,8,9,34,35,43,48,49</sup> Three investigated physical DV perpetration and social control, and results suggest an association. Specifically, perceived social control was protective for DV perpetration among adolescents in North Carolina<sup>6</sup> and Wisconsin.<sup>34</sup> Low social control was significantly associated with a nearly twofold increase in the risk for violence perpetration among Boston adolescents.<sup>9</sup>

Three studies examined physical DV and concepts related to sense of community among middle and high school youth, including social cohesion, 9 neighborhood support, 34 and community connectedness. 35 Only one of those concluded that there was a significant, inverse association between neighborhood support and DV perpetration. 34 Champion et al. 35

did not find that connectedness was associated with DV perpetration or victimization. Rothman and colleagues<sup>9</sup> found that the association between low social cohesion and DV perpetration was not statistically significant.

Finally, five studies examined the association between collective efficacy and physical DV among: Boston adolescents, 9 Chicago emerging adults, 8 rural North Carolina adolescents, 49 rural emerging adults in New England and the South, <sup>48</sup> and a sample of participants aged 16–20 years in Boston, Chicago, and San Antonio, Texas. 43 All five studies used Sampson and colleagues '28 scale of collective efficacy, albeit in different ways. Rothman et al. 9 used aggregated youth reports as the predictor variable and found that low collective efficacy was associated with a near-twofold increase in risk for perpetration (victimization was not assessed). Jain and colleagues<sup>8</sup> used non-aggregated reports of collective efficacy and did not report an association with perpetration, but did report a statistically significant inverse association with victimization. Edwards et al. 48 also used non-aggregated reports, but found statistically significant relationships with both victimization and perpetration. Although these studies suggest that there may be an association, in the two additional studies, collective efficacy did not emerge as a statistically significant protective factor for physical DV perpetration (victimization was not assessed in those two studies), <sup>43,49</sup> Notably, both of those studies used caregiver reports of collective efficacy, whereas the other three used youth report.

## **Discussion**

Although there are well-established markers of risk for DV at the individual, family, and peer levels, little is known about markers at the neighborhood level. To address this knowledge gap, we undertook a systematic review of the research on neighborhood-level factors and DV among adolescents and emerging adults. We found just 20 articles, highlighting that additional research is needed if we are to have a comprehensive understanding of how neighborhood factors—which are varied and numerous—relate to DV.

Despite the small number of articles, there was diversity in the examined neighborhood factors, research designs, and the populations under study (i.e., geographic setting, race and gender representation). There were 11 articles addressing demographic and structural characteristics, 12 addressing neighborhood disorder, and eight addressing social disorganization. Nearly one third of the articles had longitudinal designs. Because research and theory relevant to neighborhood context has historically focused on urban populations, it is notable that articles in this review span urban and non-urban populations. <sup>9,10</sup>

One area lacking in diversity was the type of dating violence that was examined; few studies addressed a form of DV other than physical violence. This pattern has been noted in other reviews addressing partner violence<sup>50,51</sup> and reflects the field's tendency to focus on physical partner violence. More research is needed in order to draw conclusions about the how neighborhood context is associated with non-physical types of DV (e.g., sexual, psychological).

Studies of adults show that neighborhood-level poverty and disadvantage increase risk for IPV, 50,51 and so we examined whether these associations held for adolescents and emerging adults. All of the studies used data from the U.S. Census, and the specific variables used were conventional (e.g., neighborhood disadvantage, poverty, and residence characteristics, such as racial composition). Thus, there was consistency in measurement of demographic and structural characteristics across the studies. However, most of the reported measures of association were not statistically significant; therefore, we cannot conclude that there is an association between demographic and structural characteristics and DV. The lack of statistical significance could be due to statistical adjustment, which may have attenuated the magnitude of effect. In nearly all of the studies, the measures of association between neighborhood-level factors and DV had been statistically adjusted for other factors, such as childhood abuse and alcohol use.<sup>39,44</sup> Crude measures of association were not presented, usually because the neighborhood-factor/DV link was not a central focus of the studies. If we are to understand the association between demographic and structural characteristics and DV among youth, more investigations are needed and researchers will need to routinely report unadjusted measures of effect.

Existing research shows an association between alcohol outlet density and IPV among adults. <sup>21</sup> We did not identify any studies of alcohol outlet density and DV among adolescents, and identified four such studies among emerging adults. <sup>44–47</sup> Results suggest that alcohol outlet density may be associated with physical DV perpetration, but not victimization, among emerging adults. It is unclear why alcohol outlet density would be associated with perpetration but not victimization. This conclusion should be considered in light of the fact that results of all four studies that addressed alcohol outlet density and DV were from the same longitudinal data set. To strengthen the results and improve generalizability, more research on alcohol outlets and DV is needed.

Unfortunately, the literature on neighborhood disorder and dating violence is not advanced enough to make definitive statements about the nature of the association. Just one study addressed the association between rate of violent crime and DV, and only three addressed neighborhood disorder and DV victimization, so we cannot draw conclusions about those associations. Although ten studies assessed neighborhood disorder and physical DV perpetration, we cannot make a determination about the association because the measurement was too varied and the results were mixed. Six of the ten studies showed an association between neighborhood disorder and physical DV perpetration, 6,9,35,41,42,49 although one was statistically significant only among girls.<sup>49</sup> Results were not any clearer when looking at urban populations, three of the six studies with urban populations showed a positive association. The assessments of neighborhood disorder were varied and difficult to compare across studies. Some assessments focused on specific instances of witnessed violence, others focused on perceived safety or social disorder more globally, and still others focused on physical disorder. To fully understand how neighborhood disorder relates to DV, we need a more advanced conceptualization of neighborhood disorder, as well as increased standardization of assessment tools.

All studies that assessed neighborhood disorder did so via multi-item, self-reported measured of perceptions. This method is fairly standard, and it is also appropriate because

perceptions are proximal to individual cognition and behavior. However, it is also subject to "same-source bias," meaning that youth engaged in violence—either as victims or perpetrators—may perceive their neighborhoods to be more dangerous than those who are not. <sup>53–55</sup> Moving forward, it will be important to include alternative strategies to assess neighborhood disorder. Systematic social observation (SSO) represents a promising strategy for addressing same-source bias, and may be particularly useful in assessing how neighborhood context impacts DV. <sup>55</sup> SSO is a standardized approach for directly observing the physical, social, and economic characteristics of neighborhoods. <sup>55</sup>

In contrast to neighborhood disorder, assessment of social disorganization was consistent across studies. Five of the eight studies that examined social disorganization used Sampson and Raudenbush's scale of collective efficacy to assess its association with physical DV perpetration. Statistically significant associations were reported in three of those five studies. Thus, results are varied, but do indicate a possible association.

#### **Conclusions**

This review suggests that there is limited evidence linking specific neighborhood-level factors to DV among adolescents and emerging adults. However, existing research shows an association between neighborhood factors with youth violence<sup>15</sup> and with IPV among adults,<sup>50,51,54</sup> highlighting the importance of continuing to explore this association among adolescents and emerging adults. Importantly, our findings are limited by the level of methodologic rigor, modeling strategies, and information presented in the underlying articles.

Continued identification of neighborhood-level factors that contribute to DV is an important priority; identifying and targeting those factors may stimulate novel and more effective DV prevention strategies. In the meantime, understanding how neighborhoods could be organized or provided with supports to discourage violence and to promote healthy, non-violent relationships among adolescents and emerging adults remains an important goal. Given that neighborhood disorder and social disorganization may be associated with a reduced risk for DV, efforts to improve collective efficacy and reduce disorder could impact DV. Notably, Branas and colleagues<sup>58</sup> conducted a 10-year study to reduce physical disorder in Philadelphia, and results showed a decrease in firearm violence. DV practitioners may consider partnering with municipal leaders on neighborhood development initiatives, such as business improvement districts.

# **Supplementary Material**

Refer to Web version on PubMed Central for supplementary material.

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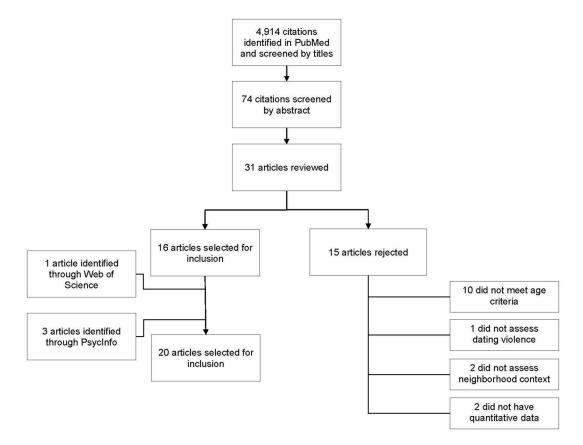
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**Figure 1.** Illustration of screening and review process.

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Table 1

Statistically significant findings of studies examining neighborhood factors and dating violence among adolescents and emerging adults

Author (Year)	Dating violence perpetration or victimization	Demographic & structural characteristics	Alcohol outlets	Alcohol outlets Neighborhood disorder Social disorganization	Social disorganization
		( <i>n</i> =11)	( <i>n</i> =4)	(n=12)	( <i>n</i> =8)
Banyard et al. (2006)	Perpetration				+
Champion et al. (2008)	Both			+	NS
Chang et al. (2015)	Perpetration	+		+	+
East et al. (2010)	Victimization			NS	
Edwards et al. (2014)	Both	+			+
Foshee et al. (2008)	Perpetration	NS			
Foshee et al. (2011)	Perpetration			+	+
Iritani et al. (2013)	Perpetration	NS	+		
Jain et al. (2010)	Both	NS		NS	+
Li et al. (2010)	Victimization	+		NS	
Longmore et al. (2014)	Victimization	+			
McNaughton Reyes et al. (2012)	Perpetration			NS	
Raghavan et al. (2009)	Perpetration			NS	
Raiford et al. (2012)	Perpetration			+	
Reed et al. (2011)	Perpetration			+	
Rothman et al. (2011)	Perpetration			+	+
Schnurr & Lohman (2013)	Perpetration	NS		NS	+
Waller et al. (2012a)	Victimization	+	NS		
Waller et al. (2012b)	Victimization	NS	+		
Waller et al. (2013)	Perpetration	NS	+		
Total +		5	8	9	7

Note. '+' = at least one neighborhood factor in this category demonstrated a statistically significant association with dating violence victimization or perpetration. 'NS' = no neighborhood factors in this category were significantly associated with dating violence. A blank cell indicates that this category of neighborhood factors was not a focus of the study.