Erased in School, Educated Online:

LGBTQQ Men and the Sex Ed Gap

Authors

M. Colleen McDaniel, Ph.D.,
Director of Research and
Program Development,
It's On Us

Emily Hilty, Ph.D.,
Director of Data and Analytics,
Civic Nation

Kyle Richard,
Director of Men's Engagement,
It's On Us

Table of Contents

About It's On Us

It's On Us was founded in September 2014 as a public awareness campaign of the Obama-Biden Administration following recommendations from the White House Task Force to Prevent Sexual Assault that noted the importance of calling everyone into the conversation on sexual assault prevention.

Since then, It's On Us has grown into the nation's largest nonprofit program dedicated to college sexual assault prevention, training a national network of student-led campus chapters to become peer educators, developing suites of prevention education programs, and conducting and publishing research to expand the field of knowledge on violence prevention and inform our work.

Our Mission

It's On Us is on a mission to build the movement to combat campus sexual assault by giving students of all identities, especially young men, the tools to address the cultural norms at the root of sexual harm. We do this by mobilizing the largest student organizing program of its kind in grassroots awareness and prevention education programs.

Our Vision

It's On Us envisions a world in which no student graduates college having experienced sexual violence because we have created a culture of prevention within higher education.

Why Men?

1. **Sexual and dating violence affects all of us**. Anyone of any gender can experience violence. Sexual and dating violence are not solely women's issues. When one person experiences violence, the entire community experiences harm from that violence.

2. **We all have a role to play**. When our culture normalizes violence, we each have the responsibility to break the silence and speak out against it.

3. **Men can be leaders**. Men connect with and resonate with other men. Men know what harmful messages they have been taught and can help other men unpack them.

4. **Men can create change**. The vast majority of men want healthy relationships and sexuality. Men can promote positive norms and teach healthy skills for strong relationships.

Abstract

Although global research has consistently demonstrated that comprehensive sexuality education is a protective factor against sexual and dating violence for young people (UNESCO, 2018, 2015), Americans have limited access to funding for it. The sexuality education often available in the United States tends to be exclusionary of marginalized communities and especially discriminatory against lesbian, gay, bisexual, transgender, queer, and questioning (LGBTQQ) individuals (Garg & Volerman, 2020). This is particularly alarming as limiting youth access to sexuality education contributes to systemically high rates of sexual and dating violence against young LGBTQQ men. The present report details the findings of a subsample of a larger study on young men's experiences with sexuality education. This report describes the settings (both formal and informal) in which young LGBTQQ men received sexuality education, the content and values presented within each of these settings, and their current belief alignment with those taught values. Four categories of sexuality education settings were compared: community, school, online, and religious institution. Findings suggest that young LGBTQQ men turn to online sources to fill in gaps in knowledge unaddressed by more formal forms of sexuality education (like school and religious settings). Specifically, young LGBTQQ men tended to turn to sources like social media (e.g., YouTube and Instagram) and sexual health websites (e.g., Mayo Clinic, Planned Parenthood, SchoolofSexEd.org, and SIECUS). Respondents reported these online sources to cover a broader range of topics and perceived these online sources to be more sex positive than other sexuality education settings. Resulting recommendations for policy and prevention include guidance for both adult educators and institutions about how to better serve this population.

Keywords: Sexual Violence. LGBTQQ. Sexuality Education. Men and Masculinity.

Acknowledgements

Tracey Vitchers, Executive Director, It's On Us, Civic Nation
Patrick Maddox, Men's Engagement Associate, It's On Us, Civic Nation
Ruairí Ó Cearúil, Manager of Analytics and Research, Civic Nation
Jae Salinas, Director of Marketing Production, Civic Nation
Dario Parra, Graphic Designer, Civic Nation
Ashlynn Profit, Executive Vice President of Communications and Content, Civic Nation
Olivia Solow-Niederman, Associate Director of Communications, Civic Nation
Brandi Stover, Press Assistant, Civic Nation
Preston D. Mitchum, Peer Reviewer, PDM Consulting

Glossary

Abstinence-Only Sexuality Education
Sex education that teaches students that abstaining from sex outside of marriage is the only morally acceptable and effective way to prevent pregnancy and sexually transmitted infections (UNESCO, 2024).

Bisexual+
An umbrella term for people who are attracted to more than one gender (which includes those who identify as pan, omni, etc.); “bi” here does not refer to the traditional gender binary (man or woman) — it refers to attraction to genders that are similar to and different from one’s own gender.

Cisgender
A person whose gender identity aligns with the cultural expectations placed on them due to the sex they were assigned at birth.

Cisnormativity
The assumption that everyone is cisgender or that this is the norm or default to which everyone must subscribe; seeing transgender identities as abnormal or exceptions to the norm.

Comprehensive Sexuality Education
A curriculum-based process of teaching and learning about the cognitive, emotional, physical, and social aspects of sexuality. It aims to equip children and young people with knowledge, skills, attitudes, and values that empower them to realize their health, well-being, and dignity (UNESCO, 2024).

Gender
A social and legal status; a set of expectations from society about behaviors, characteristics, and thoughts.

Gender Identity
How a person feels inside about themselves and their own gender.

Gender Expression
How a person expresses their gender through clothing, behavior, and personal appearance.

Gay
A sexual orientation describing someone who identifies with masculinity, maleness, or manhood in some way and is attracted to individuals of a similar gender; is sometimes used as an umbrella term to describe people who identify as gay, lesbian, bisexual, or queer.

Heteronormativity
The assumption that everyone is heterosexual or that this is the norm or default; seeing all other sexual orientations as abnormal or exceptions to the norm.

Homonegativity
Negative attitudes and beliefs directed toward gay, lesbian, bisexual, or queer individuals; this can include internalized negative feelings of one’s own sexuality or sexual orientation.

Glossary

Homophobia
Dislike or prejudice against gay, lesbian, bisexual, and queer people.

Intimate Partner Violence
Willful intimidation, physical assault, battery, sexual assault, and/or other emotionally or psychologically harmful behaviors as a part of a systematic pattern of power and control perpetrated by one intimate partner against another.

Lesbian
A sexual orientation describing someone who identifies with femininity, femaleness, or womanhood in some way and is attracted to individuals of a similar gender. Lesbians are included in this report because there are people who identify both as men and lesbian.

LGBTQQ
An acronym for lesbian, gay, bisexual+, transgender, queer, and questioning.

Nonbinary
An adjective describing someone whose gender identity is not captured by the traditional gender binary (man or woman).

Sex
A label assigned at birth based on genitals.

Sexual Orientation
Emotional, romantic, or sexual attraction to other people.

Sexual Violence
An umbrella term for any sexual activity that is achieved using any kind of aggression, including physical force, verbal coercion, manipulation, or taking advantage of someone who is intoxicated or unconscious.

Sexuality
An all-encompassing term for the complex interplay of people's sexual orientation, gender, sex, relationships, health, and personal development.

Straight/Heterosexual
A sexual orientation describing someone who is attracted to people with a different gender from their own.

Transgender
An umbrella term for people whose gender identity is different from the cultural expectations placed on them due to the sex they were assigned at birth.

Queer
An umbrella term used to describe sexual orientations, gender identities, and expressions that differ from heterosexual and/or cisgender norms. It has been reclaimed by many in LGBTQQ communities as a term of pride and resistance, though it was historically used as a slur.

Background

Sexual violence (SV) perpetrated against lesbian, gay, bisexual, transgender, queer, and questioning (LGBTQQ) men on college campuses is an epidemic, affecting 1 in 2 transgender men, 1 in 3 bisexual men, and 1 in 4 gay men (Basile et al., 2022; Chen et al., 2022; James et al., 2016; Trevor Project, 2024). LGBTQQ men also experience intimate partner violence (IPV) at high rates: 54% of transgender individuals, 46% of bisexual men, and 48% of gay men (Basile et al., 2022; Chen et al., 2022; James et al., 2016). Rates of sexual and intimate partner violence among LGBTQQ individuals are disproportionately high due to systemic inequities that increase vulnerability to victimization while limiting access to affirming, population-specific resources for survivors (James et al., 2016; Walters et al., 2013; Scheer et al., 2019). This phenomenon is highly alarming as such violence is associated with higher suicide risk in LGBTQQ young people (Trevor Project, 2024).

In 2023, It's On Us conducted a study, Engaging Men Part 2, which found that when shown vignettes of SV and IPV, LGBTQQ men and men of color were more likely to correctly distinguish healthy and unhealthy relationships than the general sample of men (Zenteno & Hilty, 2023). In this study, It's On Us also found that LGBTQQ men felt more comfortable discussing sexual violence than the general sample. Considering systemic disparities in LGBTQQ representation (discussed below) in sexuality education, this pattern of increased knowledge and comfortability around the topics of sexual violence warranted further exploration. Thus, the next step in this research program emerged: to better understand the forms of sexuality education that key populations of men receive prior to arriving on campus and how this may be associated with risk and protective factors for SV and IPV.

The present report details the findings of a subsample of a larger study on young men's experiences with sexuality education. This report describes the settings (both formal and informal) in which LGBTQQ men received sexuality education, as well as the content and values presented within each of these settings and young men's current belief alignment with those taught values. The present report is framed within the context of two common, competing approaches to this type of curriculum: comprehensive and abstinence-only.

For this study, the authors defined comprehensive sexuality education as:
"A curriculum-based process of teaching and learning about the cognitive, emotional, physical, and social aspects of sexuality. It aims to equip children and young people with knowledge, skills, attitudes, and values that empower them to realize their health, well-being, and dignity" (UNSECO, 2024).

Abstinence-only education was defined as:
Sex education that teaches students that abstaining from sex outside of marriage is the only morally acceptable and effective way to prevent pregnancy and sexually transmitted infections (STIs; UNESCO, 2024).

Sexuality Education in the United States

Although there is strong global evidence demonstrating that comprehensive sexuality education is associated with a reduction in risk of sexual violence (e.g., acceptance of social norms that promote SV) and a reduction in dating violence perpetration behaviors, sexuality education is only required in 30 states and only 18 require such education to be "medically accurate" (UNESCO, 2018, 2015; Mathews et al., 2015, 2016; Guttmacher Institute, 2021; National Conference of State Legislatures, 2020).

Even less widely available is sexuality education that provides information that is representative, affirming, and/or responsive/useful to LGBTQQ adolescents (Hobaica et al., 2019; Hobaica & Kwon, 2017; Hoefer & Hoefer, 2017; Rabbitte, 2020). A review of laws and educational standards across all 50 states and the District of Columbia conducted in 2020 found that only 22 states have curricula that even mention LGBTQQ topics: nine of which mandate inclusivity, six mandate discrimination, and five mandate neutrality in sexuality education (Garg & Volerman, 2020). Furthermore, of the 29 states that do not mention LGBTQQ topics, 13 require language that normalizes monogamous, heterosexual relationships and abstinence until marriage. The United States has a long history of centering such values in its approach to sexuality education, even within public schools, where curricula have often reflected this morality-based and abstinence-focused messaging (Irvine, 2002; Zimmerman, 2015; Fields, 2008).

These values are reflected not only in law and curricula implemented, but also in the allocation of federal dollars. The mid-2000s saw a historic wave of federal funding for comprehensive sexuality education; however, recent years have seen massive cuts to federal funding and state legislation for comprehensive sexuality education — especially that which is inclusive and representative of LGBTQQ individuals — and a rerouting of federal funding back into abstinence-only education (Donavan, 2017; National Sex Ed Conference, 2015; SEICUS, 2022). The beginning of 2025 saw even more radical advances in federal slashes to education and support services specified for LGBTQQ individuals with executive orders attempting to dismantle any programming labeled as "diversity, equity, and inclusion" (Trump, 2025). In addition, the 2025 ruling in Mahmoud v. Taylor — which held that a Maryland school district's policy prohibiting parental opt-outs from LGBTQ-inclusive children's books imposed an unconstitutional burden on parents' free exercise of religion — poses further risk to comprehensive sexuality education that is inclusive of LGBTQQ individuals.

Stigma in Formal Sexuality Education

Taken together, these trends in sexuality education may go further than simply leaving gaps in knowledge by perpetuating heteronormativity and the silencing of LGBTQQ youth (Elia & Eliason, 2010; Gowen & Winges-Yanez, 2014; Pingel et al., 2013). For instance, one qualitative study of LGBTQQ college students' experiences with sexuality education prior to college detailed stories of teachers refusing to discuss LGBTQQ relationships because they are "perverse" or "not the norm" (Bloom et al., 2022). In addition, research has demonstrated that school systems lack proper training on LGBTQQ issues for sexuality education teachers (Meadows, 2018).

Similarly, another qualitative study examining LGBTQQ individuals' experiences across three generations (timeframes of secondary school ranging from 1966–1981, 1984–1999, and 2000–2015) demonstrated the presence of heteronormativity and cisnormativity in sexuality education via exclusive descriptions of sexual activity which centered around birth control and "male-female" vaginal penetration (Bishop et al., 2020). In this same study, participants — predominantly those of the middle generation (1984–1999) — shared that the only representation of LGBTQQ people mentioned was in discussions of the HIV/AIDS epidemic. Some of this generation also shared that they were taught that only LGBTQQ and Black individuals (specifically those of African descent) were susceptible to HIV/AIDS. Although medical and popular knowledge about HIV/AIDS has largely shifted to be more accurate, this generation is now the teachers and parents of LGBTQQ youth. Such misinformation still persists, as demonstrated by a young man in the youngest generation (2000–2015) who was taught that HIV/AIDS started in Africa. Additionally, participants in the youngest generation shared that, in some states, students were taught that "homosexuality" is unhealthy and socially unacceptable.

Another qualitative study conducted by Mata and colleagues (2022) focusing on bisexual boys found similar perspectives that school-based sexuality education did not meet their needs, leading them to turn to alternative sources, like the internet, for answers about sex and relationships with same-gender partners and consent. Although these three studies cannot capture the full range of young LGBTQQ men's experiences with sexuality education, this qualitative data gives deep insight into some of the challenges faced by LGBTQQ populations within formal educational settings. These experiences also speak to the persistent effects of historical inequity on current sexuality education, in addition to more recent injustices like pushes for the exclusion of LGBTQQ individuals and the prioritization of abstinence-only education.

Informal Sexuality Education Settings

Formal education is not the only avenue through which young men learn about sexuality. Young men are likely to receive other, more informal forms of sexuality education from family members, peers, community organizations, online, and religious institutions. Past research has explored the importance of community-based programs in contributing to youth sexuality education, particularly for LGBTQQ youth. Evidence for broader populations of youth suggests that participating in such programs has been connected with a reduction in risk factors like alcohol and other substance misuse in addition to wellbeing factors such as depression and self-esteem (Erdem et al., 2016; Lachini et al., 2016). In an examination of youth across three cities in varying regions of the United States, Fish and colleagues (2019) found that Black and Latina transgender girls who received school lunches were the most likely to utilize community centers for LGBTQQ youth. This literature may indicate that youth who otherwise are systemically barred from access to wellbeing resources (including sexuality education or STI prevention resources) may seek out access in community-based organizations like nonprofits in addition to trusted adults or family members. This is consistent with research of LGBTQQ youths' behaviors online. In a qualitative comparison of LGBTQQ and non-LGBTQQ students' experiences with informal and formal sex education, Bloom and colleagues (2022) found that LGBTQQ students were more likely to turn to media (i.e., internet and pornography) as their main source of information about birth control, relationships (i.e., love and commitment), religious and cultural views of sex, masturbation, violence in relationships, and consent than non-LGBTQQ students.

In addition, parents and other family members may also act as educational resources for LGBTQQ youth. Studies on parental communication with LGBTQQ youth demonstrate that, although parental knowledge widely varies, support from parents has a critical impact on health outcomes and risk behaviors (Dittus et al., 2015; Kincaid et al., 2012; Widman et al., 2016; Wight & Fullerton, 2013). Some research has pointed to a period immediately following their teen coming out wherein parents worry about what this identity means for their teen's future health and safety (Flores et al., 2019; Newcomb et al., 2018). Parents also shared not feeling equipped with the knowledge needed to support their child in this period (Newcomb et al., 2016). In one qualitative study of LGBTQQ boys conducted by Flores and colleagues (2019), some boys described this period of interactions with their parents as reactionary and rooted in stigma and stereotypes about LGBTQQ individuals. In sharing their perceptions of their parents' knowledge of LGBTQQ topics, most boys said that their parents either had no knowledge or that they weren't sure about their parents' knowledge. Over half of these boys shared that their parents' approach to sexuality education was heteronormative, and 26% reported that their parents were negative towards LGBTQQ topics. Although many parents report that their relationship with their child improved after their child came out, it is evident that there is a wide variation in parental knowledge and that even many supportive parents may not have the knowledge to properly educate their LGBTQQ children (Newcomb et al., 2016). While there are promising features of informal modes of sexuality education that LGBTQQ boys and young men encounter, there are clear challenges and risks present in these settings. A better understanding of the knowledge and values that young LGBTQQ men are bringing to campus can allow colleges and universities to better tailor sexual and intimate partner violence prevention programming to meet the needs of these incoming students.

The Present Report

The present report includes data from a subsample of a larger study conducted by It's On Us that examines young men's experiences with formal and informal sexuality education prior to attending college and how it relates to risk factors for sexual violence. The purpose of this report is to share findings on LGBTQQ college men's sexuality education experiences. Specifically, the present report provides deeper insight into where young LGBTQQ men received sexuality education (e.g., community, school, religious institution, or online), describes young LGBTQQ men's perceptions of the values, beliefs, and attitudes they received from the settings in which they received sexuality education, and uncovers young LGBTQQ men's perceptions of the influence of their sexuality education on their current beliefs. Four measures were chosen to summarize the values and attitudes taught in formal and informal education settings: (1) breadth of content (i.e., the range of topics covered), (2) sex positivity (i.e., openness and acceptance of a wide range of sexual behaviors, preferences, and orientations), (3) traditional family and gender values (e.g., women belong in the home; men are the sole providers), and (4) sex apprehension (i.e., moral and health-based negative judgement and fear of sexual behaviors). These features were chosen because they align with defining features of comprehensive and abstinence-only approaches to sexuality education (as defined above). Additionally, four settings wherein young men received sexuality education were identified: (1) community, (2) school, (3) online, and (4) religious settings.

Comprehensive Approach	Abstinence-Only Approach
Breadth of Content	Traditional Family and Gender Values
Sex Positivity	Sex Apprehension

BACKGROUND

Research Questions

Although the broader study was partially exploratory in nature, the authors outlined hypotheses to guide data collection and analysis. These hypotheses are outlined below:

Hypothesis 1

Young LGBTQQ men will be more likely to have received sexuality education in a community or online setting than cisgender straight men.

Hypothesis 2

For young LGBTQQ men, community and online settings will have a higher breadth of content, higher sex positive values, lower traditional family and gender values, and lower sex apprehension than more formal settings.

During data analysis, the authors added an additional hypothesis to further examine young LGBTQQ men's experiences with sexuality education.

Post-Hoc Hypothesis

Given that young LGBTQQ men are more likely to seek out additional informal sexuality education, it is likely that education received in those settings, specifically online and community settings, will better reflect their beliefs than those received in more formal settings.

METHODS

Participants

Data was collected using QualtricsXM, a platform for accessing panels of survey participants. After the research team designed the survey, the Qualtrics team distributed the survey with a goal of reaching 1,000 participants, including a requirement that 25% of the sample be Black men and 25% be LGBTQQ men. Data collection opened on October 8, 2024 and closed on December 17, 2024. Participants were paid between $4.44–$5.92 for completing the 15-minute survey. Qualtrics over-collected in the case participants needed to be removed in the data cleaning stage. To be eligible to participate in the study, panel members had to (1) identify as a man, (2) be between 18–25 years old, and (3) be currently enrolled in college. Additionally, for data quality assurance, participants were removed from the study if they missed more than one of three attention checks. The final sample included 1,006 men meeting the aforementioned criteria. Full data collection and cleaning procedures will be released in the final study report, set for publication in 2026.

Measures

The following is a summary of the measures used in the survey. The complete description of measures will be released in the final study report. Measures are listed in the order in which they were presented to respondents.

First experience learning about sex. In order to measure where participants first learned about sex, the authors developed a list of 18 items based on qualitative data from Zenteno and Hilty (2023). Participants could select only one item. A second, open-ended question asked participants the age at which they first learned about sex.

Sex education settings. Participants were able to select a maximum of three settings from a list where they received some form of sexuality education. Prior to data analysis, the authors categorized each setting as either community, school, or religious. Following initial data exploration, online settings were separated out from "community" into their own category to increase measurement precision.

Features of sexuality education. Participants responded to questions about the following five features of each setting they selected: breadth of content, abstinence-only, sex positivity, traditional family and gender values, and sex apprehension. Breadth of content included a checklist of 13 topics covered in comprehensive sexuality education. Participants were assigned a sum score of checked items. Participation in abstinence-only education was measured using a single yes or no question. The following three scales each asked participants to rate how true five statements were about what they were taught in that specific setting (1 = extremely untrue, 7 = extremely true): Sex positivity (adapted from Belous & Schulz, 2022), traditional family and gender values (developed for this study and adapted from Davis & Greenstein, 2009), and sex apprehension (developed for this study). Within each grouping, the scores of each 5-item scale were averaged.

Personal narrative about belief alignment. Finally, in order to understand how these education settings may have informed individual beliefs, respondents were presented with one item rated on a 7-point scale (1 = Completely disagree, 7 = Completely agree) and one open-ended item following each feature (sex positivity, traditional family and gender role values, and sex apprehension) asking to what extent men's current beliefs align with what they were taught.

RESULTS AND DISCUSSION

LGBTQQ Sample Demographics

The sample for the present report included 512 young men between 18 and 25 years old who are currently enrolled in college and identify as LGBTQQ. The full sample of this study also includes 494 cisgender straight men. Demographics for young cisgender straight men can be found in the final study report. The distribution of ages for the LGBTQQ sample is in Table 1. Within this sample, 36% of participants were transgender. The breakdown of sexual orientation and gender is included in Table 2. Of this sample, 51.4% were white, 32.3% were Black or African American, 21.7% were Hispanic or Latino, 18.2% were multi-racial, 5.7% were East Asian, 5.7% were Native American or Pacific Islander, 3.1% were South Asian, 2.1% were Arab or Middle Eastern, and 0.8% did not select any of the listed ethnicities.

Participants also shared information about their universities and their involvement on campus. Within this subsample, 13.5% of participants attended a Historically Black College or University, 5.7% attended a Hispanic Serving Institution, 6.8% attended a religious institution, and 2.3% attended a Federal Service or Military Academy. Some participants were also involved in athletics on campus (17.8%), club and intramural sports (23.4%), Greek life (6.8%), and ROTC (4.7%).

Table 1
Frequencies of Age in Years, LGBTQQ sample only

What is your age?		
Response	**Frequency**	**Percent**
18	66	12.9
19	55	10.7
20	45	8.8
21	55	10.7
22	58	11.3
23	58	11.3
24	109	21.3
25	66	12.9

Table 2
Crosstabulation of Sexual Orientation by Gender, LGBTQQ Sample only

What is your sexual orientation? (LGBTQQ sample only)		
Response	**Cisgender (%)**	**Transgender (%)**
Asexual spectrum / ace-spec	21 (4.10)	7 (1.37)
Bisexual + (including bi, pan, omni, etc.)	175 (34.18)	75 (14.65)
Gay	110 (19.73)	58 (11.33)
Lesbian	1 (.20)	1 (.20)
Straight/Heterosexual	0 (0.00)	20 (3.9)
Queer	6 (1.17)	22 (4.30)
Questioning	15 (2.93)	1 (.20)
Column Total	**328 (64.06)**	**184 (35.94)**

Where Did Young LGBTQQ Men Receive Sexuality Education?

After comparing young LGBTQQ men and young cisgender straight men on each individual sexuality education setting (community, school, online, or religious), participants were sorted into 15 mutually exclusive groups by combining all selected setting categories (participants could select up to three). Cross tabulations illustrate the comparison of frequencies across sexual orientation and gender (Tables 3–9). Participants were able to optionally elaborate on the online and community settings where they received sexuality education. Their open-ended responses are summarized in Tables 10–11.

Hypothesis 1

Young LGBTQQ men will be more likely to have received sexuality education in a community or online setting than cisgender straight men.

This hypothesis was based on the assumption that LGBTQQ youth would need to seek further education than what was provided in their formal school setting due to the curricula issues described above, and that they would most likely seek out community settings when doing so. A chi-square test[1] revealed that significantly more LGBTQQ men did not select sexuality education in the school settings (standardized residual = 2.3) than cis-straight men (standardized residual = -2.2). No significant difference was observed between groups in the proportion who did report receiving school-based sex education (standardized residuals = 1.4 and -1.4, respectively).

Because participants could select up to three sexuality education settings, a variable was created combining across all selected settings to create mutually exclusive categories (for example, online only, online and school only, online and school and community, etc.). Overall, 51.6% (n = 264) young LGBTQQ men and 66.2% (n = 327) young cisgender straight men selected receiving sexuality education in more than one setting category. A chi-square test of independence revealed a significant association between sexual identity (LGBTQQ versus cisgender straight men) and sex education setting, $\chi^2(13, N = 1006) = 32.7$, $p < .05$. Cisgender straight men were significantly more likely to report receiving no sex education (n = 43, z = 2.2) or community-based education (n = 74, z = 2.0), whereas young LGBTQQ men were more likely to report the combination of school-based and online sources (n = 46, z = 2.3).

Additionally, the authors coded young LGBTQQ men and young cisgender straight men's open-ended responses to questions that asked them to specify where they received sexuality education information between (1) online, (2) youth services or after school programs, and/or (3) community events. Only online responses had a large enough sample size to conduct a chi-square test. Young LGTBQQ men were more likely to report turning to a sexual health website (e.g., Mayo Clinic, Planned Parenthood, SchoolofSexEd.org, or SEICUS) and social media (e.g., Instagram, YouTube, or Reddit) than young cisgender straight men, who were more likely to implement self-researching like "googling," $\chi^2(7) = 19.6$, df = 7, p-value < 0.01. While 13.4% of LGBTQQ respondents cited porn as their online sexual education setting, this did not differ significantly from the rate at which cisgender straight men utilized porn. The crosstabulations with standardized residuals are included in Tables 10–11.

WHAT IS A CHI SQUARE TEST?

A statistical method that tells us if there's a significant difference between our actual data and our expectations of our categorical data (i.e. the counts). Standardized residuals are used to tell us how different our estimated counts are from the observed count. ±2 is typically regarded as significant, meaning we can trust that the counts are different enough that we can trust that it's a pattern and not just chance.

Table 3

Crosstabulation of Sexual Orientation and Gender by Sexuality Education Setting Category

* Included for visualization, may overlap with other columns

In which of the following settings have you received sex education?									
	Count % →								
Sex Education Setting	**A-spec n=28**	**Bi n=250**	**Gay n=168**	**Lesbian n=2**	**Straight n=514**	**Queer n=28**	**Questioning n=16**	**Trans* n=184**	**Total* n=1006**
None	2	10	6	0	44	1	0	6	**63**
Community	5	46	18	0	121	7	3	32	**200**
School	5	48	39	2	100	5	3	38	**202**
Religious	0	0	0	0	1	0	0	0	**1**
Community and School	14	137	96	0	225	15	9	99	**496**
Community and Religous	1	4	1	0	6	0	1	2	**13**
School and Religious	0	1	6	0	6	0	0	4	**13**
Comm, School, and Religious	1	4	2	0	11	0	0	3	**18**

Table 4

Crosstabulation of LGBTQQ by No Sexuality Education

Note. Italicized second row indicates standardized residuals, significant at |±1.96|

$_{a, b}$ Subscripts are used to denote significantly significant differences between cell counts across rows

In which of the following settings have you received sex education? I have never received any sexuality education selected		
	Count (Row %) →	
	Cis and Straight	**LGTBQQ**
'Never Received Any' Not Selected	470$_a$ (49.8)	473$_a$ (50.2)
	-.54	*.55*
'Never Received Any' Selected	44$_a$ (69.8)	19$_b$ (30.2)
	2.08	*-2.13*

Table 5

Crosstabulation of LGBTQQ by Sexuality Education in Community Settings

Note. Italicized second row indicates standardized residuals, significant at |±1.96|

$_{a, b}$ Subscripts are used to denote significantly significant differences between cell counts across rows

In which of the following settings have you received sex education? I have never received any sexuality education selected		
	Count (Row %) →	
	Cis and Straight	**LGTBQQ**
'Community' Not Selected	183$_a$ (48.7)	193$_a$ (51.3)
	-0.12	*0.12*
'Community' Selected	311$_a$ (49.4)	319$_b$ (50.6)
	0.09	*-0.09*

Table 6

Crosstabulation of LGBTQQ by Sexuality Education in a School Settings

Note. Italicized second row indicates standardized residuals, significant at |±1.96|

$_{a, b}$ Subscripts are used to denote significantly significant differences between cell counts across rows

In which of the following settings have you received sex education? School selected		
	Count (Row %) →	
	Cis and Straight	**LGTBQQ**
'School' Not Selected	161$_a$ (58.8)	113$_b$ (41.2)
	2.28	*-2.24*
'School' Selected	333$_a$ (45.5)	399$_b$ (54.5)
	-1.40	*1.37*

Table 7

Crosstabulation of LGBTQQ by Sexuality Education Online

Note. Italicized second row indicates standardized residuals, significant at |±1.96|

$_{a, b}$ Subscripts are used to denote significantly significant differences between cell counts across rows

In which of the following settings have you received sex education? Online selected		
	Count (Row %) →	
	Cis and Straight	**LGTBQQ**
'Online' Not Selected	403$_a$ (51.2)	384$_a$ (48.8)
	0.84	*-0.83*
'Online' Selected	91$_a$ (41.6)	128$_a$ (58.4)
	-1.60	*1.57*

Table 8

Crosstabulation of LGBTQQ by Sexuality Education in a Religious Setting

Note. Italicized second row indicates standardized residuals, significant at |±1.96|

$_{a, b}$ Subscripts are used to denote significantly significant differences between cell counts across rows

In which of the following settings have you received sex education? Online selected		
	Count (Row %) →	
	Cis and Straight	**LGTBQQ**
'Religious' Not Selected	470$_a$ (49.0)	490$_a$ (51.0)
	-0.09	*0.09*
'Religious' Selected	24$_a$ (53.3)	21$_a$ (46.7)
	0.40	*-0.40*

Table 9

Crosstabulation of LGBTQQ by All Selected Sexuality Education Settings

Note. Italicized second row indicates standardized residuals, significant at |±1.96|

[a, b] Subscripts are used to denote significantly significant differences between cell counts across rows

In which of the following settings have you received sex education? If you have received sex education in more than one setting...choose the three that you remember the best.	Count (Row %) →	
	Cis and Straight	**LGTBQQ**
None	43$_a$ (68.3)	20$_b$ (31.7)
	2.17	*-2.13*
Community	74$_a$ (62.2)	45$_b$ (37.8)
	2.04	*-2.00*
School	99$_a$ (49.0)	103$_a$ (51.)
	-0.02	*0.02*
Online	13$_a$ (44.8)	16$_a$ (55.2)
	-0.33	*0.32*
Religious	1$_a$ (100)	0$_a$ (0.0)
	.73	*-0.71*
Community and School	167$_a$ (45.8)	198$_a$ (54.2)
	-0.91	*.90*
Community and Religious	5$_a$ (45.5)	6$_a$ (54.5)
	-0.17	*0.17*
School and Religious	6$_a$ (46.2)	7$_a$ (53.8)
	-0.15	*0.15*
Community and Online	26$_a$ (50.0)	26$_a$ (50.)
	0.09	*-0.09*
Religious and Online	0$_a$ (0.0)	0$_a$ (0.0)
	00	*00*
School and Online	19$_a$ (29.2)	46$_b$ (70.8)_
	-2.29	*2.25*
Community, School, and Online	29$_a$ (43.9)	37$_a$ (56.1)
	-0.60	*0.59*
Community, School, and Religious	9$_a$ (64.3)	5$_a$ (35.6)
	0.81	*-0.80*
School, Religious, and Online	2$_a$ (50.0)	2$_a$ (50.0)
	0.03	*-0.03*
Community, Religious, and Online	1$_a$ (50.0)	1$_a$ (50.0)
	0.02	*-0.02*

Table 10

Crosstabulation for Young LGBTQQ Men Versus Young Cisgender Straight by Types of Online Resources

Note. The code "porn website" covers not only pornography but educational lessons that are now being provided through porn websites. Distinguishing between these two features was not possible, as some respondents specified and others did not, so they were combined into one group.

*A standard residual of ±2 indicates a statistically significant difference between cell counts, meaning one frequency is reliably higher than the other.

Please specify where online you received sex education.				
Source	**LGTBQQ (n-134)**	**Std. Residual**	**Not LGBTQ (n-95)**	**Std. Residual**
Educational Program or Course	10 (7.5%)	0.12	6 (6.3%)	-0.12
Other online media	7 (5.2%)	0.7	3 (3.2%)	-0.75
Porn website	18 (13.4%)	-0.5	15 (15.8%)	0.5
School	5 (3.7%)	-0.56	5 (5.3%)	0.56
Self-research (e.g. googling)	12 (9.0%)	-3.71	25 (26.3%)	3.71
Sexual health website	16 (11.9%)	2.04	4 (4.2%)	-2.04
Social media	56 (41.8%)	2.13	28 (29.5%)	-2.13
Uncodable	10 (7.5%)	-0.54	9 (9.5%)	0.54

Table 11

Crosstabulation for Young LGBTQQ Men Versus Young Cisgender Straight by Types of Youth Services Center or After School Program

* Cell counts <5 are too small to be considered stable for a chi-square analysis. Counts are presented to share the breakdown of responses, but were not tested for between group differences.

Please specify the type of youth services center or after school program where you received sex education.		
Source	**LGTBQQ (n=17)**	**Not LQBTQ (n=26)**
Religious program	2 (11.76%)	1 (3.85%)
Nonprofit	1 (5.88%)	2 (7.69%)
Therapy	0 (0%)	1 (3.85%)
Educational program	3 (17.65%)	5 (19.23%)
Youth program through school	2 (11.76%)	6 (23.08%)
Community Center or Event	3 (17.65%)	6 (23.08%)
Youth Program through a College	1 (5.88%)	0 (0%)
Juvenile Detention	0 (0%)	0 (0%)
Uncodable	3 (17.65%)	3 (11.54%)

Table 12

Crosstabulation for Young LGBTQQ Men Versus Young Cisgender Straight by Types of Community Events

* Cell counts <5 are too small to be considered stable for a chi-square analysis. Counts are presented to share the breakdown of responses, but were not tested for between group differences.

Please specify the community event where you received sex education.		
Source	**LGTBQQ (n=9)**	**Not LQBTQ (n=13)**
Youth Organization	2 (22.22%)	0 (0%)
Nonprofit or Community Center	0 (0.0%)	2 (15.38%)
Community Event through a School	1 (11.11%)	3 (23.08%)
Other youth	0 (0.0%)	1 (7.69%)
One Time Event	1 (11.11%)	0 (0%)
Community Event through a College	1 (11.11%)	1 (7.69%)
Uncodable	1 (11.11%)	1 (7.69%)

Discussion

Although there were similar rates of young cisgender straight men and young LGBTQQ men who selected school settings, young cisgender straight men were more likely to leave school settings unselected. It is challenging to explain why this would occur, considering there was not a difference between the two groups in selecting school settings, however, since participants were asked to select the three they remember best, young cisgender straight men may have opted to choose other settings over the school setting. With the current state of sexuality education in the U.S., young cisgender straight men may have a difficult time remembering sexuality education in school — especially if the lesson was only a one-day lecture on abstinence. Whereas, it may be the case that LGBTQQ men are more likely to remember school settings if the messaging stood out to them either as harmful or helpful. In other words, the ever-present heteronormativity and discrimination in education and culture may have resulted in sexuality education in school being less memorable to young cisgender straight men as compared to their LGBTQQ peers. Alternatively, other settings may have stood out to young cisgender straight men more if they co-occurred with a memorable situation that led to a discussion or fun community event. Future research could further explore the influence that different sexuality education settings have on young men: what makes a setting more or less memorable? Does it vary by key aspects of their identity?

Overall, young LGBTQQ men were less likely to report that they never received any form of sexuality education and more likely to report that they received sexuality education online than cisgender straight men. When settings were combined into mutually exclusive groups to examine the combination of settings young LGBTQQ men received, it became clear that young LGBTQQ men were more likely to have received sexuality education both in school and online whereas cisgender straight men were more likely to report receiving sexuality education in community settings or none at all. These results are consistent with evidence suggesting that LGBTQQ youth turn to other sources when they do not receive sexuality education from their schools or families — most often online spaces or pornography (Arrington-Sanders et al., 2015; Kubicek et al., 2010; Lourgos, 2018; Mustanski et al., 2014; Mustanski, Lyons and Garcia, 2011). Bloom (2022) demonstrated that LGBTQQ students turn to online resources for a number of reasons, including filling gaps in knowledge left from school-based education, learning about real-life experiences and examples, and exploring sexuality in a non-heteronormative and even queer-centric way. Still, LGBTQQ students expressed (healthy) hesitancy towards the accuracy of what they would find online. Further research could also explore if LGBTQQ students perceive these online sources as less judgmental or even neutral in tone compared to other settings or educators (e.g. parents, coaches, and teachers). This may be the case especially for students who fear negative bias, stigmatization, or the risk of being outed in such settings.

Using the open-ended questions, LGBTQQ respondents were significantly more likely to share that they turned to a sexual health website or social media. Alternatively, cisgender straight respondents were more likely to report self-searching on the internet, which included more source-ambiguous responses like "googling." Considering Bloom's findings, it's possible that young LGBTQQ men specifically turn to sources that they feel they can trust. While LGBTQQ men may have more of a need to find identity-specific resources and cross reference (mis)information with reliable sources than cisgender straight men do, it may also be the case that cisgender straight men may not realize that these sites include information for them or may not even know they exist (perhaps seeing them instead as resources "for only women and LGBTQQ communities," such as Planned Parenthood). Future research could explore young men's online sexuality education behaviors to uncover the reasoning that accounts for this difference. These findings highlight the need for funding of organizations that provide reliable, medically accurate information that may fill gaps as we continue to simultaneously push for LGBTQQ representation in sexuality education curricula. Such resources may also reach a broader population by tailoring content and marketing strategies to reach young cisgender straight men to ensure they know these resources are also intended to provide them with much needed information.

In this sample, young LGBTQQ men were twice as likely to turn to social media for sexuality education as young cisgender straight men. With the rise of sexuality educators providing information on sites like YouTube and Instagram over the last 10 years, there is more opportunity for young LGBTQQ men to find real-life examples and queer-centric information. Social media may provide an avenue for young LGBTQQ men to find (a) information that is also presented in a relatable, non-stigmatizing manner and (b) community members on platforms like Reddit with whom they can discuss their questions and/or experiences. Recent research has demonstrated that transgender teens use social media for community as well as emotional and informational support (Selkie et al., 2020). As noted by Bloom, online spaces can also be venues for misinformation, stigma, and even sexual abuse. As efforts to create safe online spaces continue, all youth have a right to a safe, medically accurate space where they can ask questions and learn about sexual health and their bodily rights with a trained educator (World Health Organization, 2023).

Young cisgender straight men were more likely to select receiving sexuality education in a community setting than young LGBTQQ men. At the item level, there was not a difference between young LGBTQQ men and young cisgender straight men — however, this difference appeared when settings were combined. Young cisgender straight men receiving sexuality education in community settings may suggest that parents and other community members may feel more comfortable talking to cisgender straight boys about sexuality — especially if they also hold those identities. Due to the reality of sexuality education curricula, receiving appropriate education for LGBTQQ youth may require coming out to their educators. Research suggests that LGBTQQ youth may be uncomfortable or even fearful of coming out to their parents, which may carry over into their feelings about discussing sexuality more broadly with their parents or other trusted adults (D'Augelli, 2005; Fahs, 2021; Perrin-Wallqvist & Lindbloom, 2015). This fear is understandable considering parental responses to adolescents coming out range from acceptance and support to emotional harm or even violence (Grossman et al., 2021; van Bergen et al., 2021). Parental sexuality communication also is too often heternormative and stigmatizing (McKay & Fontenot, 2020). Parents report feeling uncomfortable and lacking knowledge to discuss sex (Bond et al., 2023; McKay & Fontenot, 2020). Better education and resources for parents may prepare them to help educate LGBTQQ children. Of course, starting with comprehensive sexuality education from a young age would also prepare the next generation of parents to provide this information or at least know where to find it, and education in school can provide better access to youth where gaps may exist in parental knowledge.

Hypothesis 2

For young LGBTQQ men, community and online settings will have a higher breadth of content, higher sex positive values, lower traditional family and gender values, and lower sex apprehension than more formal settings.

This hypothesis was based on the assumption that if young LGBTQQ men sought out community and online settings to fill gaps in knowledge and inclusion left by more formal settings, then they would likely seek out settings that were more sex positive and comprehensive. Linear mixed-effects[2] modeling was used to examine differences in perceived breadth of content, sex positivity, traditional family and gender values, and sex apprehension across sexuality education settings among young LGBTQQ men. The model included a random intercept for participants to account for repeated ratings across settings. Results indicate that online settings, rather than community settings, had more breadth of content and higher sex positivity. Online settings also had the lowest perceptions of traditional family and gender values and sex apprehension across all settings, and were the least likely setting to be rated as abstinence-only. Results are displayed in Figure 1 and Table 13.

Breadth of Content: Results revealed a significant main effect of setting on perceived breadth. Post hoc Tukey-adjusted[3] comparisons indicated that online sex education (M = 7.1, SE = 0.3, 95% CI [6.6, 7.6]) was rated as significantly more comprehensive than community (M = 5.1, SE = 0.17, $p < .0001$, 95% CI [4.8, 5.4]), school (M = 5.8, SE = 0.15, $p < .0001$, 95% CI [5.52, 6.12]), and religious (M = 4.9, SE = 0.6, $p < .01$, 95% CI [3.7, 6.1]) settings. School settings were also rated as significantly more comprehensive than community settings ($p < .01$). No other pairwise differences were statistically significant.

Sex Positivity: Results indicated a significant effect of sex education setting on sex positivity ratings. Post hoc comparisons using Tukey-adjusted estimated marginal means revealed that online sex education was rated as significantly more sex positive (M = 5.5, SE = 0.11, 95% CI [5.3, 5.7]) than both community (M = 4.7, SE = 0.1, $p < .001$, 95% CI [4.6, 4.9]) and school settings (M = 4.7, SE = 0.1, $p < .001$, 95% CI [4.6, 4.9]). There were no significant differences between community, school, and religious settings (ps > .9). These findings suggest that LGBTQQ men perceive online sexuality education settings as significantly more sex positive than more traditional education settings.

Traditional Family Values: Results showed a significant effect of setting on traditional values. Post-hoc Tukey-adjusted comparisons indicated that online sexuality education (M = 3.3, SE = 0.1, 95% CI [3.0, 3.6]) was perceived as significantly less traditional than community (M = 4.00, SE = 0.1, $p < .001$, 95% CI [3.8, 4.1]) and religious settings (M = 4.4, SE = 0.3, $p < .01$, 95% CI [3.8, 5.1]). Additionally, school settings were rated as significantly less traditional than community settings ($p < .05$). No other differences were statistically significant (ps > .05).

Sex Apprehension: Results revealed a significant main effect of setting on fear-based sexuality education ratings. Post-hoc comparisons indicated that online sex education (M = 3.6, SE = 0.1, 95% CI [3.4, 3.8]) was perceived as significantly less fear-based than community (M = 4.1, SE = 0.1, $p = .0001$, 95% CI [3.9, 4.2]), school (M = 3.9, SE = 0.1, $p < .01$, 95% CI [3.8, 4.0]), and religious settings (M = 4.4, SE = 0.2, $p < .01$, 95% CI [3.9, 4.9]). No other pairwise differences between settings were statistically significant (ps > .20).

Abstinence-Only: Online settings were also less likely to be rated as abstinence-only than other settings. A linear mixed model test indicated significant differences in which sex education settings participants classified as abstinence-only. Estimated marginal means indicated that abstinence-only endorsement was significantly lower in online settings (M = 1.37, SE = 0.04, 95% CI [1.30, 1.45]) compared to community-based (M = 1.50, SE = 0.03, 95% CI [1.45, 1.55]), school-based (M = 1.50, SE = 0.02, 95% CI [1.46, 1.55]), and religious settings (M = 1.69, SE = 0.09, 95% CI [1.50, 1.87]). No other differences were statistically significant (ps > .10).

[2] WHAT IS A LINEAR MIXED-EFFECT MODEL?

Linear mixed-effects models (LMM) were selected because participants were able to choose multiple sex education settings (up to 3), meaning not all participants received or selected every type of setting. Usually, statistical methods require comparison groups to be equal, but this model takes into account that the comparison groups (groups of people who selected each setting) are unequal and includes participants who didn't complete every question. LMM also accounts for non-independence (meaning responses from the same person could be related to each other, like when the same person is in multiple groups — e.g. picked more than one setting). In each model, sex education setting was entered as a fixed effect, and a random intercept was included to account for variation across participants (Bates et al., 2015).

[3] WHAT DOES TUKEY-ADJUSTED MEAN?

When multiple comparisons are made between groups in one statistical test, the probability of observing a significant difference by random chance increases. This adjustment sets a stricter margin of error for each comparison, resulting in a more conservative estimate and reducing the likelihood that we find a significant difference that isn't actually there.

Figure 1.

Sex Education Features by Sexuality Setting

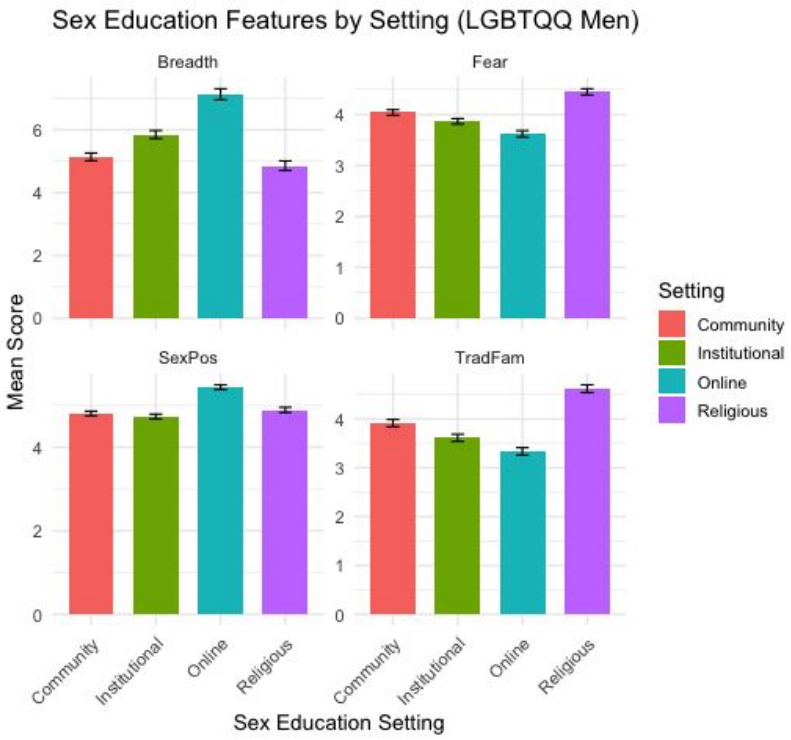

Table 13

Visualization of Comparison of Features of Sexuality Education across Settings

Note. Only significant differences are shown in the table.

Breadth of Content	Sex Positivity	Traditional Family Values	Sex Apprehension	Abstinence-Only
School > Community		School < Community		
Online > Community	Online > Community	Online < Community	Online < Community	Online < Community
Online > School	Online > School		Online < School	Online < School
		Online < Religious	Online < Religious	Online < Religious

Discussion

Overall, online settings scored strongly in terms of breadth of content and sex positivity, and were correspondingly weak on traditional family and gender values, sex apprehension, and reports of being abstinence-only. Specifically, online settings were higher on breadth of content and sex positivity than community and school settings. Online settings were also lower on traditional family and gender values than community and religious settings. Additionally, online settings were lower on sex apprehension than community, school, and religious settings. Participants were also less likely to report that online settings were abstinence-only. This is consistent with the previous literature and results of Hypothesis 1, as young LGBTQQ men are likely self-selecting medical and sexual health resource providers online as well as other LGBTQQ influencers or queer online spaces, which are often more sex positive. In addition, there is more flexibility online to provide a wider range of information on a diverse set of topics than some of the in-person sexuality education settings are able to provide with limited time and access to youth.

School settings scored higher than community settings on breadth of content. This could be because schools are more likely to have curricula that they are required to cover regardless of sexuality education policies (comprehensive versus abstinence-only). Additionally, the educator may have had more time/opportunity to share more information with respondents in a classroom setting, both due to the fact that the learner is a more captive audience and due to the youth paying more attention to the educator in this setting's power dynamics than in community settings. With a family member, the participant may have been able to walk away or avoid parts of the conversation due to discomfort or other reasons. Finally, conversations with family members and trusted adults may be teaching moments in response to specific situations and therefore only cover relevant issues at hand, rather than following a set curriculum.

Schools were not higher than other settings on sex apprehension or sex positivity. The lack of an observable difference may be due to differences in policies across states in our national sample. For example, STIs may be required curriculum in both abstinence-only and comprehensive education states, but may vary in how they're presented. Specifically, STIs may be presented in comprehensive sexuality education curricula as common, normal infections (aligned with sex positivity) or in abstinence-only sexuality education in a stigmatizing manner to instill fear in youth (aligned with sex apprehension). Although not included in this report, a comparison across states may find differences in school values on these features.

School settings were lower on traditional family and gender values than community settings, which include conversations with family members. Previous qualitative research has demonstrated that both LGBTQQ youth and their parents report that parents may not be knowledgeable about LGBTQQ sexuality topics (McKay & Fontenot, 2020; Newcomb et al., 2018) and may even make assumptions that their child is cisgender and straight. As a result, conversations with family or other community members may contain more traditional gender and family values than other educational settings. Future research could explore programming for parents on how to talk to kids about sexuality education in non-heteronormative ways. Additionally, although schools were lower than community settings on these values, they were still generally high within this setting. Better training for teachers and funding for LGBTQQ-inclusive sexuality education is a necessity for LGBTQQ youth to build the skills they need to have healthy relationships and improved sexual and emotional wellbeing.

Post-Hoc Hypothesis

Given an assumption that LGBTQQ men are more likely to seek out additional, informal sexuality education, it is likely that education received in those settings, specifically online and community settings, will better reflect their beliefs than those received in more traditional settings.

To examine whether LGBTQQ men's current personal values align differently with the sexuality education they received in various settings, we ran a series of linear mixed models separately for sex positivity, traditional family values, and sex apprehension. Each model included sex education setting category (community, school, online, and religious) as a fixed effect and a random intercept. Results are displayed in Table 14.

Sex positivity: The model revealed a significant effect of setting on value alignment, $F(3, 922.49) = 9.45$, $p < .001$. Pairwise comparisons indicated that alignment was significantly higher for sex education received online ($M = 5.53$, $SE = 0.15$, 95% CI [5.24, 5.82]) compared to community ($M = 4.74$, $SE = 0.09$, $d = 0.56$, 95% CI [4.57, 4.92]) and school settings ($M = 4.63$, $SE = 0.08$, $d = 0.64$, 95% CI [4.47, 4.79]), both $ps < .001$.

Traditional family values: There was a significant effect of setting on value alignment, $F(3, 912.78) = 4.61$, $p = .003$. LGBTQQ men reported significantly lower alignment with traditional family values taught in online settings ($M = 3.75$, $SE = 0.11$, 95% CI [3.53, 3.97]) compared to community ($M = 3.29$, $SE = 0.07$, $d = 0.44$, 95% CI [3.15, 3.43]) and school settings ($M = 3.34$, $SE = 0.06$, $d = 0.39$, 95% CI [3.22, 3.46]), $ps < .01$.

Sex apprehension: The model revealed a significant effect of setting, $F(3, 900.70) = 4.92$, $p = .002$. Alignment with sex apprehension values was significantly higher in online settings ($M = 3.60$, $SE = 0.11$, 95% CI [3.39, 3.81]) than in community ($M = 3.25$, $SE = 0.07$, $d = 0.36$, 95% CI [3.12, 3.39]) and school settings ($M = 3.23$, $SE = 0.06$, $d = 0.38$, 95% CI [3.12, 3.35]), both $ps < .05$.

Table 14

Visualization of Comparison of Personal Narrative Alignment with Features of Sexuality Education across Settings

Note. Only significant differences are shown in the table.

Sex Positivity	Traditional Family Values	Sex Apprehension	Abstinence-Only
Online > Community	Online > Community	Online < Community	Online < Community
Online > School	Online > School	Online < School	Online < School
			Online < Religious

Discussion

These findings suggest that young LGBTQQ men's alignment with sexuality education values varies by both the type of value and the setting where the education occurred. Online settings were consistently associated with greater alignment for sex positivity and sex apprehension, but had lower alignment for traditional family values. As online settings allow for tailored content and may be presented by other LGBTQQ individuals, they could be highly influential for youth looking for connection, support, and validation (Selkie et al., 2020). Furthermore, even if schools or community members present sex positive information, it may still contain heteronormative beliefs, which could lower personal belief alignment among young LGBTQQ men. Alternatively, because the results suggest that young LGBTQQ men may use online settings supplementally to school learning, they may seek out information that is already aligned with what they believe. This hypothesis was explored post-hoc, and, therefore, other variables may help explain this difference in personal belief alignment. The cross-sectional nature of this study also makes it challenging to interpret these findings without a baseline measure of personal beliefs, and there is no temporal precedence to claim that current beliefs differed from those of participants prior to accessing the online source. Research could examine young men's engagement with online information and track personal beliefs over time. Future studies could also compare the effects of heteronormative versus nonheteronormative sexuality education on young men's online behaviors. Further study is also required to understand how the findings of this research can inform more thoughtful development of sexuality education programming that better support LGBTQQ young men in non-online settings.

IMPLICATIONS FOR POLICY AND PREVENTION

Findings of this report demonstrate that LGBTQQ men are often turning to online settings for sexuality education, which provide a wide range of information and a sex positive tone, opposed to the traditional family values, sex apprehension, and abstinence-only education that are more common in other settings. We anticipate that the current restrictions on federal funding for comprehensive sexuality education in conjunction with policies banning LGBTQQ topics from classrooms will perpetuate and exacerbate harm against young LGBTQQ men in classrooms, further driving them to turn to online spaces. While online settings are promising for filling gaps in knowledge and providing alternatives to more traditional educational settings, online spaces are not free of risk nor the potential for misinformation.

Policy and Activism

Policies for sexuality education that promote youth wellbeing and safety are an absolute must. The need for comprehensive sexuality education that is inclusive and representative of LGBTQQ experiences — and accompanying training for educators across settings — is a policy need that is backed by this research and much of the previous literature. Unfortunately, it is unlikely that LGBTQQ inclusion in comprehensive sexuality education will be able to be addressed through federal legislative efforts for the foreseeable future. Instead, energies for policy-based changes that support LGBTQQ student inclusion should be directed towards advocacy at the local and state level, where possible. If reform is also not possible at the state or local level, student activists can partner with local and national sexual health organizations and LGBTQQ-serving programs to implement LGBTQQ-inclusive programming that is not reliant on their educational institution.

Parents and Trusted Adults

Parents and educators should be invited to build their awareness of reliable and inclusive resources such as free sexuality education service providers to better prepare themselves to discuss these topics with youth across identities. Some of these curricula can be found through Sex Positive Families, Planned Parenthood, and SIECUS. Parents could also partner with other local nonprofits or government services, such as health or recreation centers, family wellness organizations, and sexual/domestic violence response agencies to create grassroots educational opportunities within their own communities. Providing food and other necessities for youth and their families at these events could be a great way to incentivize engagement and provide more holistic care for the community. If financial resources are limited, recruiting volunteers is a great way to get community members involved. Crowdfunding may be another promising way to compensate educators or to purchase curricula to implement. It should be noted that local agencies are being stripped of their funding as well, and financial or other support for these partners must be considered if they are being asked to lend their expertise and resources in their community.

Educational Institutions

In the current political climate, educators may face challenges implementing programming that could be labeled as "diversity, equity, and inclusion." Therefore, a strategy that focuses on supporting the development of critical thinking and teaching skills to find and identify reliable resources can ultimately help children access this same information in other ways. For example, considering the results that young LGBTQQ men are using online sources, K–12 educators should increase education for students on media literacy and online safety to support youth in adopting safe practices when approaching online spaces. Campuses and universities should also provide educational resources that are inclusive of the needs of LGBTQQ students to all students throughout their entire time in school. Critically, this must go beyond using gender neutral language. Sexual health is neither gender-blind nor is it sexuality-neutral. Instead of adopting a gender-neutral approach, institutions should strive for sexual health and violence prevention education to be gender-inclusive and incorporate lessons that directly relate to the unique experiences of LGBTQQ students within the context of historical and present systemic injustice.

Furthermore, all institutional entities charged with sexuality education should consider partnering with local agencies or trained peer educators who can provide this educational information in a manner that expands the resources and connections available to their students, ensuring everyone has access to a setting that serves to further their baseline understanding of sexuality. Finally, given that the literature recognizes that the LGBTQQ population has been historically underserved by existing institutional sexuality education programs (a finding validated by the exploration of settings in this report), institutions should consider auditing their programming with that potential shortcoming in mind, specifically seeking out the feedback of their students that identify as LGBTQQ. The current state of the country is not a permanent one. Educational institutions can and should commit to demonstrating institutional courage by continuing to invest in programs that support LGBTQQ health, wellbeing, and safety. Now is the time to double down on providing support for LGBTQQ students rather than abandoning them. We encourage institutions to engage in creativity and courage, committing to their support of LGBTQQ students through policy, funding, and practice.

References

Arrington-Sanders R, Harper GW, Morgan A, Ogunbajo A, Trent M, & Fortenberry JD (2015). The role of sexually explicit material in the sexual development of same-sex- attracted Black adolescent males. *Archives of Sexual Behavior,* 44(3), 597–608. 10.1007/s10508-014-0416-x

Basile, K. C., Smith, S. G., Kresnow, M. J., Khatiwada, S., & Leemis, R. W. (2022). The national intimate partner and sexual violence survey: 2016/2017 report on sexual violence.

Bates, D., Mächler, M., Bolker, B., & Walker, S. (2015). *Fitting linear mixed-effects models using lme4*. *Journal of Statistical Software, 67*(1), 1–48. https://doi.org/10.18637/jss.v067.i01

Belous, C. K., & Schulz, E. E. (2024). The Sex Positivity Scale: A new way to measure sex positivity as a trait. *Sexual and Relationship Therapy*, 39(3), 944–962.

Bond, K. T., Mansour, M., Kershaw, T., & Flores, D. D. (2023). "Whenever you're ready to talk about it": Prompts and barriers to inclusive family sex communication with gay, bisexual, and queer sons. *American Journal of Sexuality Education*, 18(4), 569–593.

Chen, J., Khatiwada, S., Chen, M. S., Smith, S. G., Leemis, R. W., Friar, N. W., ... & Kresnow, M. J. (2023). The National Intimate Partner and Sexual Violence Survey: 2016/2017 report on victimization by sexual identity.

D'Augelli, A. R., Grossman, A. H., & Starks, M. T. (2005). Parents' awareness of lesbian, gay, and bisexual youths' sexual orientation. *Journal of Marriage and Family, 67*(2), 474–482. https://doi.org/10.1111/j.0022-2445.2005.00129.x

Dittus PJ, Michael SL, Becasen JS, Gloppen KM, McCarthy K, & Guilamo-Ramos V (2015). Parental monitoring and its associations with adolescent sexual risk behavior: a meta-analysis. *Pediatrics*, 136, e1587–1599. https://doi.org/10.1542/peds.2015-0305

Donovan, M. K. (2017). The looming threat to sex education: A resurgence of federal funding for abstinence-only programs? Guttmacher Institute. https://www.guttmacher.org/gpr/2017/03/looming-threat-sex-education-resurgence-federal-funding-abstinence-only-programs

Elia JP, & Eliason MJ (2010). Dangerous omissions: Abstinence-only-until- marriage school-based sexuality education and the betrayal of LGBTQ youth. *American Journal of Sexuality Education*, 5(1), 17–35.

Erdem G, DuBois DL, Larose S, De Wit D, & Lipman EL (2016). Mentoring relationships, positive development, youth emotional and behavioral problems: investigation of a mediational model. *Journal of Community Psychology*, 44, 464–483.

Fahs, B. (2021). The coming out process for assigned-female-at-birth transgender and non-binary teenagers: Negotiating multiple identities, parental responses, and early transitions in three case studies. *Journal of LGBTQ Issues in Counseling*, 15(2), 146–167.

References

Fields, J. (2008). *Risky lessons: Sex education and social inequality*. Rutgers University Press.

Garg, N., & Volerman, A. (2021). A national analysis of state policies on lesbian, gay, bisexual, transgender, and questioning/queer inclusive sex education. *Journal of School Health*, 91(2), 164–175.

Gowen LK, & Winges-Yanez N. (2014). Lesbian, gay, bisexual, transgender, queer, and questioning youths' perspectives of inclusive school-based sexuality education. *The Journal of Sex Research*, 51(7), 788–800.

Guttmacher Institute (2021). Sex and HIV education. https://www.guttmacher.org/state-policy/explore/sex-and-hiv-education.

Grossman, A. H., Park, J. Y., Frank, J. A., & Russell, S. T. (2021). Parental responses to transgender and gender nonconforming youth: Associations with parent support, parental abuse, and youths' psychological adjustment. *Journal of Homosexuality*, 68(8), 1260–1277.

Hobaica, S., & Kwon, P. (2017). This is how you hetero: Sexual minorities in heteronormative sex education. *American Journal of Sexuality Education*, 12(4), 423–450. https://doi. org/10.1080/15546128.2017.1399491

Hobaica, S., Schofield, K., Kwon, P. (2019). "Here's your anatomy … good luck": Transgender individuals in cisnormative sex education. *American Journal of Sexuality Education*, 14(3), 358–387. https://doi.org/10.1080/15546128.2019.1585308

Hoefer, S. E., & Hoefer, R. (2017). Worth the wait? The consequences of abstinence-only sex education for marginalized students. *American Journal of Sexuality Education,* 12(3), 257–276. https://doi.org/10.1080/15546128.2017.1359802

Iachini AL, Bell BA, Lohman M, Beets MW, & Reynolds JF (2016). Maximizing the contribution of after-school programs to positive youth development: exploring leadership and implementation within Girls on the Run. *Children & Schools*, 39, 43–52.

Irvine, J. M. (2002). *Talk about sex: The battles over sex education in the United States*. University of California Press.

James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). The Report of the 2015 U.S. Transgender Survey. Washington, DC: National Center for Transgender Equality.

Kincaid C, Jones DJ, Sterrett E, & McKee L (2012). A review of parenting and adolescent sexual behavior: The moderating role of gender. *Clinical Psychology Review*, 32, 177–188. https://doi.org/10.1016/ j.cpr.2012.01.002

Kubicek K, Beyer WJ, Weiss G, Iverson E, & Kipke MD (2010). In the dark: Young men's stories of sexual initiation in the absence of relevant sexual health information. *Health Education & Behavior*, 37(2), 243–263.10.1177/1090198109339993 [PubMed: 19574587]

Lourgos AL (2018). Parents often struggle to talk about sex with LGBTQ teens: Northwestern study. https://www.chicagotribune.com/news/ct-met-lgbtq-teens-parents-sex-talk-20180406-story.html

Mathews, C., Eggers, S. M., de Vries, P. J., Mason-Jones, A. J., Townsend, L., Aaro, L. E., & De Vries, H. (2015). Reaching the hard to reach: Longitudinal investigation of adolescents' attendance at an after-school sexual and reproductive health programme in Western Cape, South Africa. *BMC Public Health*, 15(1), 608. https://doi.org/10.1186/s12889-015-1963-3

Mathews, C., Eggers, S. M., Townsend, L., Aaro, L. E., de Vries, P. J., Mason-Jones, A. J., De Koker, P., McClinton Appollis, T., Mtshizana, Y., Koech, J., Wubs, A., & De Vries, H. (2016). Effects of PREPARE, a multi-component, school-based HIV and Intimate Partner Violence (IPV) prevention programme on adolescent sexual risk behaviour and IPV: Cluster randomised controlled trial. *AIDS and Behavior*, 20(9), 1821–1840. https:// doi.org/10.1007/s10461-016-1410-1

McKay, E. A., & Fontenot, H. B. (2020). Parent-adolescent sex communication with sexual and gender minority youth: An integrated review. *Journal of Pediatric Health Care*, 34(5), e37–e48.

Mustanski B, Greene GJ, Ryan D, & Whitton SW (2014). Feasibility, acceptability, and initial efficacy of an online sexual health promotion program for LGBT youth: The queer sex ed intervention. *The Journal of Sex Research*, 52(2), 220–230. 10.1080/00224499.2013.867924

Mustanski B, Lyons T, & Garcia SC (2011). Internet use and sexual health of young men who have sex with men: A mixed-methods study. *Archives of Sexual Behavior*, 40(2), 289–300. 10.1007/ s10508-009-9596-1

National Conference of State Legislatures. (2020). State policies on sex education in schools: Why is sexual education taught in schools? https://www.ncsl.org/research/health/state-policies-on-sex-education-in-schools.aspx.

Newcomb, M. E., Feinstein, B. A., Matson, M., Macapagal, K., & Mustanski, B. (2018). "I have no idea what's going on out there:" Parents' perspectives on promoting sexual health in lesbian, gay, bisexual, and transgender adolescents. *Sexuality Research and Social Policy*, *15*, 111–122.

National Sex Ed Conference (2015 May 15). The history of sex education. https://sexedconference.com/the-history-of-sex-education/

Perrin-Wallqvist, R., & Lindblom, J. (2015). Coming out as gay: A phenomenological study about adolescents disclosing their homosexuality to their parents. *Social Behavior and Personality: an international journal*, *43*(3), 467–480.

Pingel ES, Thomas L, Harmell C, & Bauermeister J. (2013). Creating comprehensive, youth centered, culturally appropriate sex education: What do young gay, bisexual and questioning men want? *Sexuality Research & Social Policy*, 10(4), 293–301. 10.1007/s13178-013-0134-5

Scheer, J. R., McConocha, E. M., & Sainato, D. M. (2019). Intimate partner violence victimization and mental health among LGBTQ+ adults: A systematic review and meta-analysis. *Journal of Traumatic Stress, 32*(6), 900–912. https://doi.org/10.1002/jts.22457

SEICUS: Sex Ed for Social Change (2022). Exposing Hate: The Truth About Attacks on Our Kids, Schools, and Diversity. https://siecus.org/resource/the-truth-about-attacks-on-our-kids-schools-and-diversity

Selkie, E., Adkins, V., Masters, E., Bajpai, A., & Shumer, D. (2020). Transgender adolescents' uses of social media for social support. *Journal of Adolescent Health*, 66(3), 275–280.

The Trevor Project. (2024). Sexual Violence and Mental Health among LGBTQ+ Young People. https://www.thetrevorproject.org/research-briefs/sexual-violence-and- suicide-risk-among-lgbtq-young-people/

Trump, D. J. (2025, January 20). Ending radical and wasteful government DEI programs and preferencing (Executive Order No. 14151). The White House. https://www.whitehouse.gov/presidential-actions/2025/01/ending-radical-and-wasteful-government-dei-programs-and-preferencing/

Rabbitte, M. (2020). Sex education in school, are gender and sexual minority youth included?: A decade in review. *American Journal of Sexuality Education*, 15(4), 530–542. https://doi.org/10.1080/15546128.2020.1832009

UNESCO (2015). *Emerging evidence, lessons and practice in global comprehensive sexuality education: A global review.* http://www.unfpa.org/sites/default/files/pub-pdf/CSE_ Global_Review_2015.pdf.

UNESCO (2018). *International technical guidance on sexuality education: An evidence informed approach. United Nations Educational, Scientific and Cultural Organization (UNESCO),* UNAIDS, UNFPA, UNICEF, UN Women, WHO.

UNESCO (2019). *Facing the facts: The case for comprehensive sexuality education.* https://unesdoc.unesco.org/ark:/48223/pf0000368231/PDF/368231eng.pdf.multi.

UNESCO (2024). Comprehensive sexuality education: For healthy, informed and empowered learners. https://www.unesco.org/en/health-education/cse

Van Bergen, D. D., Wilson, B. D., Russell, S. T., Gordon, A. G., & Rothblum, E. D. (2021). Parental responses to coming out by lesbian, gay, bisexual, queer, pansexual, or two-spirited people across three age cohorts. *Journal of Marriage and Family*, 83(4), 1116–1133.

Widman L, Choukas-Bradley S, Noar SM, Nesi J, & Garrett K (2016). Parent-adolescent sexual communication and adolescent safer sex behavior: A meta-analysis. *JAMA Pediatrics*, 170, 52–61. https://doi.org/10.1001/jamapediatrics.2015.2731

Wight D, & Fullerton D (2013). A review of interventions with parents to promote the sexual health of their children. *Journal of Adolescent Health*, 52, 4–27. https://doi.org/10.1016/j.jadohealth.2012.04.014

World Health Organization (18 May 2023). Comprehensive sexuality education. https://www.who.int/news-room/questions-and-answers/item/comprehensive-sexuality-education

Zimmerman, J. (2015). *Too hot to handle: A global history of sex education*. Princeton University Press.