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Recommended Citation
Swahn MH, M Alemdar, and DJ Whitaker. 2010. "Nonreciprocal and Reciprocal Dating Violence and Injury Occurrence among Urban Youth." *The Western Journal of Emergency Medicine*. 11 (3): 264-268.

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Nonreciprocal and Reciprocal Dating Violence and Injury Occurrence among Urban Youth

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Supervising Section Editor: Abigail Hankin, MD, MPH
Submission history: Submitted March 1, 2010; Revision Received April 1, 2010; Accepted April 15, 2010
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Objective: Dating violence is a significant health problem among youth that leads to adverse health outcomes, including injuries. Reciprocal violence (perpetrated by both partners) is associated with increased injury in adults, but very little is known about the prevalence and context for reciprocal violence, as well as injury rates, among youth. We sought to determine the prevalence and scope of reciprocal dating violence and injury occurrence among urban youth in a high-risk community.

Methods: Analyses were based on data from the Youth Violence Survey, conducted in 2004, and administered to over 80% of public school students in grades 7, 9, 11, and 12 (N=4,131) in a high-risk, urban school district. The current analyses were restricted to those who reported dating in the past year and who also reported any dating violence (n=1,158). Dating violence was categorized as reciprocal (the participant reported both violence perpetration and victimization) and non-reciprocal (the participant report either violence perpetration or victimization, but not both).

Results: Dating violence reciprocity varied by sex. Girls who reported any dating violence were more likely to report reciprocal dating violence (50.4%) than were boys (38.9%). However, reciprocity did not vary by race/ethnicity or grade level. Reciprocal dating violence was more common among participants who reported more frequent violence experiences. Reciprocal violence was also associated with greater injury occurrences relative to non-reciprocal relationships (10.1% versus 1.2%).

Conclusion: Reciprocal dating violence is common among adolescents and leads more often to injury outcomes. In particular, relationships in which boys report reciprocal violence against their partner appear to lead to more frequent injury occurrences. These findings underscore the importance of addressing dating violence and factors that increase risk for reciprocal violence and therefore exacerbate injury occurrence. [West J Emerg Med. 2010; 11(3): 264-268.]

INTRODUCTION

Dating violence is common among adolescents; about one in 10 high school students report that they have been hit, slapped or physically hurt on purpose by their boyfriend or girlfriend in the past year.[1] However, the prevalence and severity of dating and sexual violence victimization are even higher among high risk samples.[2-4] Dating violence is often perpetrated by both boys and girls against their dating partners[2-3] and research shows that in relationships where there is reciprocal violence (mutual violence), injuries are more likely to occur.[5] While reciprocity of dating violence does not necessarily mean that the frequency or the severity of the violence is equal or similar between partners, it does indicate that both dating partners engage in violence.[5]

To date, there is limited research on reciprocity of dating violence among youth; one study shows that the percentage of violent adolescent relationships, in which there was reciprocal partner violence, ranged from 45% to 72%.[6] Research on reciprocity of intimate partner violence among adults has found that much of partner violence is reciprocal.[5,7,8] For example, in

Table 1. Demographic characteristics of involvement in nonreciprocal versus reciprocal dating violence.[1]

	Adolescents who date (n=2,888)								
	No violence		Any dating violence perpetration or victimization (n=1,158)						
			Nonreciprocal dating violence				Reciprocal dating violence		
			Victimization		Perpetration				
	n	%	n	%	n	%	n	%	P-value[2]
Participant's sex									
Boys	1378	47.9	242	49.8	55	11.3	189	38.9	<.0001
Girls	1500	52.1	130	22.8	153	26.8	287	50.4	
Participant's Race/ethnicity									0.8867
Hispanic	1257	44.5	163	33.7	99	20.5	221	45.8	
Non-Hispanic African American	774	27.4	103	35.2	61	20.8	129	44.0	
Non-Hispanic White	667	23.6	83	38.3	38	17.5	96	44.2	
Non-Hispanic Other	127	4.5	17	34.7	8	16.3	24	49.0	
Participant's grade									0.7734
7th	821	28.6	103	36.2	52	18.3	129	45.4	
9th	823	28.6	107	33.6	70	22.0	141	44.3	
11/12th	1231	42.8	162	35.6	85	18.7	208	45.7	

[1]Missing non-reciprocal/reciprocal items: 97, n=1056.
[2] Pearson's Chi-Square test of association.

the national studies of family violence, about half of the cases had reciprocal violence[7] and similar results were observed in the National Survey of Families and Households.[8] However, there is little information about reciprocal dating violence among youth, especially with regard to the prevalence, context, or severity. Based on research with adults, reciprocity of dating violence is more likely to lead to injury outcomes.[5] Accordingly, reciprocal violence may implicate different kinds of prevention and intervention strategies than those typically used.[5,9,10] It is, therefore, critically important to determine the scope and prevalence of dating violence reciprocity among teens where most prevention efforts are targeted.[11]

METHODS

The "Youth Violence Survey: Linkages among Different Forms of Violence" was administered in 2004 to all public school students enrolled in grades 7, 9, 11 and 12 in a school district in a high-risk community in the U.S. The details of the study have been described elsewhere.[2-4,12,13] Briefly, the school district was identified and selected using community indicators of risk (i.e., poverty, unemployment, single-parent households, and serious crimes), was racially and ethnically diverse, and located in a city with a population of less than 250,000. This district operated 16 schools (elementary, middle, high schools, alternative schools), which all agreed to participate in the study. Within these 16 schools, all students in grades 7, 9, 11, and 12 were invited to participate. Because of the high drop-out rate, students in grades 11 and 12 were grouped to produce a sufficient number of participants in the oldest of the three age groups.

Data collection occurred in April 2004. Students voluntarily completed the anonymous, self-administered questionnaire in classrooms during a 40-minute class period. The questionnaire, an optically scannable booklet in multiple-choice format, was administered by field staff. Prior to data collection, active, signed, written parental permission, and student assent were required for all students under 18 years of age to participate in the study. Students 18 years of age or older provided written consent prior to participating in the survey. Parental permission forms were provided in English, Spanish, and other major languages as requested by the schools. Return of the parental permission forms by invited students was high (14% of students did not return the form), and parent and student refusals were very low (approximately 1% each). Of the 5,098 students who met eligibility criteria, 4,131 participated, yielding a participation rate of 81%: 1,491 in 7th grade (83.0%), 1,117 in 9th grade (73.4%), and 1,523 in 11th and 12th grades combined (79.0%). The study received IRB approval from the Centers for Disease Control and Prevention and ORC Macro International. Secondary analyses of the study were also approved by the local institutional review committee.

Table 2. Severity of nonreciprocal and reciprocal dating violence in the past year among adolescents who reported any dating violence (n=1,158).

	Violence frequency			Injury occurrence		
	Low n (%)	Medium/High n (%)	p-value[1]	Yes n (%)	No n (%)	p-value[2]
Reciprocity			<.0001			<.00001
Nonreciprocal	403 (64.0)	173 (30.0)		7 (1.2)	571 (98.8)	
Reciprocal	72 (15.1)	404 (84.9)		48 (10.1)	428 (89.9)	
Participant's sex			.2396			<.001
Boy (against partner)	227 (47.3)	253 (52.7)		36 (7.4)	447 (92.6)	
Girl (against partner)	248 (43.7)	320 (56.3)		18 (3.2)	549 (96.8)	
Participant's sex by reciprocity			<.0001			
Boy against partner: nonreciprocal	194 (66.0)	100 (34.0)		6 (2.0)	290 (98.0)	
Boy against partner: reciprocal	33 (17.7)	153 (82.3)		30 (16.0)	157 (84.0)	
Girl against partner: nonreciprocal	209 (74.1)	73 (25.9)		*[3]	281 (99.6)	
Girl against partner: reciprocal	39 (13.6)	247 (86.4)		17 (6.0)	268 (94.0)	

[1] Pearson's Chi-Square test of association.
[2] Fisher's Exact test of association.
[3] Cell size smaller than 5 and not reported.

Measures

The dating-violence measures used in the current study were adapted from previous research[14,15] and the modifications are described elsewhere.[2,3,12] Briefly, dating violence perpetration and victimization were assessed through two identical 10-item scales to determine if participants had experiences with certain forms of violence (e.g., scratched, hit or slapped, threw something that could hurt, slammed or held against wall, kicked, pushed, grabbed or shoved, punched or hit with something that could hurt, threatened with a weapon, forced to have sex, and hurt badly enough to need bandages or care from a doctor or nurse) in the past 12 months. Response options for each scale were as follows never, 1-3 times, 4-9 times, and 10 or more times.

Analyses

The current analyses were restricted to those who reported dating in the past year and who also reported any dating violence (n=1,158). The data were grouped into four categories of dating violence: 1) No dating violence; 2) Dating violence victimization only; 3) Dating violence perpetration only; and 4) Dating violence reciprocity (both victimization and perpetration). Because responses to the dating violence frequency measure were not normally distributed (negatively skewed), and there were small cell sizes within levels of some of the independent measures, the median was used to group the violence data into two ordinal categories to indicate low or medium-high violence frequency. We conducted Chi Square and Fisher's exact tests to determine if there were statistically significant associations with reciprocity (nonreciprocal vs. reciprocal) and differences in categorical demographic variables (by gender, race/ethnicity and grade level), as well as violence frequency and injury occurrence.

RESULTS

There was a statistical difference between boys and girls in terms of reporting reciprocal dating violence (p<.0001) (Table 1). Among those who reported any dating violence, 38.9% of boys and 50.4% of girls reported reciprocal violence. There were no statistical significant differences in terms of reciprocity and participants' race/ethnicity or grade level. Reciprocity was associated with the frequency of violence (p<.0001) and of injury occurrence (P<.00001), with reciprocal violence associated with more frequent violence and greater injury occurrence (Table 2). However, participant's sex was not associated with violence frequency but was associated with injury occurrence (p<.001). Boys were more likely to report injuries than were girls.

DISCUSSION

Our study of urban youth in a high-risk community shows that reciprocal dating violence is relatively common among those engaging in dating violence; 38.9% of boys and 50.4% of girls reported reciprocal dating violence. Moreover, the study found that when violence is reciprocal, violence is more frequent, and there are also more reports of injuries. These findings corroborate research on adults[5] and highlight that prevention efforts that seek to reduce injuries from dating violence may need to target reciprocity specifically. More importantly, since reciprocal dating violence is common among high school students in this study, prevention strategies that seek to reduce dating violence and related injuries among

high-risk youth may need to implement prevention strategies much earlier.[2]

It is important to note also that similar to research with adults, injury occurrence was particularly common when boys reported engaging in reciprocal dating violence against their partners. Previous research has shown that boys and men are more likely to inflict injuries on their partners than are girls.[2,16] The likelihood of injury outcomes may be exacerbated because the dispute or argument escalates in severity when both partners are engaged in the act. Moreover, research shows that a woman's perpetration of violence is the strongest predictor of also being a victim of violence,[17] suggesting that the prevention of escalating violent interactions could be an important prevention target.

LIMITATIONS

Our findings are subject to several limitations. First, all participants were students in a high-risk urban school district, and results may not reflect the experiences of those who have dropped out of school or who live in other communities. Second, our measures of violence perpetration and victimization were self-reported and may be subject to reporting biases. Third, our study asked participants about their experiences and those of their dating partners, which may have varied across relationships. Accordingly, findings may pertain across dating relationships and as well as to multiple partners. Research shows that involvement in physical violence varies across relationships.[18] Finally, this study did not include any specific information about the partner or the relationship contexts that could provide more detail about factors that exacerbate dating violence and injury occurrence. These limitations must be considered in the context of the relative novelty of the analyses presented; future studies can and should address the various limitations, for example, by asking both partners about a broader range of violence-related information and by surveying participants over time to assess experiences with potentially different partners.

CONCLUSION

Despite these limitations, this is one of very few studies that have sought to determine patterns of dating-violence reciprocity and injury occurrence among adolescents. Our findings show that reciprocal dating violence is common among adolescents who are engaged in violence and that it is associated with more frequent involvement in violence and that it also more often leads to injuries. Further research is clearly needed to better determine the factors that contribute to dating violence and injury occurrence among adolescents. Meanwhile, new strategies and approaches are needed to prevent and reduce the injury outcomes associated with dating violence among youth.

ACKNOWLEDGMENT

We thank the entire Linkages Study team from ORC Macro, CDC and Battelle who contributed to the planning and implementation of the study. We also thank the school district for their enthusiasm and logistical support of this project. Finally, we thank the students for their time and willingness to participate in this study.

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Conflicts of Interest: By the *West*JEM article submission agreement, all authors are required to disclose all affiliations, funding sources,and financial or management relationships that could be perceived as potential sources of bias. The authors disclosed none.

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