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## The Current Status of Sex Education in U.S. Colleges and Universities: A School Website Content Review

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### ABSTRACT

This study used a website content analysis to examine the prevalence of sex education in higher education institutions throughout the US. A total of 413 postsecondary institutions varying in type (public, private) and size (small, medium, large) were chosen via stratified random sampling. Each of the 413 school websites was reviewed to determine whether sexual health programs, sexual violence prevention programs, and basic sexual health information and resources were provided to their school community. Results show that the majority of institutions reviewed, regardless of the type and size, provided sexual assault prevention programs, whereas a smaller proportion of institutions (mostly public and large) provided sexual health programs. Findings confirm the importance and urgency of allocating more resources to comprehensive sex education in US higher education.

### KEYWORDS

Postsecondary institutions;  
sex education; sexual  
health; sexual violence

College occupies a developmentally important time and place for many young adults in the United States (US). Over 40% of the US population between the ages of 18 and 24 (over 12 million) enrolled in college in 2019 (Institute of Education Sciences, National Center for Education Statistics [IES NCES], 2021). This age range, coinciding with emerging adulthood, represents an important developmental “interlude” because it provides a bridge between unresolved adolescent challenges and the transition to adulthood (Arnett, 2007). One of the more pressing developmental challenges during this transition is the pursuit and resolution of one’s sexuality and its eventual incorporation into personal identity (Garcia et al., 2012; Halpern & Kaestle, 2014). The prominence of sexual behavior for this age group is reinforced by the observation that nearly 80% of emerging adults (79% of women and 77% of men) experience their first sexual intercourse by age 20 (Martinez & Abma, 2020). Although many individuals in this age group experience the pleasure and benefits of sexuality, they are not

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completely immune to some of its unintended consequences. Specifically, the Centers for Disease Control and Prevention (CDC) estimates that a quarter of the sexually active population in the US are adolescents and young adults ages 15–24 years, yet in 2018, nearly half of this age group made up the 26 million reported cases of sexually transmitted infections (STIs) in the US (Centers for Disease Control and Prevention [CDC], 2021a). STIs are not the only health concern for this age group; sexual violence is also an unfortunate reality. Results of the 2016/2017 National Intimate Partner and Sexual Violence Survey indicate that 54.3% of women and 30.7% of men in the US reported having experienced some form of sexual violence in their lifetime (Basile et al., 2022). Of those who reported having experienced attempted or completed rape, 83.4% of women and 86.1% of men reported the event occurred before they were 25.

To address this harsh reality faced by young adults, colleges and universities devote substantial resources to sexual assault prevention. The unintended effect of this outlay of resources is the perception among students that sexual health promotion has a much lower priority (Hubach et al., 2019). Lack of sexual health education leaves students unprepared for giving or obtaining sexual consent, negotiating “dos and don’ts” prior to or during sex, and choosing different methods of protection or contraception that fit their needs. Aligned with this concern, there has, to date, been no systematic review of how ubiquitous sexual health programs are relative to sexual violence prevention programs across the US. To fill this gap, we conducted a web-based content analysis to assess the prevalence and instructional modalities of sexual health and sexual assault prevention programs in colleges and universities nationwide.

### ***The current status of sex education in higher education***

In the US, there is currently no federal regulation that mandates sex education in secondary schools. This lack of federal oversight creates inconsistencies in the availability and content of sex education in the K-12 curriculum across the country (Lindberg et al., 2016). Sex education programs provided in secondary schools are usually based on either an abstinence-only or comprehensive approach. Abstinence-only (or abstinence-plus) programs are designed with the specific goal of promoting sexual risk avoidance (e.g., learning ways to avoid pregnancy or STIs), often emphasizing abstinence until marriage as the only healthy option. Program content includes sexual anatomy and reproductive functioning (Guttmacher Institute, 2022; Marques et al., 2017) and is currently considered the most common approach across the US. Comprehensive sex education, on the other hand, generally provides more evidence-based, medically accurate information and covers a variety of

topics, including not only dating and intimate partner violence prevention, but also condom use, sexual consent, appreciation of sexual diversity, child sex abuse prevention (e.g., body ownership, self-protection), sexual orientation, and strategies for creating and sustaining healthy relationships (e.g., communication skills, social-emotional learning) (Goldfarb & Lieberman, 2021; Guttmacher Institute, 2022; Marques et al., 2017).

Unlike secondary schools, postsecondary schools in the US face strict federal regulations specifically outlining the need for sexual violence prevention. US colleges and universities that participate in federal student aid programs are mandated by the Clery Act of 1990<sup>1</sup> (20 USC §1092[f]) to provide crime statistics (including sexual violence) that occur on and near their campuses. Part of the Clery Act is the Federal Campus Sexual Assault Victims' Bill of Rights of 1992 (Public Law: 102–325, Section 486[c]), which aims to protect the basic rights of sexual assault victims, such as being notified of their legal options, the outcome of legal proceedings, and availability of counseling services among other rights. The 2013 Campus Sexual Violence Elimination (Campus SaVE) Act (Public Law: 113–114, Section 304) amends the Clery Act, adding additional requirements for institutions to address and prevent sexual violence on campus. Given these federal mandates, both public and private colleges and universities that receive federal funding are required to provide resources and educational programming for sexual assault prevention. Sexual assault prevention programs can be part of institutional policies to comply with Title IX of the Education Amendments of 1972 (or simply “Title IX”; 20 USC §1681–1688), a federal legislation designed to ban gender-based discrimination in educational (and later athletic) programs. The law has now been extended to cover any forms of sexual violence (e.g., sexual coercion, harassment, rape) as sexually hostile environments discriminate a group of individuals vulnerable to sexual violence. Bystander intervention programs are often considered synonymous to sexual violence prevention programs given that a bystander approach has been used as a common and effective means to prevent sexual assault (Banyard et al., 2004).

Federal mandates are not the only reasons why sex education in US higher education emphasizes sexual violence prevention. First, the high prevalence of sexual violence in university settings is a major concern. Sinozich and Langton (2014) reported that from 1997 to 2013, women in the age group between 18 and 24 were 2–3 times more likely than women in other age groups to have been sexually victimized. A more recent report by Cantor et al. (2020) estimated that in 2019, 25.9% of undergraduate women and 6.8% of undergraduate men experienced nonconsensual sexual penetration and touching. College students' heightened vulnerability to sexual perpetration and victimization can be explained in part by their frequent and large consumption

of alcohol (White & Hingson, 2013),<sup>2</sup> which diminishes their ability to refuse unwanted sexual advances and increases the risk of acquaintance sexual assault (Abbey, 2002). Second, college-attending young adults who have experienced sexual victimization are more likely to get revictimized (Norris et al., 2021), show poor academic performance (Jordan et al., 2014), and experience serious mental health issues including posttraumatic stress disorder, depression, and anxiety (Carey et al., 2018; Clum et al., 2000; Klump, 2006). Third, it is also well documented that college-bound women report a greater fear of crime, particularly sexual assaults (Kelly & Torres, 2006), even though non-sexual, violent victimization is more common among men on campus (Baum & Klaus, 2005; Hale, 1996). The perception of lack of campus safety can promote avoidant and precautionary behaviors (Wilcox et al., 2007), limiting social and academic opportunities and creating chronic stress for college students, particularly women.

To address the serious implications of sexual victimization (and fear of it) for individuals' well-being as well as for a school's safety and reputation, a number of colleges and universities have implemented sexual assault prevention programs. According to Vladutiu et al.'s (2011) synthesis of eight published review articles, college- or university-based sexual assault prevention programs are generally effective in changing rape (e.g., pro-rape, rape-related) attitudes, decreasing rape myth acceptance, and increasing knowledge and awareness about rape and sexual assault. A systematic review of programs that utilized bystander intervention as a means to prevent sexual violence (Mujal et al., 2021) also indicated that in-person bystander intervention programs were successful in facilitating positive changes similar to those reported by Vladutiu et al. (2011). Some sexual assault prevention programs that utilize well-trained peer educators have demonstrated similar success in changing attitudes toward rape and increasing willingness to prevent or intervene in rape among college men (Foubert & Perry, 2007; Stein, 2007). However, it is important to note that changes in attitudes do not always directly translate into behavioral changes (Wulfert & Wan, 1993), and confidence in knowledge does not guarantee the accuracy of knowledge (Puzio & Konradi, 2016).

### ***Rationale for the current study***

Preventing sexual violence represents one step forward toward creating a safe campus environment. However, programs that emphasize sexual and reproductive health and safe sex practices are equally important for students' well-being, even though their availability seems less ubiquitous in the US than sexual violence prevention programs. While the scarcity of sexual health programs in higher education is concerning, Wong et al. (2019)

reported in their systematic review that peer education could be effective in increasing sexual health knowledge and creating behavioral changes (e.g., increased HIV testing and condom use). In addition, students who attend institutions that have tangible sexual health resources (e.g., HIV/STI testing, condoms) readily available on campus are more likely to utilize them (Eisenberg et al., 2013). These findings suggest that the availability of peer education and sexual health resources seems to have a meaningful impact on students' sexual knowledge, attitude, and behaviors. However, there is currently no study providing a panoramic view of sex education including its availability and instructional modalities in US postsecondary institutions. In an effort to fill this gap, we conducted a systematic content analysis of institutional websites regarding three areas: (1) sexual health programs, (2) sexual violence prevention/bystander intervention programs, and (3) sexual health information and resources. To achieve this, we used a representative sample of 4-year degree-granting colleges and universities in the US.

There have been similar studies that conducted a website content analysis. For example, Eisenberg et al. (2013) used the College Resources and Sexual Health (CRaSH) Inventory (Eisenberg et al., 2012) to conduct a thorough website content analysis of sexual health information and services for 28 institutions of higher education in Minnesota. Judson et al. (2010) conducted a similar website content review focusing on sexual health information and resources. Their review involved 23 campuses of the California State University system. More recently, Cushing et al. (2019) did the same for 96 institutions in Georgia. A web-based content analysis has also been conducted regarding sexual violence information and resources. Hayes-Smith and Hayes-Smith (2009) examined the availability and quality of women's resource centers and sexual assault-related information by analyzing websites of 60 postsecondary institutions in the Great Lakes region (i.e., Michigan, Illinois, Indiana, Ohio, Minnesota, Wisconsin). A similar website review of information pertaining to sexual violence information and/or resources was conducted with 28 institutions in New Jersey (Schwartz et al., 2015), 74 institutions in Texas (Franklin et al., 2016), and 75 elite institutions (Dunlap et al., 2018).

While these website content analyses focused on specific states (e.g., Texas, California, Georgia), Stanley et al. (2019) and Aubrey et al. (2020) used a stratified random sample of 400 colleges and universities in the US. In both of these studies, the authors reviewed student health center websites with respect to sexual health information (e.g., availability, types, and depth of sexual health topics). The use of a nationally representative sample of postsecondary institutions enabled them to provide a more thorough and complete perspective on the prevalence of sexual health information culled from institutional websites. However, in both cases, the authors did

not focus on sex education programs. Therefore, the current study will be the first to provide a nationally representative perspective on the prevalence of sex education programs (including both sexual health and sexual violence prevention) in higher education institutions throughout the US. In addition to the provision of these two types of sex education, a third area of web-based information (i.e., sexual health information and resources) was reviewed so that its availability could be examined in light of sex education programming.

## Method

### *Institution sampling procedure*

The current study involved canvassing and reviewing the content of college and university websites to gather information regarding sexual health programs, sexual violence prevention programs, and sexual health information and resources available to students. In order to create a nationally representative sample of US postsecondary institutions, we conducted stratified random sampling in four steps: (1) identifying institutions that met the inclusion criteria, (2) creating eight strata, (3) determining the number of institutions to select for each stratum to represent 20% of the institutions, (4) randomly selecting the institutions for each stratum.

In the first step, we identified all 4-year, nonprofit colleges and universities in the US (both public and private) that grant bachelor's degrees, across the 50 states and the District of Columbia (DC). We excluded five major US territories: American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the US Virgin Islands. We excluded for-profit institutions as well as those that grant only associate degrees, certificates, and/or advanced degrees. We did not include two-year institutions (e.g., community colleges) because their student population is composed differently, and their setting is not conducive to staging sex education. Specifically, a majority of traditional-age, first-time students choose to attend four-year, baccalaureate degree-granting institutions (American Association of Community Colleges, 2019), while the average age of community college students is 29 (American Association of Community Colleges, 2022). In addition, most community colleges do not provide on-campus housing (American Association of Community Colleges, 2016), making it unlikely for students to engage in extracurricular activities or utilize sexual health resources available on campus.

In the Summer and Fall of 2020, two undergraduate Research Assistants (RAs) compiled a complete list of colleges and universities that met the inclusion criteria outlined above. Information was drawn from the website ([www.nces.ed.gov/collegenavigator](http://www.nces.ed.gov/collegenavigator)), which is operated by the National



Center for Education Statistics (NCES).<sup>3</sup> The NCES database produced a list of 2,090 institutions across all 50 states and DC, consisting of 720 public and 1,370 private institutions that meet the inclusion criteria.

Figure 1 shows the next two steps taken to select representative schools from the wider sampling frame. In the second step, we created a total of eight “strata” based on the list of institutions created above. The first two strata include 51 flagship state universities (representing 50 states and DC) and separately top 50 private institutions. Flagship universities are typically the best known, largest, most selective, and most research-intensive institutions of higher education in the state, which make them very distinct from the rest of higher education institutions. Top 50 private institutions, which were identified based on the US News Best College rankings ([www.usnews.com/best-colleges](http://www.usnews.com/best-colleges)), are also distinct from the rest of the institutions across the US as they are typically highly selective, research-intensive, and backed by considerable financial resources given their relatively large endowments.

The remaining six strata were created based on two factors: (a) the source of funding (i.e., public, private) and (b) school size (i.e., small, medium, large). Institutions were categorized into public or private given the financial differences between the two types of schools with the latter typically being financially more resourceful. Different campuses that belong to the same university (e.g., University of Wisconsin, University of Illinois) were counted as separate institutions given different sizes and student demographics. School sizes were determined based on the number of undergraduate students enrolled in 2018 (which was the most recent year in which NCES collected data as of Summer and Fall 2020). Considering limited financial resources in very small institutions, we excluded those with fewer than 500 undergraduate students, including 20 public and 402 private institutions. Public and private institutions were then categorized by size based on different cutoffs for public vs. private institutions as the former is generally considerably larger than the latter: small ( $\geq 500$ ,  $< 5,000$  for public;  $\geq 500$ ,  $< 1,000$  for private), medium ( $\geq 5,000$ ,  $< 10,000$  for public;  $\geq 1,000$ ,  $< 2,000$  for private), and large ( $\geq 10,000$  for public;  $\geq 2,000$  for private). Of 649 public institutions (i.e., excluding 51 flagship and 20 “very small” institutions from 720), this sizing procedure produced three strata: 254 small (39%), 181 medium (28%), and 214 large (33%). Of 918 private institutions (i.e., excluding top 50 and 402 “very small” institutions from 1,370), we created another three strata: 221 small (24%), 343 medium (37%), and 354 large (39%).

The third step of stratified random sampling procedure was to determine the numbers of institutions to randomly select from each of the six strata (excluding flagship public and top 50 private institutions) to create a sample that represented 20% of the total institutions (i.e.,



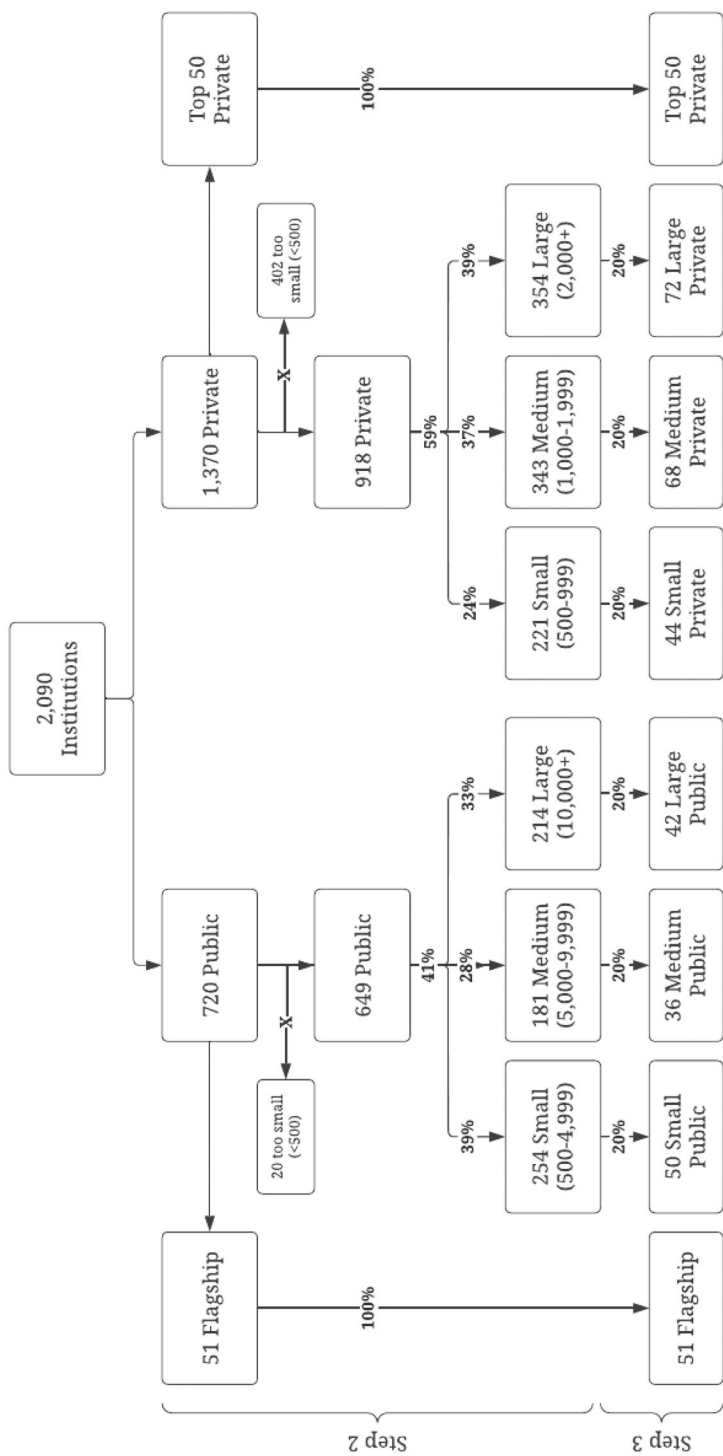


Figure 1. Institution sampling procedure: Step 2 and Step 3.

313.4 = 20% of 1,567). This step also involved maintaining the actual proportions of public vs. private institutions as well as of three different school sizes (as outlined in the previous paragraph). The numbers for the six strata on the bottom of [Figure 1](#) are for the final sample and reflect the actual proportions of public/private and small/medium/large institutions.

In the final step, we arranged institutions in each of the six strata in alphabetical order based on the first letter of the 50 states and DC (i.e., from Alaska to Wyoming) and numbered them. For example, in the small public stratum, 254 small public institutions were organized from Alaska to Wyoming and numbered from 1 to 254 from the top to the bottom of the list. In this case, 1 was given to the University of West Alabama, and 254 was given to the University of Wisconsin-Parkside (note that the state of Wyoming did not have any small public institution). Then, using an online random number generator ([www.random.org](http://www.random.org)), we generated a specific number of integers for each stratum (e.g., for small public institutions, 50 integers were randomly selected from 1 to 254). For each stratum, the institutions with the assigned numbers that were randomly chosen were selected to be part of the final sample.

### ***Institution sample description***

The sampling procedure described above resulted in a total of 413 institutions, consisting of 179 public (i.e., 50 small, 36 medium, 42 large, 51 flagship) and 234 private institutions (i.e., 44 small, 68 medium, 72 large, 50 top 50). [Table 1](#) indicates the average size of the undergraduate student body for each school size along with the average graduation and transfer-

**Table 1.** Descriptive statistics of reviewed institutions: mean (standard deviation).

Types of institutions ( $N = 413$ )	Undergraduate students	Graduation rate <sup>a</sup>	Transfer-out rate <sup>a</sup>
Public ( $n = 179$ )			
Small ( $n = 50$ )	2,627.78 (1,390.87)	42.07% (16.80)	28.56% (11.93)
Medium ( $n = 36$ )	7,324.50 (1,389.26)	48.33% (15.32)	26.13% (10.28)
Large ( $n = 42$ )	19,861.10 (9,205.61)	50.69% (18.91)	18.47% (7.47)
Flagship ( $n = 51$ )	22,949.12 (9,924.69)	71.35% (14.62)	16.46% (7.67)
Public total	13,405.82 (11,141.69)	54.10% (20.02)	22.40% (10.74)
Private ( $n = 234$ )			
Small ( $n = 44$ )	751.23 (146.15)	43.00% (15.72)	25.18% (15.40)
Medium ( $n = 68$ )	1,493.24 (288.33)	55.37% (18.78)	26.53% (13.83)
Large ( $n = 72$ )	4,622.11 (5,465.63) <sup>b</sup>	63.86% (14.82)	22.44% (11.15)
Top 50 ( $n = 50$ )	8,740.98 (5,706.06)	89.70% (5.36)	7.50% (4.19)
Private total	3,865.11 (4,972.90)	63.11% (21.53)	22.48% (13.49)
Total	8,000.19 (9,488.13)	59.26% (21.35)	22.43% (12.07)

Note: <sup>a</sup>Some institutions did not have graduation rate and/or transfer-out rate available on the NCES website, thus the average was calculated based on the Institutions with available information. <sup>b</sup>Liberty University (in Virginia) was an outlier in terms of its size of undergraduate student body (i.e., 45,935), which inflated the standard deviation. Without Liberty University, the average number of undergraduate students was 4,040.24 with a standard deviation of 2,360.98.

out rate. The average number of undergraduate students was considerably larger for public than private institutions, whereas the average graduation and transfer-out rates were comparable.

### ***Reviewed content of school websites***

There were three areas of information that the research assistants (RAs) searched on school websites: (1) sexual health programs, (2) sexual violence prevention/bystander intervention programs, and (3) sexual health information and resources. For sexual health programs, four factors were reviewed: (a) availability, (b) mandatory participation, (c) in-person vs. online format (or both), and (d) availability of peer educators. Sexual health programs are similar to comprehensive sex education in secondary schools, often focusing on a variety of sexuality-related topics such as birth control/condoms, diversity in sexual orientation, and healthy relationships. If a school website indicated that peer educators addressing some aspects of sexual health were available, it was coded as available. Any courses for credits (e.g., human sexuality, gender studies) were not considered as sexual health programs. For sexual violence prevention programs, the same four factors as for sexual health programs were reviewed on websites. This type of programs often offers information about Title IX, the definition of sexual assault/rape and sexual consent, the signs of potential sexual assault, and what actions to take in the event of sexual assault. Periodic school events that focus on sexual violence prevention and awareness such as “Take Back the Night,” “Denim Day,” and “Clothesline Project” were not considered in the analysis. For peer educators, we applied the same rule as sexual health programs. For sexual health information and resources, five areas of content were reviewed on websites: (a) methods of protection, (b) sexual orientation, (c) HIV/STIs facts, (d) HIV/STI testing offered on campus, and (e) condoms provided on campus. The information on (a), (b), and (c) did not have to be developed by the institution. We counted information as available as long as the website offered the names of organizations (e.g., CDC) and provided hyperlinks from which information could be obtained. For HIV/STI testing, we recorded whether the testing was offered on campus and whether information on the location of community testing centers was offered if the testing was not available on campus. Similarly, we also noted whether condoms were offered on campus and whether they were provided free of charge or not.

### ***Procedure in collecting information on school websites***

Prior to collecting any of the website information, the first author trained all undergraduate RAs how to find relevant information on school websites

and what information would comport with the intended review's purpose. This training involved a few hour-long Zoom meetings during which we visited some websites as examples and demonstrated how to find certain information in different ways. Then three pairs of RAs were formed, and each coder of each pair conducted independent coding for 20–30 websites until their percent perfect agreement reached minimum of 70%. Each pair was assigned weekly to a different set of 10 schools for which they would independently access school websites, obtain the required information, and record appropriate codes (i.e., 0 = no/not available/online; 1 = yes/available/in person) to discuss with the first author the following week. The weekly meetings with the first author provided opportunities to discuss any questions regarding website information, exchange tips on how to optimize information searches on school websites and clarify discrepancies between the RAs. Each pair was assigned to a total of two to three strata of schools to conduct online information searches on school websites. All 413 school websites were coded by two coders from one of the three pairs and went through rigorous vetting at weekly meetings.

We used multiple strategies to search for information, as each institution presents information at different locations of their website using a different format. One strategy relied on using the search bar within each school website. Basic keywords (and their variations) were used for each category of information: (1) “sex,” “sexual health,” “sex education,” “peer training,” and “peer mentor” for sexual health programs; (2) “Title IX,” “sexual violence,” “sexual assault,” “rape,” “bystander,” “peer training,” and “peer mentor” for sexual violence prevention programs; (3) “condoms,” “protection,” “contraception,” “birth control,” “LGBTQ” “sexual orientation,” “STD,” “STI,” “HIV,” and “AIDS” for sexual health information and resources. These keywords were by no mean exhaustive, and each RA was instructed to use as many keywords as possible for each category if they failed to find information with the initial set of keywords. Another strategy involved locating the annual security report by the campus police/fire department, the Clery report, or any similar annual reports. The use of these documents was critical as they were sometimes the sole source of information regarding sexual assault prevention programs. The RAs also visited specific pages on each school website to find information, such as the student wellness center, health center, and Title IX office.

All the website content searches were completed during Fall 2020. If websites stated that some programs were not available due to the pandemic but would be available otherwise, we treated them as available. Inter-rater reliabilities were determined using percent perfect agreement as well as Bennett et al.'s (1954) S score. S score is a chance-adjusted reliability index considered more suitable than the Kappa statistic when there is a substantial imbalance in a

2 × 2 table's marginal totals of binary agreements and disagreements between two coders (Cicchetti & Feinstein, 1990; Feinstein & Cicchetti, 1990). For example, both coders reviewed 40 school websites for the availability of information on sexual orientation. They agreed that 38 of them had the information available (code = 1), while they disagreed on two remaining schools where they coded the opposite of each other (i.e., when one coder coded the information not available, the other coder coded it available). This results in  $\kappa = -.03$  (deemed no agreement or worse than expected) despite 95.00% agreement, while the S score is .90. Bennett et al.'s S scores ranged from .70 to 1.00, and the average across three pairs of coders was .89. The percent perfect agreements ranged from 70.00% to 100.00%, and the average across three pairs of coders was 91.48%. By area of information (i.e., sexual health programs, sexual violence prevention programs, sexual health information/resources), Bennett et al.'s S scores ranged from .75 to 1.00 (average .91), from .72 to 1.00 (average .96), and from .70 to 1.00 (average .86), respectively. The percent perfect agreements by area of information ranged from 83.33% to 100% (average 95.07%), from 70.45% to 100% (average 93.85%), and from 70.00% to 100% (average 89.10%), respectively.

## Results

### *Sexual health programs*

Table 2 shows the number of institutions that offer programs focusing on various aspects of sexual health (e.g., sexual and reproductive anatomy, methods of protection against pregnancy and HIV/STIs, sexual consent,

**Table 2.** The numbers of institutions that offer sexual health programs.

Types of institutions (N = 413)	(1) Sexual health programs			
	(a) Availability <sup>a</sup>	(b) Mandatory <sup>b</sup>	(c) In-person format <sup>b,c</sup>	(d) Peer educators <sup>a,d</sup>
Public (n = 179)				
Small (n = 50)	6 (12.00%)	1 (16.67%)	6/0 (100/0%)	7 (14.00%)
Medium (n = 36)	15 (41.67%)	1 (6.67%)	14/0 (93.33/0%)	11 (30.56%)
Large (n = 42)	20 (47.62%)	0 (0%)	20/1 (100/0%)	21 (50.00%)
Flagship (n = 51)	37 (72.55%)	0 (0%)	36/4 (97.30/10.81%)	38 (74.51%)
Public total	78 (43.58%)	2 (2.56%)	76/5 (97.44/6.41%)	77 (43.02%)
Private (n = 234)				
Small (n = 44)	0 (0%)	0 (0%)	0/0 (0/0%)	2 (4.54%)
Medium (n = 68)	8 (11.76%)	0 (0%)	8/0 (100/0%)	8 (11.76%)
Large (n = 72)	9 (12.50%)	0 (0%)	9/0 (100/0%)	12 (16.67%)
Top 50 (n = 50)	26 (52.00%)	0 (0%)	26/1 (100/3.85%)	34 (68.00%)
Private Total	43 (18.38%)	0 (0%)	43/1 (100/2.33%)	56 (23.93%)
Total <sup>e</sup>	121 (29.30%)	2 (1.65%)	119/6 (98.35/4.96%)	133 (32.20%)

Note: <sup>a</sup>The percentages were calculated based on the total number of institutions reviewed. <sup>b</sup>The percentages were calculated based on the institutions that offered the program. <sup>c</sup>The numbers on the left include the programs that were offered either in-person only or both in-person and online, while the numbers on the right indicate the numbers of programs that were offered *both* in-person and online. <sup>d</sup>The number of institutions may not match with the number of institutions that offered the program as peer educators were not always the ones that offered the program. <sup>e</sup>The percentages were calculated with respect to the total number of institutions reviewed (i.e., N = 413).

healthy relationships). There is a general trend showing that public and larger institutions were more likely to offer sexual health program, while none of the small size private institutions reviewed (with  $\geq 500$ ,  $< 1,000$  undergraduate students) offered a sexual health program. A chi-square test confirmed that the availability of sexual health programs was dependent on the type of institutions,  $\chi^2(1, N=413) = 31.09, p < .00001$ , with public institutions more likely to offer these programs than private institutions. Of all the institutions reviewed, only two public institutions (i.e., Lock Haven University in Pennsylvania as a small-size institution and Salisbury University in Maryland as a medium-size institution) mandated the program. At both institutions, the program targeted incoming students (including first-year, transfer, and graduate students). Specifically, at Lock Haven University, incoming students were required to attend "Sex Ed Boot Camp" as part of the move-in weekend activities. Incoming students at Salisbury University were required to complete the online program called "Think About it," which, according to the school website, covers not only sexual health and healthy relationships but also sexual violence. When the programs were offered at institutions, they were primarily delivered in-person rather than online, irrespective of the type and size of institutions.

Common topics covered in the programs included birth control, methods of protection against HIV/STIs (sometimes part of "safe sex" program), HIV/STIs, sexual consent, and healthy relationships. These programs were sometimes offered along with sexual violence-related programs and contained program materials that focus on body image and eating disorders, mental health, alcohol and drug use, sleep hygiene, and stress management. Among the institutions that offer sexual health programs, Tulane University, LA (part of private top 50) had a particularly impressive list of sexual health workshops offered upon request, each focusing on a different topic: consent, healthy relationships, sexual orientation, safer sex methods (e.g., methods of STIs and pregnancy prevention), sexual and reproductive anatomy, and STI testing and prevention. San Francisco State University, CA (a "large" public institution) also offered a wide variety of topics being covered across different programs: birth control, healthy relationships, safer sex (e.g., consent, barrier methods of contraception, STI testing), and sexual communication.

Many programs frequently utilized undergraduate peer educators for program dissemination. However, the main reason why the number of institutions offering sexual health programs did not match the number of institutions offering peer education is because peer educators were not necessarily those who delivered the programs offered on campus. In many cases, peer educators would organize club activities and lead campus events related to sexual health. In this capacity, they could function as student advocates promoting safer sex and condom use.

**Table 3.** The numbers of institutions that offer sexual violence prevention/bystander intervention programs.

Types of institutions (N = 413)	(2) Sexual violence prevention/bystander intervention programs			
	(a) Availability <sup>a</sup>	(b) Mandatory <sup>b</sup>	(c) In-person format <sup>b,c</sup>	(d) Peer educators <sup>a,d</sup>
Public (n = 179)				
Small (n = 50)	38 (76.00%)	26 (68.42%)	19/6 (50.00/15.79%)	8 (16.00%)
Medium (n = 36)	34 (94.44%)	28 (82.35%)	18/9 (52.94/26.47%)	19 (52.78%)
Large (n = 42)	32 (76.19%)	27 (84.38%)	8/4 (25.00/12.50%)	14 (33.33%)
Flagship (n = 51)	51 (100%)	44 (86.27%)	44/38 (86.27/74.51%)	40 (78.43%)
Public total	155 (86.59%)	125 (69.83%)	89/57 (57.42/36.77%)	81 (45.25%)
Private (n = 234)				
Small (n = 44)	23 (52.27%)	14 (60.87%)	16/10 (69.57/43.48%)	3 (6.82%)
Medium (n = 68)	59 (86.76%)	49 (83.05%)	40/24 (67.80/40.68%)	17 (25.00%)
Large (n = 72)	59 (81.94%)	45 (76.27%)	37/24 (62.71/40.68%)	17 (23.61%)
Top 50 (n = 50)	50 (100%)	43 (86.00%)	49/39 (98.00/78.00%)	39 (78.00%)
Private total	191 (81.62%)	151 (64.53%)	142/97 (74.35/50.79%)	76 (32.48%)
Total	346 (83.78%)	276 (66.83%)	231/154 (66.76/44.51%)	157 (38.01%)

Note. The superscript numbers represent the same notes as Table 2.

### ***Sexual violence prevention/bystander intervention programs***

Table 3 shows the number of institutions that provided sexual violence prevention or bystander intervention programs. The majority of institutions, both public and private and across all sizes, provided and also mandated completion of these programs. Indeed, the proportion of institutions that offered sexual violence prevention programs did not differ significantly by the type of institutions,  $\chi^2(1, N = 413) = 1.84, p = .17$ . All of the institutions reviewed provided information on Title IX (including contact information), which is federally mandated. Although the lack of information on the websites does not always mean that institutions failed to provide (or mandate) a sexual violence prevention program, it was somewhat surprising in light of federal mandates (e.g., Clery Act, Title IX) that not all institutions made the programs compulsory, let alone provide it (except for 51 flagship universities and Top 50 private institutions). In addition, a chi-square test revealed that the availability of sex education programs was dependent on its focus (sexual health vs. sexual violence prevention). Specifically, sexual violence prevention programs were more likely to be offered than sexual health programs,  $\chi^2(1, N = 826) = 249.42, p < .00001$ .

In many instances, incoming students (and often employees as well) were the target audience for mandated programs or workshops, especially those offered in person. Programs of this nature most frequently occurred during the welcome or orientation week (e.g., the week before the start of the semester or the first week of the semester). If mandated programs were offered online, the deadline was often set either prior to class registration or at some point during the semester. Public institutions provided programs online more often than in person, whereas programs offered at private institutions were delivered in person more often than online. Programs delivered in person were often created and managed in-house



and involved peer educators who would deliver a program upon request to a group of students (e.g., clubs, Greek-letter organizations) or provide assistance for the wellness center or the office of student affairs in program and event development and delivery. Online programs were often created by third parties. For example, one of the common online programs (at least based on the websites where the details were provided) was called the “Sexual Assault Prevention for Undergraduates” (SAPU).<sup>4</sup>

The SAPU program offers two versions: full and primary. According to the Vector Solution’s website ([www.vectorsolutions.com](http://www.vectorsolutions.com)), the former (also referred to as “Think About It” or “Haven”) covers both sexual assault prevention and some of the non-sexual violence-related topics such as consent and healthy relationships, whereas the latter (also referred to as “Not Anymore”) focuses exclusively on sexual violence. Although only a few school websites specified the version of SAPU (e.g., “Not Anymore” at University of San Francisco and Wellesley College), the program description often indicated sexual violence as a sole focus. The SAPU program is sometimes paired with “AlcoholEdu,” another online course delivered by Vector Solutions that covers the skills needed for healthy and safe decisions and for alcohol-related harm prevention and reduction. “AlphaPoint” is another online platform that is less common than “AlcoholEdu” but similarly focuses on substance abuse among college students.

Bystander intervention programs were offered separately from other sexual assault prevention programs at some institutions. One of the frequently mentioned programs is called Green Dot. For example, University of Maryland, Baltimore County, MD (large public), Auburn University, AL (large public), and Kent State University, OH (small public) all offer in-person /bystander intervention training (upon request) using the Green Dot approach. Green Dot is a nonprofit organization ([www.alteristic.org](http://www.alteristic.org)) that offers bystander intervention training in higher education focusing on teaching signs of potential violence and safe and positive options for intervention. The program is an intensive, interactive training program run by professional staff from the program provider, and it takes 4–5 hours to complete.

### ***Sexual health information and resources***

Table 4 shows the number of institutions that provided sexual health information on their school websites and tangible sexual health resources on campus. Public and larger institutions were slightly more likely to provide sexual health information on their websites than private and smaller institutions. Interestingly, more institutions, regardless of the type and size, provided information on sexual orientation compared to methods of protection against STIs and pregnancy (including emergency contraception)

**Table 4.** The numbers of institutions offering sexual health information and resources on websites.

Types of institutions ( <i>N</i> = 413)	(3) Sexual health information and resources				
	(a) Methods of protection	(b) Sexual orientation	(c) HIV/STIs facts	(d) HIV/STI testing offered <sup>a</sup>	(e) Condoms offered <sup>b</sup>
Public ( <i>n</i> = 179)					
Small ( <i>n</i> = 50)	10 (20.00%)	21 (42.00%)	12 (24.00%)	28/5 (56.00/10.00%)	13/12 (26.00/24.00%)
Medium ( <i>n</i> = 36)	20 (55.56%)	28 (77.78%)	21 (58.33%)	30/1 (83.33/2.78%)	23/19 (63.89/52.78%)
Large ( <i>n</i> = 42)	20 (47.62%)	33 (78.57%)	25 (59.52%)	34/3 (80.95/7.14%)	25/24 (59.52/57.14%)
Flagship ( <i>n</i> = 51)	41 (80.39%)	51 (100%)	45 (88.24%)	50/0 (98.04/0%)	40/37 (78.43/72.55%)
Public total	91 (50.84%)	133 (74.30%)	103 (57.54%)	142/9 (79.33/5.03%)	101/92 (56.42/51.40%)
Private ( <i>n</i> = 234)					
Small ( <i>n</i> = 44)	0 (0%)	5 (11.36%)	1 (2.27%)	4/2 (9.09/4.55%)	0/0 (0/0%)
Medium ( <i>n</i> = 68)	13 (19.12%)	36 (52.94%)	16 (23.53%)	23/5 (33.82/7.35%)	16/13 (23.53/19.12%)
Large ( <i>n</i> = 72)	19 (26.39%)	41 (56.94%)	29 (40.28%)	39/7 (54.17/9.72%)	15/14 (20.83/19.44%)
Top 50 ( <i>n</i> = 50)	31 (62.00%)	45 (90.00%)	38 (76.00%)	48/1 (96.00/2.00%)	34/32 (68.00/64.00%)
Private total	68 (29.06%)	127 (54.27%)	84 (35.90%)	114/15 (48.72/6.41%)	65/59 (27.78/25.21%)
Total	159 (38.50%)	260 (62.95%)	187 (45.28%)	256/24 (61.99/5.81%)	166/151 (40.19/36.56%)

Note: All the percentages were calculated with respect to the total number of respective (public or private) institutions, except for the percentages on the bottom, which were calculated with respect to the total number of institutions reviewed (i.e., *N* = 413). <sup>a</sup>The numbers on the left indicate the number of institutions that offer HIV/STI testing on campus. The numbers on the right indicate the numbers of institutions that do not offer HIV/STI testing on campus but at least offer the information on where to obtain testing off campus. <sup>b</sup>The numbers on the left indicate the number of institutions that offer condoms on campus that are either free or for purchase. The numbers on the right indicate the subset of these institutions that offer condoms on campus for free of charge.

or HIV/STIs facts. Many institutions created their own content, while they also provided external links to further information. The most common websites recommended for obtaining further information include Planned Parenthood ([www.plannedparenthood.org](http://www.plannedparenthood.org)), the Centers for Disease Control and Prevention ([www.cdc.gov](http://www.cdc.gov)), Go Ask Alice! ([www.goaskalice.columbia.edu](http://www.goaskalice.columbia.edu)), and Bedsider ([www.bedsider.org](http://www.bedsider.org)). Less frequently mentioned were the Office of Women's Health ([www.womenshealth.gov](http://www.womenshealth.gov)) and It's Your (Sex) Life ([www.itsyoursexlife.com](http://www.itsyoursexlife.com)). These represent a handful of available websites that address various aspects of sexuality and sexual health, such as methods of protection, sexual orientation, HIV/STIs facts, healthy relationships, pregnancy/fertility, abortion, and female and male sexual and reproductive health among others. There were also other external websites recommended that specialize in particular topics. For example, the Trevor Project ([www.thetrevorproject.org](http://www.thetrevorproject.org)) and PFLAG ([www.pflag.org](http://www.pflag.org)) provide not only information related to LGBTQ+ but also support advocacy for LGBTQ+ communities.

Nearly 80% of the public institutions and nearly half of the private institutions had HIV/STI testing available on campus, which was often provided as part of student medical and health services. In some cases, HIV testing was not always available on campus, but offered annually or periodically throughout the year by the County Health Department. Even if testing was not offered on campus, a few institutions provided information on local community health

service centers, stating that testing would be relatively inexpensive or in some cases even free.

Similar to the availability of HIV/STI testing, condoms were more likely to be offered on campus by public and larger institutions compared to private and smaller institutions. Condoms, typically external condoms, were often available at health and wellness centers. At larger institutions, in particular, condoms were provided as part of “safer sex supplies,” including lubricants and other forms of protection (e.g., internal/female condoms, dental dams). Condoms were often free if provided on campus at all. Even if not free, they (along with other supplies) could often be purchased for a very low price (e.g., 10 condoms for \$1).

## Discussion

The current study was the first to systematically examine the prevalence of sexual health programs, sexual violence prevention programs, and sexual health information and resources available in US postsecondary institutions. Accentuating the need for this review was a noticeable lack of emphasis on sexual health promotion in higher education (especially at private institutions) relative to sexual violence prevention, a discrepancy that was confirmed by the website content review.

### *Sexual health programs*

The website content review revealed that sexual health programs, compared to sexual violence prevention programs, were not widely available across colleges and universities in the US, although public and larger institutions, compared to private and smaller institutions, were more likely to offer them. Despite its relative scarcity, sexual health programs, when provided in college and university settings, covered a wide range of topics, including sexual and reproductive health (e.g., sexual anatomy, reproductive functioning, HIV/STIs), safe sexual practices (e.g., influence of substance, birth control, condom use, sexual consent), gender identity, and sexual orientation. The wide coverage of topics is consistent with “developmentally appropriate” sex education, which focuses on multiple areas of gender and sexual development (Marques et al., 2017). Breuner et al. (2016) suggested given the multifaceted nature of gender and sexual development and their implications for identity and well-being, sex education should cover three major domains: cognitive (e.g., information), affective (e.g., feelings, attitudes), and behavioral (e.g., communication, decision-making). Such a wide breadth of focus would lend support to a majority of college students who,

as emerging adults, face unique challenges in different domains of functioning (e.g., relational, sexual, psychological, sociocultural, spiritual).

One concern raised by the current review is that many of the sexual health programs offered at higher education institutions frequently deal with one particular topic at a time rather than addressing a wide range of developmental issues relevant to this age group. For instance, a particular club or Greek life may decide to invite a health center professional to present information regarding safe sex (e.g., different types of barrier methods), while not addressing any other material as part of their presentation. This singular focus would leave students without adequate knowledge about other relevant topics (e.g., sexual consent, HIV/STIs, healthy relationships) unless they choose to take a separate workshop focusing on these specific topics. This problem could be resolved if comprehensive, multi-domain sexual health education is mandated to all incoming students to promote overall sexual health as part of first-year orientation or seminar (Braeken & Cardinal, 2008). In fact, many higher education institutions in the US have adopted a mandatory first-year seminar and have demonstrated tremendous success in helping students make a successful academic and socioemotional transition into college life (Pascarella & Terenzini, 2005).

### ***Sexual violence prevention programs***

Given existing federal legislation (e.g., the Clery Act, Title IX), the majority of higher education institutions, regardless of the type and size, provided programs that focus on sexual violence prevention or bystander intervention. Unlike sexual health programs, sexual violence prevention programs in higher education have been widely evaluated. Systematic reviews of college- and university-based sexual assault prevention programs (Vladutiu et al., 2011) and in-person bystander intervention programs (Mujal et al., 2021) provided evidence for favorable outcomes, such as greater bystander behavior, lower rape myth acceptance, and reduced involvement in sexually coercive behaviors.

One of the successful, in-person bystander intervention programs that some institutions offer is called the Green Dot bystander intervention training. Several Green Dot evaluation studies have demonstrated significant reductions in sexual violence perpetration (Coker et al., 2015, 2016) as well as significant increases in active bystander behaviors to prevent sexual violence at the institutions exposed to the training (Coker et al., 2011). Part of the Green Dot success can be attributed to the implementation of a Peer Opinion Leader (POL) strategy whereby faculty, staff, students, and resident assistants nominate well-respected, influential peers, who then recruit students for the training given its voluntary nature. Krause et al. (2017) suggested that students can serve as “agents of change” when research no longer treats them

as “objects of study”—survivors, perpetrators, and bystanders. One way to encourage active student participation in program creation, implementation, and evaluation is through participatory action research (PAR; Whyte et al., 1989). PAR methods can allow institutions to tailor a program that can directly address students’ perceived needs while empowering students’ autonomy and garnering their involvement at the same time.

Online sexual assault prevention programs were also very common, especially among large public institutions. There is empirical evidence supporting the efficacy of online sexual assault prevention and bystander intervention programs, including “Haven—Understanding Sexual Assault” (currently known as “Sexual Assault Prevention for Undergraduates” or SAPU). Zapp et al. (2021) evaluated “Haven” using a quasi-experimental design with 80 four-year US institutions. The program was shown to be successful in fostering empathy and support toward sexual violence survivors and improved behavioral intentions to intervene among first-year exposed students, although no data were available to evaluate program effects on actual behavior (e.g., bystander behavior, sexual violence perpetration).

### ***Sexual health information and resources***

Information on various aspects of sexual health was widely available on school websites included in this review. Information on sexual orientation and diversity in particular was common across different types and sizes of institutions, which is expected given a remarkable cultural shift in public support for same-sex marriage (Pew Research Center, 2019) and the advent of civil rights for sexual minorities (McCarthy, 2019). Many institutions provided external links to outside sources of information in addition to or instead of their own created content. Among the most frequently mentioned websites were the CDC and Planned Parenthood with the former evaluated to be the most reliable (e.g., trustworthy, unbiased, current) and the latter evaluated as the most usable source of sexual health information (Diez et al., 2022).

The current website content review also revealed the majority of public institutions and nearly half of private institutions made HIV/STI testing available on campus, although not as many public or private institutions provided HIV/STIs facts on their websites. The greater availability of HIV/STI testing at the institutions reviewed is consistent with the study by Coor et al. (2018), who also reported a significant improvement in sexual health services at US colleges and universities between 2001 and 2014. In terms of condom availability, more than half of public institutions and less than one-third of private institutions had condoms available on campus, and most of these institutions provided them gratis. Even though condom availability programs in secondary schools have shown mixed results

(Andrzejewski et al., 2019), many college students expect their schools to provide subsidized sexual health resources including condoms (Lechner et al., 2013). In addition, Francis et al. (2016) demonstrated that two months after condom dispensers were distributed across campus, a majority of students reported having seen the dispensers, more than half of sexually active students reported intentions to use them, and one-third had already used them. Similarly, Eisenberg et al. (2013) reported that students at institutions with more sexual health resources (e.g., presence of a health clinic, multiple modalities of health services, pregnancy/HIV/STI testing, condom availability) were more likely to engage in protected sexual intercourse and HIV/STI testing. These associations remained significant even after students' personal and demographic characteristics were controlled in statistical models. These findings are quite promising given that availability of sexual health care and resources can facilitate the actual use of these resources and, in turn, encourage safe sex practices among college students.

### ***The future role of colleges and universities in sex education***

The current review confirms that the majority of postsecondary institutions in the US (especially public and larger institutions) provide sexual violence prevention/bystander intervention programs and have sexual health information and resources available on campus. However, the review also sheds light on the scarcity of sexual health programs in US higher education. A majority of adolescents come to college, expecting to explore or continue to explore their sexuality (Garcia et al., 2012; Halpern & Kaestle, 2014). However, many of them are unaware of safe sexual practices, an observation reinforced by their greater engagement in unprotected sex (American College Health Association, 2022), higher prevalence of STIs (CDC, 2021b), and higher prevalence of sexual violence among college students (Cantor et al. 2020). This places colleges and universities in an ideal position to educate students on how to maintain sexual and reproductive health and practice healthy and safe sex for several reasons.

First, college students' sexual interactions happen among peers, often in the form of hookups or casual sex in the absence of a romantic commitment (Garcia et al., 2012). College students engage in hookups as early as the first semester when still adjusting to college life (Fielder & Carey, 2010) and often under the influence of alcohol (Fielder & Carey, 2010; LaBrie et al., 2014), which is associated with a greater risk of sexual violence (Abbey, 2002). Second, a majority of adolescents, particularly adolescent boys, do not have frequent and in-depth sex-related communication with their parents (Astle et al., 2022; Lindberg et al., 2016) despite its association with lower sexual risk (Coakley et al., 2017). Although adolescents discuss sex with peers more

frequently and comfortably than with parents (DiIorio et al., 1999; Lefkowitz & Espinosa-Hernandez, 2007), its quality is dependent on a variety of individual and peer characteristics (Waterman et al., 2018), and its implications are not always positive (Fletcher et al., 2015; Holtzman & Rubinson, 1995). Third, sex education in secondary schools is inconsistent in the implementation, quality, and content across the US (Goldfarb & Lieberman, 2021; Guttmacher Institute, 2022; Lindberg et al., 2016), even though college students wish they had received sex education before college that covers a variety of sex-related topics with updated and realistic information (Astle et al., 2021). Fourth, endorsement for school-based sex education comes not only from students themselves but also from national organizations, such as the Sexuality Information and Education Council of the United States (SIECUS, 2022) and the American Academy of Pediatrics (Breuner et al., 2016). The CDC (2021a), in the most updated Health Education Curriculum Analysis Tool (HECAT), also lists sexual health promotion as a fundamental part of health education well beyond secondary education. Taken together, there is not only an expectation and desire but also a need for collegiate sex education that focuses *both* sexual health promotion and sexual assault prevention.

### ***Limitations and future directions***

While the current study contributes to the sex education literature, there are several limitations that should be addressed. First, we did not use Eisenberg et al.'s (2012) CRaSH inventory to search for information on sexual health topics and resources on websites. CRaSH is an evidence-based inventory that covers 53 measures in 10 domains of sexual health and resources, including on-campus clinics and their services, condom availability, sexual violence resources, and LGBT resources among others. Given the primary focus of the current study on sex education (for both sexual health promotion and sexual violence prevention), we utilized our own set of measures to conduct a website content analysis. Future research can benefit from using CRaSH to, for example, examine the availability and quality of sexual health information and resources on websites of nonacademic organizations or conduct a more thorough web-based analysis to investigate the link between the prevalence of sex education and that of sexual health resources in college.

Second, we did not confirm whether an institution had a particular sex education program or sexual health resources in place. Thus, our inability to locate certain information on a website does not mean that the program or resource was indeed not available. Although we attempted to avoid this problem by using multiple search strategies including cross-referencing search terms and looking at different locations of the website, direct



confirmation with institutional personnel could have ensured the accuracy of the results. Future studies can investigate possible discrepancies between what institutions actually do or do not provide regarding sex education and sexual health resources and what is or is not indicated on their respective websites. Given that many college students rely on the Internet for sexual information (Buhi et al., 2009), it is important for institutions to eliminate (or at least minimize) discrepancies between what is actually offered in practice and what is presented on the website.

Third, we did not systematically examine the specific content of programs being offered on campus (e.g., sexual consent, healthy relationships). Similarly, we did not use an a priori checklist of possible topics being covered in programs as we searched for information on a website. The notes that we took during the online searches were useful to contextualize the prevalence data we collected, some of which were provided in the results. However, a more thorough and systematic analysis of program content can provide a clearer perspective on the current status of sex education in higher education, which in turn informs better program designs.

## Conclusion

Given sexual violence's high prevalence and negative implications for college students, its prevention has been the main focus among colleges and universities across the US. However, many high school graduates arrive to their respective colleges and universities with high expectations for not only academic training but also for opportunities to develop their identity, pursue relationships, and either initiate or continue their personal sexual exploration. Therefore, it is critical that higher education institutions provide a safe haven in which these activities can occur safely by not only preventing sexual violence but also promoting safe and healthy sexual practices. An important component in the design of sex education is recognizing that merely teaching students what is "bad" does not necessarily teach them what is "good." In order to make positive changes in students' cognition, attitude, and ultimately behavior, institutions need to systematically assess the efficacy of both sexual health and sexual violence prevention programs. They should also encourage and support students' activism and advocacy to help create a cultural shift on their own campuses that promotes sexual health and sex-positive messages (e.g., sexual desire, pleasure) and condemns sexual violence. Tangible resources such as condoms and HIV/STI testing on campus can also make healthy sexual choices easier to act on. It is time US secondary institutions started creating, implementing, and evaluating programs for not only sexual violence prevention but also sexual health promotion.

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## Notes

1. This federal law was named after Jeanne Clery, a student who was raped and murdered on the campus of Lehigh University, PA in 1986.
2. It is worth noting that escalation of drinking is not only observed among college students but has been shown to correspond to the transition from adolescence to young adulthood in non-college bound youth as well. See, for example, Jackson et al. (2001) and Schulenberg and Maggs (2002) for studies of the general population.
3. NCES is the primary federal entity for collecting and analyzing data related to education in the US and other nations. The organization is housed within the US Department of Education and the Institute of Education Sciences.
4. This online training used to be operated by EVERFI, and many institutions referred to it as the “EVERFI” program. Effective summer 2021, Vector Solutions assumed ownership of EVERFI’s campus prevention network and their higher education business and currently manages many online training courses for college students including SAPU.

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