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Physical Dating Violence Victimization Among Sexual Minority Youth

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Abstract

Objectives—We examined (1) whether sexual minority youths (SMYs) are at increased risk for physical dating violence victimization (PDVV) compared with non-SMYs, (2) whether bisexual youths have greater risk of PDVV than lesbian or gay youths, (3) whether youths who have had sexual contact with both sexes are more susceptible to PDVV than youths with same sex–only sexual contact, and (4) patterns of PDVV among SMYs across demographic groups.

Methods—Using 2 measures of sexual orientation, sexual identity and sexual behavior, and compiling data from 9 urban areas that administered the Youth Risk Behavior Surveys from 2001 to 2011, we conducted logistic regression analyses to calculate odds of PDVV among SMYs across demographic sub-samples.

Results—SMYs have significantly increased odds of PDVV compared with non-SMYs. Bisexual youths do not have significantly higher odds of PDVV than gay or lesbian youths, but youths who had sexual contact with both-sexes possess significantly higher odds of PDVV than youths with same sex–only sexual contact. These patterns hold for most gender, grade, and racial/ethnic subgroups.

Conclusions—Overall, SMYs have greater odds of PDVV versus non-SMYs. Among SMYs, youths who had sexual contact with both sexes have greater odds of PDVV than youths with same sex–only sexual contact. Prevention programs that consider sexual orientation, support tolerance, and teach coping and conflict resolution skills could reduce PDVV among SMYs.

Dating violence refers to any stalking behaviors, psychological, physical or sexual violence perpetrated by a partner toward a current or former dating partner; violence may be perpetrated in-person or electronically (e.g., repeated unwanted texts, cyberstalking).[1] The

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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prevalence of dating violence victimization reported across studies varies by definition, measure, and population.[2] In general, between 10% and 30% of adolescent samples reported experiencing some form of dating violence.[2] There are few studies on dating violence among sexual minorities, defined either by sexual identity (e.g., gay or lesbian, bisexual) or by sexual contact (e.g., sexual contact with same sex–only or contact with both sexes), and they suggested that prevalence may vary from 11% to upwards of 40%.[3–6] In a convenience sample of adolescents, Freedner et al. found that bisexual boys had 3.6 times the odds of experiencing any form of dating violence compared with heterosexual boys and lesbians had 2.4 times the odds of reporting fear for their safety in the context of a dating relationship compared with heterosexual girls.[4] In a sample of 10 schools in New York, researchers found that 42% of lesbian, gay, and bisexual students reported experiencing physical dating violence compared with 29% of heterosexual students.[3] Using data from 8 states, an analysis of the Youth Risk Behavior Surveys found that physical dating violence victimization (PDVV) in the past 12 months ranged from 6.1% to 13.8% among heterosexual students, from 19.1% to 29.2% among gay or lesbian students, and from 17.7% to 28.0% among bisexual students.[6] Based on sex of sexual contact, the prevalence of dating violence victimization ranged from 11.5% to 17.1% among students who only had sexual contact with the opposite sex, from 16.3% to 26.2% among students who only had sexual contact with the same sex, and from 26.3% to 39.6% among students who engaged with both sexes.[6] Only 1 study showed relatively low prevalence of PDVV–among 117 youths in the National Longitudinal Study of Adolescent Health who reported same-sex romantic or sexual relationships, 11% reported experiencing any physical violence in the past 18 months.[5]

Many reasons exist for a higher prevalence of dating violence among sexual minority youths (SMYs). Although many youths face stressors in adolescence as they develop their social and sexual identities, this pressure may be more intense for SMYs who often grow up amidst individual and institutional stigma, prejudice, and discrimination toward sexual minorities. This hostile social environment may lead to feelings of shame and isolation, denying one's sexuality, internalized homophobia, depression, negative health behaviors, less favorable perceptions of the quality of one's relationships, and relationship violence.[7–10] Other related reasons for increased relationship violence may include difficulties among some SMYs in navigating their gender identity and gender expression which may play a role among some SMYs and create tensions in relationships.[11] SMYs, like their heterosexual peers are also influenced by strict gender roles and social norms of behaving depicted in the “mainstream” culture.[12,13] For example, a partner may take on a more dominant role and expect the other partner to conform. Without visible role models, issues of dominance and submissiveness may become destructive.[11] Other stressors within heterosexual couples also play out in sexual minority relationships such as power imbalances attributed to social class differences, jealousy, incompatibility, and a lack of recognition of unhealthy relationships stemming from absent role models.[11] When SMYs do recognize violence in their relationships, they may be less likely to seek help for fear of reprisal or rejection upon coming out.[14] Additionally, services and education received may lack cultural appropriateness.[15] These factors may keep youths feeling stuck in violent relationships. SMYs may also be afraid to leave a violent relationship because they don't see other relationship options for themselves given low visibility of sexual minorities in the community.[11]

The short- and long-term consequences of dating violence have been well documented and include variety of negative physical, social, and mental health outcomes including injury, fear, depression, substance abuse, sexual risk behaviors, suicidal ideation, school failure, and eating disorders.[12,16–19] Findings from 2 studies suggested that the consequences of dating violence among sexual minorities may be even more severe with increased risk of HIV infection in populations experiencing intimate partner violence.[20,21] Numerous risk factors have been associated with dating violence in past research. These factors include having multiple sexual partners, depression, anxiety, substance use, or aggression, holding traditional gender views, having antisocial friends or friends who perpetrate dating violence, witnessing or experiencing family violence, having a poor relationship with parents, and low parental monitoring.[22]

More research on the prevalence of dating violence among SMY youths is needed to guide research on etiology and prevention of such violence. According to Wolfe et al., adolescent dating violence may be a stepping-stone to adult intimate partner violence,[23] so prevention is imperative. Specifically, understanding which sexual minorities are at increased risk is essential as sexual minorities are not a single homogenous group. Examining results within sexual minority groups (e.g., lesbian or gay or bisexual) requires large sample sizes. To date, most studies have employed relatively small convenience samples and have often grouped all sexual minorities together.[4,5] Additionally, stratified analyses by race/ethnicity remain absent in the literature of dating violence among SMYs, perhaps because of sample size limitations.

To address these gaps, we combined data from large population-based local Youth Risk Behavior Surveys from 2001 to 2011 to examine PDVV experienced by SMY groups and stratified analyses by demographic characteristics (e.g., gender or race/ethnicity). We used 2 measures of sexual orientation, sexual identity and sexual behavior, which allowed for the inclusion of more SMYs in the analyses, because not all youths who engage in same-sex behavior identify as a sexual minority and similarly not all youths who identify as a sexual minority engage in sexual behavior. We sought to examine the following: (1) whether SMYs (based on both definitions) are at increased risk for PDVV compared with non-SMYs, (2) whether bisexual youths have a higher risk of PDVV than do lesbian or gay youths, (3) whether youths with sexual contact with both-sexes have a higher risk of PDVV than do youths with same sex–only engagement, and (4) patterns of PDVV among SMYs in different demographic groups.

METHODS

The Youth Risk Behavior Surveillance System (YRBSS) monitors health-risk behaviors of leading health indicators such as unintentional injuries, violence, tobacco, alcohol, drug use, and sexual risk behaviors.[24] It includes surveys conducted at the national, state, and local levels. Data for the current study came from multiple local (i.e., urban) sites from 2001 to 2011 that measured sexual orientation and physical dating violence. Each local site used an independent, cross-sectional, 2-stage clustered design to produce representative samples of public school students in grades 9 to 12 in their districts.

Variables

Physical dating violence victimization was measured by the question “During the past 12 months, did your boyfriend or girlfriend ever hit, slap, or physically hurt you on purpose?” Response options were yes or no.

Sexual orientation was measured by 2 questions. Regarding sexual identity, participants were asked, “Which of the following best describes you?” Response options included heterosexual or straight, gay or lesbian or homosexual, bisexual, and unsure. Regarding sexual behavior, participants were asked, “During your life, with whom have you had sexual contact?” Response options included: I have never had sexual contact, females, males, and females and males. Based on student gender and sexual behavior, we classified students as having had sexual contact with opposite sex only, same sex only, both sexes, or as never having had sexual contact.

We included gender, grade, and race/ethnicity as demographic control variables. To control for unobserved confounding factors by place and time, we also included city and year dummy variables.

Data Samples

We created 2 analytic samples based on the 2 sexual orientation measures. The sites included were Boston, MA; Chicago, IL; Houston, TX; Los Angeles, CA; Milwaukee, WI; New York City, NY; San Diego, CA; San Francisco, CA; and Seattle, WA (Figure A, available as a supplement to the online version of this article at http://www.ajph.org). Both samples contained more than 70 000 observations.

Statistical Analyses

We performed all statistical analyses on weighted data to adjust for student non-response and accounted for the complex sampling design of the Youth Risk Behavior Surveys. Weighted analyses also allowed us to draw inference to the public high school students in cities included in the sexual identity and behavior samples. We divided weights in each local site by the number of its survey years included in the samples.[25] We then examined the characteristics of each sample (Table 1) and the prevalence of PDVV by selected characteristics (Table 2). Next, we conducted multivariable logistic regression analyses to examine the relationship between sexual orientation measures, sexual identity (Table 3) and sexual behavior (Table 4), and PDVV. After model estimation, we made comparisons between bisexual youths and lesbian or gay youths, and between youths who reported sexual contact with both sexes and youths with same sex–only sexual contact. To better understand the association of PDVV with sexual orientation by demographic characteristics, we further stratified the analyses by gender, grade, and race/ethnicity. All analyses were conducted using SAS version 9.3 (SAS Institute, Cary, NC) survey procedures.

RESULTS

The sexual identity sample included 70 793 observations and the sexual contact sample included 70 497 observations. Table 1 shows that distribution of students by gender, grade,

race/ethnicity, and physical dating violence were similar in the 2 samples. Specifically, the weighted percentages of male and female participants were almost equal. The percentage distribution of 9th to 12th graders decreased as grade increased. Racial/ethnic minorities accounted for the large majority of both samples. Non-Hispanic Black and Hispanic groups each made up about 30% of the samples, and Non-Hispanic Asians/Pacific Islanders composed about 10%. By contrast, Non-Hispanic Whites accounted for approximately 12% of the 2 samples. The overall prevalence rate of PDVV was approximately 12% in both samples. Heterosexuals constituted the majority of the sexual identity sample (89.2%) with smaller percentages spread out among lesbian or gay (2.0%), bisexual (5.3%), and unsure youths (3.5%). In the sexual behavior sample, youths with opposite-sex contact only made up almost 50% of the same with the remainder spread out across same-sex contact only (2.6%), contact with both sexes (3.9%), and no sexual contact (45.7%).

Table 2 reports the prevalence of PDVV by selected characteristics. Heterosexual youths experienced the lowest prevalence of PDVV (10.7%), followed by unsure youths (19.1%), bisexual youths (21.5%), and lesbian or gay youths (24.6%). Pair-wise comparisons showed that the prevalence rate of PDVV among heterosexual youths was significantly lower than that among any other sexual identity group ($P < .001$). Youths who had opposite sex–only sexual contact had a significantly lower prevalence rate of PDVV (14.3%) than did youths who had either same sex–only sexual contact (21.1%) or who had sexual contact with both sexes (29.7%), but they reported a significantly higher prevalence rate of PDVV compared with youths who had no sexual contact (6.3%, $P < .001$). Male participants had significantly greater prevalence of PDVV than did female participants in both samples, and 10th through 12th graders had higher prevalence of PDVV than did 9th graders. Non-Hispanic American Indians/Alaska Natives (AI/ANs), Blacks, and multiple or other groups had significantly higher prevalence of PDVV than did Non-Hispanic Whites in both samples, and Non-Hispanic Asian/Pacific Islanders (APIs) had a significantly lower rate of PDVV than did Non-Hispanic Whites in the sexual identity sample.

Upon controlling for demographic factors, lesbian or gay, bisexual, and unsure youths each had significantly higher odds of PDVV than did heterosexual youths (Table 3). The odds of PDVV for both lesbian or gay and bisexual youths were more than twice that of heterosexual youths (odds ratio [OR] = 2.46; 95% confidence interval [CI] = 1.98, 3.05 and OR = 2.36; 95% CI = 2.05, 2.72, respectively). With respect to the comparison between lesbian or gay youths and bisexual youths, we found no significant differences in their odds of PDVV. Across all gender, grade, and race/ethnicity subgroups the same patterns held—lesbian or gay and bisexual youths had significantly increased odds of PDVV than did heterosexual youths but bisexual youths did not have significantly higher odds of PDVV than did lesbian or gay youths. It is noteworthy that while APIs had the lowest prevalence rates of lesbian or gay and bisexual youths (Table 2), these groups had the greatest odds of PDVV compared with the other racial/ethnic minorities. Equally interesting is that White youths had one of the lowest prevalence rates of PDVV but the highest odds ratio of PDVV among bisexual youths compared with all other racial/ethnic groups.

Switching to the sexual behavior sample (Table 4), results indicated that youths who had same-sex sexual contact only and sexual contact with both sexes had significantly increased

odds of PDVV compared with youths who had opposite-sex sexual contact only (OR = 1.53; 95% CI = 1.24, 1.90 and OR = 2.63; 95% CI = 2.22, 3.12, respectively). Youths who had no sexual contact had significantly lower odds for physical dating violence than those who had opposite-sex sexual contact only (OR = 0.43; 95% CI = 0.40, 0.47). As for the comparison between youths with contact with same-sex versus both sexes, the odds of PDVV were significantly higher for the latter group (OR = 1.72; 95% CI = 1.37, 2.15). This compares to no significant differences found between the odds of PDVV for lesbian or gay and bisexual youths reported in Table 3. In all but 3 stratified analyses, youths with same-sex contact and contact with both sexes had significantly higher odds for PDVV than did those who had opposite sex–only sexual contact. Similar to results based on sexual identity, the API youths with same-sex contact and sexual contact with both-sexes had higher odds of PDVV than did youths having same-sex and both-sex sexual contact in most other racial/ethnic subgroups, although their prevalence rate of physical dating violence was lower than that among any other racial/ethnic subgroup. Finally, youths with sexual contact with both sexes had higher odds of PDVV than did youths with same-sex sexual contact across most gender, grade, and racial/ethnic subgroups.

DISCUSSION

We found that SMYs are at significantly increased odds of PDVV compared with non-SMYs, which is similar to most previous studies.[2,6] We also discovered that bisexual youths do not have significantly higher odds of PDVV than do gay or lesbian youths, and youths having sexual contact with both sexes have significantly higher odds of PDVV than do youths with same-sex sexual contact only. This may indicate that behavior is a more potent predictor of risk than identity. Other studies have noted similar patterns of results related to other outcomes.[10,26,27] In stratified analyses by demographic characteristics, we found the above patterns held for most gender, grade, and racial/ethnic subgroups.

Prevalence of PDVV, overall, concurred with previous research of general adolescent populations that suggests between 10% to 30% of youths experience PDVV,[2] although youths without sexual contact had the lowest reported prevalence at 6.3%. This finding could suggest that youths who were not sexually active may delay dating onset or date less frequently, thus reducing exposure to the possibility of experiencing dating violence. Alternatively, previous research has suggested that youths who are not sexually active are at lower risk for PDVV than are youths who engage in casual sex or have sex with multiple partners.[22] Although the absence of a risk factor does not always indicate the presence of a protective factor, in this case, sexual activity presents a risk for PDVV and delay of sexual activity may protect youths from PDVV; further research is needed to explore the meaning of this finding. Among SMYs, prevalence was comparable to other studies, between 20% to 30%.[6] Data from the national YRBSS finds that state and city data vary, such that prevalence in cities is slightly higher than in states and has much more variation across cities (range = 7.6%–24.2%) than states (range = 6.5%–16.1%),[6] suggesting that different prevalence might be found among youths in rural communities. Moreover, prevalence may vary within communities contingent on race/ethnicity; for example, in the national YRBSS, Black youths are most likely to be victims of PDVV (12.2%), followed by Hispanic students (11.4%) and White non-Hispanic students (7.6%).[6] These variations in national prevalence

are thought to reflect variations in economic disadvantage across racial/ethnic groups. In the case of SMYs, our findings may reflect past research that suggests racial/ethnic minority populations disapprove of sexual minority orientation.[28–30] This, too, has implications for generalizability of our findings. For example, owing to what researchers sometimes refer to as multiple minority stress,[31] it may be that prevalence rates reported here are even greater than may be reported in less racially/ethnically diverse populations.

Limitations

This study adds to the scant knowledge known about the prevalence of PDVV among youths who identify or have sexual contact with same-sex peers only or with both sexes. This study compiles data from large samples of local school-based surveys, which adds to the generalizability of findings compared with small convenience samples. Despite the strengths, several limitations must be kept in mind when interpreting reported results. This article only reports on PDVV, just 1 component of adolescent dating violence. Furthermore, PDVV was measured by only 1 item. Sexual dating violence—any forced sexual activity—in addition to PDVV, will be measured in the 2013 YRBSS, which will provide additional insights into the prevalence of other forms of dating violence victimization among SMYs.

The YRBSS also lacks information on perpetration of dating violence, so we do not know the degree to which the violence in these relationships was mutual, as is often the case in adolescent dating relationships.[32] Similarly, the data do not include the gender of the perpetrator. More research in this area is warranted. Although the question on PDVV has existed in the YRBSS for more than 10 years, we do not have any information on the frequency, duration, or severity of the physical dating violence. For instance, studies have found that although prevalence of physical dating violence is comparable among girls and boys, boys' violence perpetration is more likely to have serious consequences, including psychological and physical harm.[33] With regard to measurement of sexual orientation, it is possible that some students were unwilling to disclose or did not understand the questions. Even students who were sexually attracted to persons of the same sex or who had previously had sexual contact with persons of the same sex might not have been willing to label themselves as a sexual minority. The data used in these analyses describe students based on their sexual identity and sex of their sexual contacts. None of the surveys included questions on sexual attraction, which might have identified a different group of sexual minority students and different relationships with health-risk behaviors. Additionally, it is possible that some survey participants might have included their involuntary sexual experiences, such as child sexual abuse and sexual violence victimization in the question of sexual contact. The extent of underreporting or overreporting of health-risk behaviors, sexual identity, and sexual behavior cannot be determined, although the survey questions measuring health-risk behaviors demonstrate good test-retest reliability.[34] The findings reported here cannot be generalized to all sexual minority youths given the data come primarily from large urban school districts. Also, these data apply only to youths who attended public school and therefore are not representative of all persons in this age group.[35] Nationwide, in 2009, of persons aged 16 to 17 years, approximately 4% were not enrolled in a high school program and had not completed high school. Sexual minority students might represent a

disproportionate percentage of high school dropouts and other youths who do not attend school.

Conclusions

Several implications result from these findings. Implementers of current dating violence prevention programs will likely benefit students if they are aware of the increased risk of physical dating violence victimization among SMYs and if their programs are culturally relevant and responsive to the needs of this population. Current evidence-based dating violence prevention programs tend to use gender-neutral language so that skills and vignettes apply to both same-sex and opposite-sex dating scenarios; however, core components of these programs, such as a focus on gender stereotyping[30] may need to be adapted to capture the role of gender in same-sex relationships. That said, it is an empirical question whether the current evidence-based programs are effective for both SMYs and non-SMYs. Additionally, sexual minorities report having encountered skeptical, dismissive, and avoidant attitudes by service providers upon revealing abusive experiences.[15] This suggests that intervention services for dating violence and health services in general may benefit from assessing whether their services are culturally appropriate and take into account the unique needs of sexual minority populations–both those who identify as sexual minorities and those that engage in sexual contact with same- or both-sex peers.

Assessing these sensitive areas appropriately is also necessary so that youths may feel more comfortable seeking help for abusive relationships from adults. Little is known about if and how the risk and protective factors for dating violence in SMY relationships differ from those among heterosexual youths. Continued research in this area is needed to develop prevention programs that are relevant to all youths and adapt, if needed, existing programs.

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TABLE 1

Characteristics of Sexual Identity and Behavior Samples: Pooled Local Youth Risk Behavior Surveys, United States, 2001–2011

	Sexual Identity Sample Unweighted No. (Weighted %)	Sexual Behavior Sample Unweighted No. (Weighted %)
Total no. of observations	70 793	70 497
Gender		
Male	34 093 (50.2)	33 686 (50.0)
Female	36 458 (49.8)	36 570 (50.0)
Grade		
9th	19 882 (32.2)	19 798 (32.7)
10th	18 610 (26.9)	18 621 (26.9)
11th	17 067 (21.4)	17 310 (21.3)
12th	14 366 (19.1)	13 882 (18.6)
Ungraded/other	321 (0.4)	314 (0.4)
Race/ethnicity		
Non-Hispanic AI/AN	702 (0.5)	755 (0.5)
Non-Hispanic API	11 039 (10.8)	7207 (9.2)
Non-Hispanic Black	17 587 (30.2)	19 273 (30.7)
Non-Hispanic White	8569 (11.6)	9078 (12.2)
Hispanic	17 110 (28.7)	18 481 (31.7)
Multiple/other	13 490 (18.3)	13 479 (15.6)
Sexual orientation		
Sexual identity		
Heterosexual	59 050 (89.2)	
Lesbian/gay	1305 (2.0)	
Bisexual	3556 (5.3)	
Unsure	2273 (3.5)	
Sex of sexual contacts		
Opposite		31 970 (47.8)
Same		1837 (2.6)
Both		2817 (3.9)
No sexual contact		28 924 (45.7)
Physical dating violence		
Yes	7884 (12.0)	8137 (11.7)
No	61 624 (88.0)	61 063 (88.3)

Note. API = Asian/Pacific Islander; AI/AN = American Indian/Alaska Native. The sexual identity sample includes the following sites and years: Boston, MA (2009 and 2011); Chicago, IL (2003, 2005, 2007, 2009, and 2011); New York, NY (2005, 2007, 2009, and 2011); Houston, TX (2011); Los Angeles, CA (2009 and 2011); Milwaukee, WI (2011); San Francisco, CA (2001, 2005, 2007, and 2009); San Diego, CA (2011); and Seattle, WA (2009 and 2011). The sexual behavior sample includes the following sites and years: Boston (2009 and 2011), Chicago (2003, 2005, 2007, 2009, and 2011), New York City (2005, 2007, 2009, and 2011), Houston (2011), Los Angeles (2003, 2009 and 2011), Milwaukee (2007, 2009, and 2011), San Diego (2001, 2003, 2005, and 2011), and Seattle (2011). Counts in a characteristic (e.g., gender, grade, race/ethnicity) do not add up to the total number of observations because of missing data.

TABLE 2

Prevalence of Physical Dating Violence by Selected Characteristics among Sexual Identity and Behavior Samples: Pooled Local Youth Risk Behavior Surveys, United States, 2001–2011

	Prevalence of PDV Among Sexual Identity Sample, Unweighted No. (Weighted %)	Prevalence of PDV Among Sexual Behavior Sample, Unweighted No. (Weighted %)
Gender[a]		
Male	3963 (12.5)	4031 (12.1)
Female	3872 (11.3)	4056 (11.2)
Grade[b]		
9th	2000 (10.7)	2047 (10.4)
10th	2010 (11.7)	2079 (11.6)[c]
11th	1935 (12.1)[c]	2024 (11.9)[c]
12th	1765 (13.8)[c]	1821 (13.6)[c]
Ungraded/other	88 (28.5)[c]	79 (28.3)[c]
Race/ethnicity[b]		
Non-Hispanic AI/AN	97 (14.8)[d]	109 (13.2)[d]
Non-Hispanic API	865 (8.4)[e]	653 (8.7)
Non-Hispanic Black	2249 (14.0)[d]	2498 (14.0)[d]
Non-Hispanic White	795 (10.0)	837 (9.0)
Hispanic	1684 (10.0)	1819 (9.6)
Multiple/other	1891 (14.8)[d]	1929 (15.0)[d]
Sexual orientation[b]		
Sexual identity		
Heterosexual	5855 (10.7)	
Lesbian/gay	300 (24.6)[f]	
Bisexual	732 (21.5)[f]	
Unsure	371 (19.1)[f]	
Sex of sexual contacts		
Opposite		4530 (14.3)
Same		365 (21.1)[g]
Both		749 (29.7)[g]
No sexual contact		1744 (6.3)[h]

Note. API = Asian/Pacific Islander; AI/AN = American Indian/Alaska Native; PDV = physical dating violence.

[a]The bivariate analyses show that the association of PDV with gender is significant at $P < .05$ in both sexual identity and behavior samples.

[b]The bivariate analyses show that the associations of physical dating violence with grade, race/ethnicity, and sexual orientation are significant at $P < .001$ in both sexual identity and behavior samples.

[c] This group had a significantly greater rate of PDV than 9th graders.

[d] This group had a significantly greater rate of PDV than Non-Hispanic Whites.

[e] This group had a significantly lower rate of PDV than Non-Hispanic Whites.

[f] This group had a significantly greater rate of PDV than heterosexual youth.

[g] This group had a significantly greater rate of PDV than youth with opposite-sex sexual contacts.

[h] This group had a significantly lower rate of PDV than youth with opposite-sex sexual contacts.

TABLE 3

Adjusted Odds Ratios of Physical Dating Violence by Sexual Identity, Overall and Subgroup Samples: Pooled Local Youth Risk Behavior Surveys, United States, 2001–2011

	Sexual Identity (Ref: Heterosexual)	AOR (95% CI)
Overall sample (n = 62 861)		
	Lesbian/gay	2.46*** (1.98, 3.05)
	Bisexual	2.36*** (2.05, 2.72)
	Unsure	1.99*** (1.63, 2.43)
	Bisexual vs lesbian/gay	0.96 (0.76, 1.22)
Gender		
Male (n = 29 564)		
	Gay	2.23*** (1.63, 3.04)
	Bisexual	2.59*** (1.91, 3.50)
	Unsure	2.52*** (1.85, 3.44)
	Bisexual vs gay	1.16 (0.75, 1.81)
Female (n = 33 297)	Lesbian	2.83*** (2.07, 3.87)
	Bisexual	2.28*** (1.92, 2.71)
	Unsure	1.57*** (1.22, 2.02)
	Bisexual vs lesbian	0.81 (0.58, 1.13)
Grade		
9th (n = 17 530)	Lesbian/gay	2.27*** (1.41, 3.63)
	Bisexual	1.88*** (1.43, 2.48)
	Unsure	1.39* (1.00, 1.93)
	Bisexual vs lesbian/gay	0.83 (0.49, 1.42)
10th (n = 16 587)	Lesbian/gay	3.03*** (1.98, 4.65)
	Bisexual	3.11*** (2.37, 4.06)
	Unsure	1.92** (1.24, 2.98)
	Bisexual vs lesbian/gay	1.02 (0.61, 1.71)
11th (n = 15 479)	Lesbian/gay	2.43*** (1.53, 3.85)
	Bisexual	2.55*** (1.92, 3.37)
	Unsure	2.66*** (1.70, 4.17)
	Bisexual vs lesbian/gay	1.05 (0.65, 1.71)
12th (n = 13 010)	Lesbian/gay	2.19*** (1.41, 3.41)
	Bisexual	1.83*** (1.29, 2.61)
	Unsure	2.15*** (1.39, 3.33)
	Bisexual vs lesbian/gay	0.84 (0.49, 1.42)
Race/ethnicity		
Non-Hispanic API (n = 10 536)	Lesbian/gay	2.84** (1.37, 5.87)

	Sexual Identity (Ref: Heterosexual)	AOR (95% CI)
	Bisexual	3.31*** (2.05, 5.33)
	Unsure	2.13** (1.21, 3.75)
	Bisexual vs lesbian/gay	1.17 (0.56, 2.41)
Non-Hispanic Black (n = 15 635)	Lesbian/gay	2.24*** (1.53, 3.28)
	Bisexual	2.51*** (1.83, 3.44)
	Unsure	1.79** (1.24, 2.60)
	Bisexual vs lesbian/gay	1.12 (0.72, 1.75)
Non-Hispanic White (n = 8251)	Lesbian/gay	2.49* (1.21, 5.11)
	Bisexual	3.54*** (2.25, 5.57)
	Unsure	1.79 (0.97, 3.33)
	Bisexual vs lesbian/gay	1.42 (0.63, 3.20)
Hispanic (n = 15 615)	Lesbian/gay	2.61*** (1.65, 4.13)
	Bisexual	2.04*** (1.48, 2.82)
	Unsure	1.82** (1.27, 2.61)
	Bisexual vs lesbian/gay	0.78 (0.45, 1.38)
Multiple/other (n = 12 233)	Lesbian/gay	2.51*** (1.69, 3.73)
	Bisexual	1.95*** (1.45, 2.61)
	Unsure	2.44*** (1.61, 3.69)
	Bisexual vs lesbian/gay	0.78 (0.48, 1.26)

Note. API = Asian/Pacific Islander; AOR = odds ratio; CI = confidence interval. For the overall sample, control variables are gender, grade, and race/ethnicity and city and year dummy variables. For each subgroup sample, control variables are those used in the overall sample minus the stratification variable. The adjusted odds ratios for the ungraded/other subgroup and the American Indian/Alaska Native subgroup are not reported because of unreliable estimates resulting from very low counts in some combination categories of sexual identity and physical dating violence.

*$P < .05$;

**$P < .01$;

***$P < .001$.

TABLE 4

Adjusted Odds Ratios of Physical Dating Violence by Sexual Behavior, Overall and Subgroup Samples: Pooled Local Youth Risk Behavior Surveys, United States, 2001–2011

	Sexual Behavior (Ref: Opposite Sex)	AOR (95% CI)
Overall sample (n = 62 348)	Same sex	1.53*** (1.24, 1.90)
	Both sexes	2.63*** (2.22, 3.12)
	No sexual contact	0.43*** (0.40, 0.47)
	Both vs same	1.72*** (1.37, 2.15)
Gender	Same sex	1.49* (1.10, 2.01)
Male (n = 28 987)	Both sexes	4.21*** (2.87, 6.18)
	No sexual contact	0.43*** (0.38, 0.50)
	Both vs same	2.83*** (1.77, 4.53)
Female (n = 33 361)	Same sex	1.56** (1.18, 2.06)
	Both sexes	2.16*** (1.80, 2.59)
	No sexual contact	0.42*** (0.37, 0.48)
	Both vs same	1.38* (1.03, 1.85)
Grade	Same sex	1.53* (1.01, 2.31)
9th (n = 17 391)	Both sexes	2.02*** (1.45, 2.83)
	No sexual contact	0.39*** (0.33, 0.46)
	Both vs same	1.32 (0.84, 2.08)
10th (n = 16 545)	Same sex	1.61* (1.12, 2.32)
	Both sexes	3.24*** (2.40, 4.37)
	No sexual contact	0.44*** (0.37, 0.53)
	Both vs same	2.01*** (1.34, 3.03)
11th (n = 15 686)	Same sex	1.97** (1.32, 2.96)
	Both sexes	2.78*** (2.02, 3.83)
	No sexual contact	0.46*** (0.38, 0.56)
	Both vs same	1.41 (0.90, 2.20)
12th (n = 12 482)	Same sex	1.12 (0.76, 1.64)
	Both sexes	2.25*** (1.62, 3.12)
	No sexual contact	0.46*** (0.37, 0.58)
	Both vs same	2.02* (1.23, 3.30)
Race/ethnicity		
Non-Hispanic API (n = 6782)	Same sex	3.62*** (1.95, 6.74)
	Both sexes	2.72*** (1.55, 4.79)
	No sexual contact	0.37*** (0.28, 0.48)
	Both vs same	0.75 (0.33, 1.70)

	Sexual Behavior (Ref: Opposite Sex)	AOR (95% CI)
Non-Hispanic Black (n = 17 168)	Same sex	1.56** (1.15, 2.12)
	Both sexes	2.40*** (1.73, 3.32)
	No sexual contact	0.53*** (0.46, 0.61)
	Both vs same	1.54* (1.03, 2.29)
Non-Hispanic White (n = 8707)	Same sex	1.04 (0.58, 1.87)
	Both sexes	2.60*** (1.77, 3.83)
	No sexual contact	0.38*** (0.30, 0.50)
	Both vs same	2.51** (1.33, 4.71)
Hispanic (n = 16 889)	Same sex	1.16 (0.70, 1.91)
	Both sexes	3.01*** (2.09, 4.33)
	No sexual contact	0.37*** (0.32, 0.45)
	Both vs same	2.60*** (1.53, 4.43)
Multiple/other (n = 12 180)	Same sex	1.72** (1.16, 2.57)
	Both sexes	2.3*** (1.66, 3.18)
	No sexual contact	0.46*** (0.38, 0.56)
	Both vs same	1.33 (0.85, 2.10)

Note. API = Asian/Pacific Islander; AOR = odds ratio; CI = confidence interval. For the overall sample, control variables are gender, grade, and race/ethnicity and city and year dummy variables. For each subgroup sample, control variables are those used in the overall sample minus the stratification variable. The adjusted odds ratios for the ungraded/other subgroup and the American Indian/Alaska Native subgroup are not reported because of unreliable estimates resulting from very low counts in some combination categories of sex of sexual contacts and physical dating violence.

*$P < .05$;

**$P < .01$;

***$P < .001$.