HHS Public Access

Author manuscript

*J LGBT Youth*. Author manuscript; available in PMC 2024 March 08.

Published in final edited form as:

*J LGBT Youth*. 2018 ; 15(3): 149–161. doi:10.1080/19361653.2018.1451802.

# Health risks among discordant heterosexual high school students

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## Abstract

Limited information exists on heterosexual youth with sexual contact with same-sex partners in the United States (i.e., discordant heterosexual). We compared the prevalence of health risks between discordant heterosexual, heterosexual with only opposite-sex sexual contact, lesbian/gay, and bisexual students using the 2015 national Youth Risk Behavior Survey (YRBS). Nationwide, 3.2% of students were identified as discordant heterosexuals. The prevalence of several risk behaviors was significantly higher among discordant heterosexual students than their heterosexual peers with only opposite-sex sexual contact. Clinicians should consider sexual identity and sex of sexual partners when conducting risk-assessments to ensure they appropriately target populations for intervention.

### Keywords

Youth lgbt; sexual orientation; sexual development; heterosexuality

## Introduction

Sexual minority youth are at an increased risk of poor health outcomes due to their higher prevalence of health risks, the origin of which may be attributed to complex social processes, such as stigma and social exclusion associated with identifying as a sexual minority (Herek, 2009; King et al., 2008; Meyer & Frost, 2013; Przedworski et al., 2015); According to the 2015 national Youth Risk Behavior Survey (YRBS), high school students who identify as gay, lesbian, or bisexual (LGB) have a higher prevalence of health risks than heterosexual high school students, including sexual risk taking, substance use, and violence victimization (Kann, 2016a). Similarly, high school students who had sexual contact with individuals of the same sex had a higher prevalence of sexual risk taking, substance use, and violence

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Potential conflicts of interest

The authors have no conflicts of interest relevant to this article to disclose.

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

victimization than their peers who had sexual contact with only individuals of the opposite sex.

The findings of the 2015 national YRBS are supported by years of research, much of which has already been summarized in meta-analyses (King et al., 2008; Marshall et al., 2008). One such meta-analysis of sexual orientation and substance use found that LGB youth were nearly three times as likely to report substance use as compared to their heterosexual peers (Marshall et al., 2008). A systematic review of mental health, substance use, and suicide risk among LGB adults found that their lifetime risk for depression was higher than among heterosexual adults; substance use dependence was more prevalent among lesbian or bisexual women than among heterosexual women; and suicide attempts were more prevalent among homosexual or bisexual men than heterosexual men (King et al., 2008). Findings from the 2015 National School Climate Survey found that 85% of LGBTQ middle and high school students experienced verbal harassment at school, and nearly two-thirds reported LGBTQ-related discrimination (Kosciw, Greytak, Giga, Villenas, & Danischewski, 2016). This research confirms that LGB individuals experience disproportionate risk for multiple health risks.

Adolescence is a time of rapid sexual identity development, and not all youth will neatly fit into the identity labels of heterosexual, gay, lesbian, or bisexual (Savin-Williams & Ream, 2006). For some youth, discordance exists between sexual identity and behavior with youth expressing heterosexual identity but reporting sexual attraction to or sexual contact with same sex partners. For example, data from the Quebec Youth Risk Behaviour Survey found that 43.4% of youth who had same-sex sexual contact identified as heterosexual compared to 38.2% who identified as LGB (Igartua, Thombs, Burgos, & Montoro, 2009). From the 2015 national YRBS, 8.0% of students identified as gay, lesbian, or bisexual," while 6.3% of students had sexual contact with an individual of the same sex. (Kann, 2016a). A quarter (25.0%) of students who had sexual contact with the same sex identified as heterosexual. Research conducted among adult populations has provided some evidence that this discordant heterosexual group may be a particularly vulnerable population. For example, a survey of men in New York found that men who self-identified as heterosexual but had at least one sexual contact with an individual of the same-sex were less likely to receive an HIV test and were less likely to use a condom at last sex than their gay-identified peers (Pathela et al, 2006).

Few studies have explored the implications of discordance between sexual identity and sex of sexual contacts on the health risks among youth. Researchers using the 2003–2007 Massachusetts YRBS data found that sex of sexual contacts and identity were uniquely associated with smoking, having ever made a plan to commit suicide, and methamphetamine use (Matthews, Blosnich, Farmer, & Adams, 2014). Specifically, they found that among heterosexual youth, 3.1% had sexual contact with same sex individuals, with sexual identity and sex of sexual contacts uniquely predicting risk behavior. Additionally, data from the National Longitudinal Study of Adolescent to Adult Health found that among young adults discordance between sexual identity and behavior was correlated with increased depression among self-identified heterosexual females and mostly heterosexual males (Lourie & Needham, 2017). These findings underpin a greater need to understand the prevalence of

risk behaviors among heterosexual adolescents who have had sexual contact with individuals of the same sex. National studies of sexual orientation and health have tended to focus on either behavior or identity and have not considered the unique vulnerability of discordant heterosexual youth across multiple domains of risk.

The 2015 national YRBS included data on sexual identity and the sex of sexual contacts. These nationally representative data offered a unique opportunity to examine health risks among high school students whose sexual contacts are discordant with their heterosexual identity. The purpose of this study is to use the 2015 national YRBS data to examine differences between heterosexual high school students who have had sexual contact with the same sex and heterosexual high school students who have had sexual contact with only the opposite sex, for a variety of health risks that have been shown to disproportionately impact sexual minority youth, including bullying, sexual violence (i.e., forced sexual intercourse), substance use, seriously considering attempting suicide, and sexual risk behaviors (i.e., alcohol or drug use before last sexual intercourse and no condom use at last sexual intercourse; Kann, 2016a). The findings provide important information on the health risks of discordant heterosexual youth, which may help identify unique avenues for addressing the needs of these youth.

## Methods

### Study population

The YRBS is a nationally representative, cross-sectional, school-based survey that has been administered by the Centers for Disease Control and Prevention (CDC) biennially since 1991. The sampling frame for the 2015 national YRBS consisted of all regular public and private schools in the United States with students in at least one of grades 9–12 in the 50 states and the District of Columbia (Brener et al., 2013). YRBS data are weighted to adjust for school and student nonresponse, as well as the oversampling of black and Hispanic students.

Student participation in the 2015 national YRBS was both anonymous and voluntary, and conducted in accordance with local procedures for parental permission. During a regular class period, students completed a self-administered, 99-item questionnaire, and recorded their responses on an answer sheet or a computer-scannable booklet. The 2015 national YRBS school response rate was 69%, and the student response rate was 86%. Thus the overall response rate was 60% (product of the school and student response rates; Kann, 2016b). The sample size was 15,624 students. Missing data were not imputed. Additional details of the YRBS sampling strategies have been reported elsewhere (Kann, 2016b). The national YRBS was reviewed and approved by CDC's Institutional Review Board.

### Measures

Two dimensions of sexual orientation were assessed on the 2015 national YRBS – sexual identity and sex of sexual contacts (Kann, 2016a). Sexual identity was assessed with a single question, "Which of the following best describes you," including four response options: "Heterosexual (straight)", "Gay or lesbian," "Bisexual," and "Not sure." Sex of

sexual contacts was assessed with a single question, “During your life, with whom have you had sexual contact,” including four response options “I have never had sexual contact,” “Females,” “Males,” and “Females and males.” No definition was provided for sexual contact.

Discordance between heterosexual identity and sex of sexual contacts was constructed by combining the two measures of sexual orientation in the context of the sex of respondent. Students who identified as heterosexual but had sexual contact with individuals of the same or both the same and opposite sex were considered to be discordant for the purpose of this analysis. For example, male students who identified as heterosexual but had sexual contact with males or both males and females were categorized as discordant. Heterosexual students who had sexual contact with individuals of only the opposite sex were categorized as concordant.

**Health Risks and Behaviors.—**We examined three risk behavior domains: violence, substance use, and sexual risk taking. While the YRBS includes multiple measures of risk, we selected outcome measures where there was a robust literature suggesting disparities between heterosexual and non-heterosexual youth exist, a high enough prevalence to prevent results being unreliable or underpowered, and emerging public health issues (i.e., sexual violence, synthetic marijuana use, non-medical use of prescription drugs).

The violence domain included the following eight behaviors: (1) not going to school because of safety concerns; (2) being in a physical fight; (3) being bullied on school property; (4) being forced to have sexual intercourse; (5) being electronically bullied; (6) experiencing physical dating violence; (7) experiencing sexual dating violence; and (8) seriously considering attempting suicide. We did not include attempted suicide as a measure because of its low prevalence in the YRBS.

For the substance use domain, we included ever drinking alcohol, ever using marijuana, ever using prescription drugs without a doctor’s prescription, and ever using synthetic marijuana. We chose lifetime measures of substance use because the higher prevalence of lifetime as compared to current use ameliorates threats to statistical power and reliability. We included both measures of synthetic marijuana and marijuana use because these behaviors have differential associations with other risk behaviors (Clayton, Lowry, Ashley, Wolkin, & Grant, 2017).

For the sexual risk behavior domain, we included having four or more lifetime sex partners, alcohol or drug use before last sexual intercourse, first sexual intercourse before the age of 13 years, and no condom use during last sexual intercourse among students who were currently sexually active (excludes female students who only reported sexual contact with the same-sex regardless of sexual identity). The questionnaire wording, response options, and analytic coding for all of the health risks and behaviors examined our study are described in Table 1.

### Data analysis

The initial sample available for analysis consisted of 15,624 students. The sample was restricted to students who answered both the sexual identity question and the sex of sexual contacts question and who had a sexual identity of heterosexual, gay/lesbian or bisexual. Additionally, students who indicated on the sex of sexual contact question that they "have never had sexual contact" were excluded. These restrictions resulted in a sample of 7,638 students available for this analysis. Descriptive statistics were used to calculate the prevalence of each risk behavior for the following groups: heterosexual students who are discordant; heterosexual students who are concordant; gay/lesbian students; and bisexual students. Linear contrasts were conducted to compare results for all health risk behavior variables by sexual identity grouping (heterosexual concordant vs. heterosexual discordant, heterosexual concordant vs. gay/lesbian, heterosexual concordant vs. bisexual, heterosexual discordant vs. gay/lesbian, heterosexual discordant vs. bisexual, gay/lesbian vs. bisexual). Significant differences were denoted by $p < 0.05$. To account for the complex sample design of the survey, we conducted all analyses using SUDAAN statistical software (Research Triangle Institute, Research Triangle Park, NC).

## Results

### Demographics

Nationwide, 3.2% (95%CI: 2.6–4.1; n = 247) of students were categorized as discordant heterosexuals. Discordant heterosexual students were significantly more likely to be female than male (75.5%; 95%CI: 68.8–81.2, n = 181). However, no significant differences were identified by age or race/ethnicity (Table 2).

Table 3 presents the prevalence of the 16 risk behaviors separately for discordant heterosexuals, concordant heterosexuals, gay/lesbian students, and bisexual students. Discordant heterosexual students had a significantly higher prevalence of six injury/violence behaviors than their concordant heterosexual peers: being bullied on school property, being forced to have sexual intercourse, being electronically bullied, experiencing physical dating violence, experiencing sexual dating violence, and seriously considering attempting suicide. Discordant heterosexual students had a significantly lower prevalence of not going to school because of safety concerns than their gay/lesbian peers. Discordant heterosexual students had a significantly lower prevalence of being bullied on school property or seriously considering attempting suicide than their bisexual peers.

Discordant heterosexual students had a higher prevalence of ever using marijuana and ever using a prescription drugs without a doctor's prescription than their concordant heterosexual peers. There were not significant differences between discordant heterosexual students and their LGB peers for any of the substance use behaviors examined.

Discordant heterosexual students had a higher prevalence of drinking alcohol or using drugs before last sex and no condom use during last sexual intercourse than their concordant heterosexual peers. There were no significant differences between discordant heterosexual students and their LGB peers for any of the sexual risk behaviors examined.

## Discussion

In line with previous research, our analysis reveals a distinction between the prevalence of risk behaviors among discordant heterosexual students and their concordant heterosexual peers. We observed a higher prevalence of six violence, two substance use, and two sexual risk taking behaviors among discordant heterosexual students compared to their heterosexual peers who only had opposite-sex sexual contact. This difference suggests that discordant heterosexual high school students are a vulnerable population, as they have a greater risk for adverse outcomes compared to their heterosexual concordant counterparts.

Additionally, important differences emerged between discordant heterosexual students and their LGB peers. However, the significant differences between LGB youth and discordant students were in the opposite direction of the differences between concordant and discordant heterosexual students. Specifically, where there were significant differences between discordant students and their lesbian/gay (not going to school because of safety concerns) and bisexual (being bullied on school property, seriously considering attempting suicide) peers, the prevalence estimates were higher among LGB students than their discordant peers. This finding suggest that while discordant heterosexual students may be at increased risk of adverse outcomes, the prevalence of some health risk behaviors among this group differs from their LGB peers. Discordant heterosexual students do not appear to experience the same forms of discrimination as their LGB peers, and thus may be a distinct subgroup of youth with their own unique health risks.

Furthermore, these findings demonstrate that discordant heterosexual youth are disproportionately impacted by adverse experiences, such as forced sexual intercourse, bullying, physical and sexual dating violence, as well as seriously considering attempting suicide. Numerous longitudinal studies have linked adverse childhood experiences, such as sexual abuse, with poor physical and mental health outcomes in adulthood (Dube et al., 2001; Dube et al., 2003a; Dube, Felitti, Dong, Giles, & Anda, 2003b). Additionally, adverse experiences in childhood and adolescence have been shown to predict other risk behaviors, including substance use and sexual risk behaviors (Dube et al., 2001; Dube et al., 2003a; Dube, Felitti, Dong, Giles, & Anda, 2003b). Thus, discordant heterosexual youths' disproportionate exposure to violence and victimization may carry prolonged health consequences.

In addition to differences in violence, discordant students were more likely to ever use marijuana and prescription drugs without a doctor's prescription, drink alcohol or use drugs before last sexual intercourse, and not use a condom during last sexual intercourse, than their concordant heterosexual peers. These elevated rates of substance use and sexual risk behavior suggest that these youth may benefit from interventions that target these specific behaviors in a manner that is sensitive to their sexual orientation. Use of substances and engaging in sex risk behaviors may be coping strategies employed by sexual minority youth dealing with sexual stigma (King et al., 2008). Potentially, discordant heterosexual youth are contending with similar stresses, despite their identification as heterosexual. Future research may wish to explore this connection, and interventions seeking to address risk behaviors with discordant heterosexual youth may need to account for sexual stigma in the context of

adolescent sexual identity development for all youth, not just those who identify as lesbian, gay, or bisexual (Herek, 2009).

These differences between heterosexual discordant youth and their peers lead to two specific implications for clinical practice. When conducting risk assessments it is important for practitioners to consider both sexual identity and sex of sexual contacts, consistent with recommendations by the American Academy of Pediatrics (Levine, 2013). These findings as well as findings from other YRBS analyses continue to show that both of these dimensions of sexuality are uniquely associated with risk, and neglecting to assess either dimension limits practitioners' ability to adequately address patient needs (Kann, 2016; Matthews, Blosnich, Farmer, & Adams, 2014; Levine, 2013). Additionally, it is important for providers to be sensitive when considering sexual identity and behaviors. Although heterosexual discordant youth may benefit from similar interventions as their LGB peers, these interventions should be cautious about the labels applied to such youth, who do not identify as LGB. It is important the providers not make assumptions about patients' sexual orientation or behavior (Meyer & Frost, 2013).

## Limitations

Even though the YRBS has shown good test-retest reliability, YRBS data are self-reported and only generalizable to high school students in the United States (Brener et al., 2013). As such, the extent of over or -under reporting of behaviors cannot be determined. Furthermore, these findings are not generalizable to adolescents not currently enrolled in school. Although, according to a 2012 report, nationwide about 3% of individuals aged 16–17 years were either not enrolled in a high school program, nor had completed high school (Stark & Noel, 2015). The 2015 national YRBS did not include questions pertaining to gender identity or expression. Therefore, we were unable to consider gender variant youth within our analyses. Additionally, the sample sizes were too small to consider discordance between sexual identity and behavior among LGB high school students. Finally, a nuance that we were unable to address is the extent to which discordance between sexual behavior and identity observed among some heterosexual students is a stage of identity development or an indicator of sexual fluidity during adolescence (Savin-Williams & Ream, 2007). More longitudinal research considering attraction, sexual behavior, and identity is needed to better assess the relationship between sexual development and health outcomes.

We lacked statistical power to meaningfully examine difference between sexual identity, sex of sex contacts, and biological sex, because there were only 66 males in the sample who identified as heterosexual and had a sex contact of the same sex. However, there were significantly more discordant heterosexual female students than male. These differences echo work in developmental psychology (Savin-Williams & Diamond, 2000) and findings from the National Survey of Adolescent Health (Lourie & Needham, 2017), which suggest that sexual identity and behavior emerge differently for girls and boys across adolescence. However, more research is need on the biopsychosocial underpinnings of this difference. The YRBS only contains information on risk behaviors; it does not contain data on inter or intrapersonal factors that may explain this difference.

### Implications for policy and practice

This study is the first to provide nationally representative data on the association between heterosexual discordance and increased health risk behaviors. Our results suggest discordant heterosexuals may be a unique population with specific health needs. Like LGB youth, discordant heterosexual youth tend to have higher levels of risk behavior than their concordant heterosexual peers; however, they do not identify themselves as sexual minorities. This distinction carries implications for appropriate clinical and programmatic approaches to risk reduction, including considering the specific needs of discordant heterosexual high school students in health promotion efforts and ensuring this population's access to stigma free care. At this time, limited research has considered how to address this population's health needs or to design interventions to improve their health, and continued efforts are needed to determine the best approaches for these highly vulnerable youth.

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**Table 1.**

Questions and response options for the 16 risk behaviors examined.

| | Question (Response Options) | Calculation |
|---|---|---|
| Injury/Violence | | |
| Did Not Go To School Because of Safety Concerns | During the past 30 days, on how many days did you not go to school because you felt you would be unsafe at school or on your way to or from school? (0 days, 1 day, 2 or 3 days, 4 or 5 days, 6 or more days) | >0 days versus 0 days |
| Had Been In a Physical Fight | During the past 12 months, how many times were you in a physical fight (0 times, 1 time, 2 or 3 times, 4 or 5 times, 6 or 7 times, 8 or 9 times, 10 or 11 times, 12 or more times) | >0 times versus 0 times |
| Bullied on School Property | During the past 12 months, have you ever been bullied on school property (Yes/no) | Yes versus no |
| Forced to Have Sexual Intercourse | Have you ever been physically forced to have sexual intercourse when you did not want to? (Yes/No) | Yes versus no |
| Electronically Bullied | During the past 12 months, have you ever been electronically bullied? (Yes/No) | Yes versus no |
| Experienced Physical Dating Violence | During the past 12 months, how many times dies someone you were dating or going out with physically hurt you on purpose (I did not date or got out with anyone during the past 12 months, 0 times, 1 time, 2 or 3 times, 4 or 5 times, 6 or more times) | >0 times versus 0 times |
| Experienced Sexual Dating Violence | During the past 12 months, how many times dies someone you were dating or going out with force you to do sexual things that you did not want to do (I did not date or got out with anyone during the past 12 months, 0 times, 1 time, 2 or 3 times, 4 or 5 times, 6 or more times) | >0 times versus 0 times |
| Seriously Considered Attempting Suicide | During the past 12 months, did you ever consider attempting suicide? (Yes/no) | Yes versus no |
| Substance Use | | |
| Ever Drank Alcohol | During your life, on how many days have you had at least one drink of alcohol? (0 days, 1 or 2 days, 3 to 9 days, 10 to 19 days, 20 to 39 days, 40 to 99 days, 100 or more days) | >0 days versus 0 days |
| Ever Used Marijuana | During your life, how many times have you used marijuana? (0 times, 1 or 2 times, 3 to 9 times, 10 to 19 times, 20 to 39 times, 40 to 99 times, 100 or more times) | >0 times versus 0 times |
| Ever Used Prescription Drugs Without a Doctor's Prescription | During your life, how many times have you taken a prescriptions drug (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription? (0 times, 1 or 2 times, 3 to 9 times, 10 to 19 times, 20 to 39 times, 40 or more times) | >0 times versus 0 times |
| Ever Used Synthetic Marijuana | During your life, how many times have you used synthetic marijuana (also called K2, Spice, fake weed, King Kong, Yucatan Fire, Skunk, or Moon Rocks)? (0 times, 1 or 2 times, 3 to 9 times, 10 to 19 times, 20 to 39 times, 40 or more times) | >0 times versus 0 times |
| Sexual Risk Behavior | | |
| Had Four or More Lifetime Sex Partners | During your life, with how many people have you had sexual intercourse? (I have never had sexual intercourse, 1 person, 2 people, 3 people, 4 people, 5 people, 6 or more people) | ≥4 people versus <4 people |
| Drank Alcohol or Used Drugs Before Last Sexual Intercourse | Did you drink alcohol or use drugs before you had sexual intercourse the last time? ((have never had sexual intercourse, Yes, No) | Yes versus No |
| Had First Sexual Intercourse Before Age 13 Years | How old were you when you had sexual intercourse for the first time? (I have never had sexual intercourse, 11 years old or younger, 12 years old, 13 years old, 14 years old, 15 years old, 16 years old, 17 years old or older) | < 13 years old versus ≥ 13 |
| No Condom Use During Last Sexual Intercourse (Excludes Females Who Only Had Same-Sex Sexual Contact) | The last time you had sexual intercourse, did you or your partner use a condom (I have never had sexual intercourse, Yes, No) | Yes versus No |

**Table 2.**

Demographic characteristics by sexual identity[a].

| | Sexual identity | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Concordant Heterosexual (sexual contact with opposite sex only) | | Discordant Heterosexual (sexual contact with both sexes or same sex only) | | Gay/Lesbian | | Bisexual | |
| **Demographic characteristics** | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** |
| Overall | 6,570 | 84.6 | 247 | 2.8 | 199 | 2.1 | 622 | 7.5 |
| Sex | | | | | | | | |
| Male | 3,735 | 57.4 | 66 | 24.5 | 94 | 47.0 | 95 | 16.6 |
| Female | 2,835 | 42.6 | 181 | 75.5 | 103 | 53.0 | 518 | 83.4 |
| Race/ethnicity[b] | | | | | | | | |
| White, non-Hispanic | 2,955 | 55.6 | 105 | 42.5 | 60 | 34.2 | 271 | 51.7 |
| Black, non-Hispanic | 750 | 14.3 | 42 | 22.5 | 39 | 30.9 | 73 | 14.8 |
| Hispanic | 2,142 | 22.0 | 76 | 26.3 | 72 | 23.4 | 187 | 22.9 |
| Age group | | | | | | | | |
| 12–14 years | 411 | 5.3 | 24 | 9.5 | 16 | 8.3 | 60 | 9.1 |
| 15–16 years | 3,010 | 45.7 | 117 | 46.9 | 82 | 44.4 | 313 | 52.7 |
| 17 or more years | 3,141 | 49.0 | 105 | 43.6 | 101 | 47.4 | 247 | 38.2 |

[a]Sample *n* is unweighted, percentage is weighted.

[b]While racial/ethnic groups other than non-Hispanic black ("black"), non-Hispanic white ("white"), and Hispanic students (who might be of any race), were included in all analyses, their data were not presented because their sample size was insufficient for meaningful interpretation.

**Table 3.**

Prevalence of selected risk behaviors by sexual identity with separate estimates for heterosexual students who report same-sex sex partners and heterosexual students who only report opposite-sex partners.

| | Discordant Heterosexual (Same or Same and Opposite-Sex Sex Contacts) | Concordant Heterosexual (Only Opposite-Sex Sex Contacts) | Gay or Lesbian | Bisexual |
|---|---|---|---|---|
| Injury/Violence | | | | |
| Did Not Go To School Because of Safety Concerns[d] | 9.0 (5.4,14.6) | 5.5 (4.5,6.6) | 20.6 (14.1,29.3) | 11.7 (9.1,15.0) |
| Had Been In a Physical Fight[e] | 32.7 (23.9,42.8) | 29.9 (28.0,31.9) | 31.9 (21.6,44.4) | 33.8 (27.4,40.8) |
| Bullied on School Property[f] | 27.9 (22.1.,34.6) | 20.4 (18.7,22.2)[a] | 26.9 (19.2,36.3) | 40.0 (34.5,45.9) |
| Forced to Have Sexual Intercourse[g] | 21.6 (14.4,31.1) | 8.5 (7.3,9.9)[a] | 15.9 (10.1,24.2)[b] | 28.0 (22.6,34.2) |
| Electronically Bullied[h] | 30.7 (22.4,40.4) | 16.8 (15.2,18.6)[a] | 25.3 (17.7,34.8) | 34.4 (29.0,40.3)[b] |
| Experienced Physical Dating Violence[i] | 21.1 (13.6,31.1) | 10.6 (9.4,11.9)[a] | 17.8 (10.6,28.6) | 20.5 (17.1,24.3)[b] |
| Experienced Sexual Dating Violence[j] | 29.8 (21.6,39.5) | 9.9 (8.8,11.2)[a] | 20.2 (12.7,30.5)[b] | 27.2 (22.4,32.5)[b] |
| Seriously Considered Attempting Suicide[f] | 33.6 (26.1,42.1) | 18.2 (16.9,19.6)[a] | 39.7 (26.8,54.1)[b] | 53.2 (48.1,58.3) |
| Substance Use | | | | |
| Ever Drank Alcohol[k] | 86.1 (79.6,90.8) | 80.7 (78.8,82.5) | 81.7 (69.7,89.6) | 84.9 (79.3,89.2) |
| Ever Used Marijuana[l] | 66.1 (58.9,72.6) | 57.1 (53.8,60.4)[a] | 74.2 (62.4,83.3)[b] | 64.9 (59.8,69.6)[b] |
| Ever Used Prescription Drugs Without a Doctor's Prescription[m] | 36.1 (26.8,46.6) | 23.7 (21.9,25.5)[a] | 40.7 (33.1,48.8)[b] | 29.7 (25.8,34.0) |
| Ever Used Synthetic Marijuana[n] | 20.6 (14.6,28.3) | 14.1 (12.2,16.2) | 17.8 (11.1,27.3) | 18.2 (14.8,22.2)[b] |
| Sexual Risk Behavior | | | | |
| Four or More Lifetime Sex Partners[o] | 24.2 (16.8,33.6) | 21.3 (18.8,24.0) | 25.9 (17.5,36.5) | 22.0 (18.2,26.4) |
| Drank Alcohol or Used Drug Before Last Sexual Intercourse[p] | 37.0 (23.3,53.2) | 19.6 (17.5,21.8)[a] | 24.7 (13.7,40.6) | 21.7 (16.8,27.5) |
| Had First Sexual Intercourse Before Age 13 Years[o] | 11.8 (6.3,20.9) | 6.4 (5.2,7.9) | 13.9 (7.5,24.3) | 10.8 (7.5,15.2)[b] |
| No Condom Use During Last Sexual Intercourse[p] (Excludes Women Who Only Have Same-Sex Contacts) | 59.3 (43.3,73.5) | 41.8 (38.6,45.1)[a] | 55.8 (26.3,81.7) | 47.8 (40.7,55.1) |

[a]Linear contrast indicates significantly different from discordant heterosexual group (same or same and opposite-sex sex contacts), $P<0.05$.

[b]Linear contrast indicates significantly different from concordant heterosexual group (only opposite-sex sex contacts), $P<0.05$.

[c]Linear contrast indicates significantly different from gay/lesbian group, $P<0.05$.

[d] On at least 1 day during the 30 days before the survey;

[e] One or more times during the 12 months before the survey;

[f] During the 12 months before the survey;

[g] When they did not want to;

[h] Counting being bullied through e-mail, chatrooms, instant messaging, Websites, or testing during the 12 months before the survey;

[i] Being physically hurt on purpose (counting being hit, slammed into something, or injured with an object or weapon) by someone they were dating or going out with one or more times during the 12 months before the survey, among students who dated or went out with someone during the 12 months before the survey;

[j] Being forced to do sexual things (counting kissing, touching, or being physically forced to have sexual intercourse) they did not want to do by someone they were dating or going out with one or more times during the 12 months before the survey, among students who dated or went out with someone during the 12 months before the survey;

[k] At least one drink of alcohol on at least 1 day during their life;

[l] One or more times during their life;

[m] Such as Oxycontin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax, one or more times during their life;

[n] Also called “K2,” “Splice,””Fake weed,””King Kong,””Yucatan Fire,””Skunk,”or “Moon Rocks,”one or more times during their life;

[o] students who had no sexual contact are excluded from these analyses;

[p] Among students who were currently sexually active;