



# THE PREPARATION PROBLEM: HOW THE SYSTEM IGNORES YOUNG MEN'S SEX EDUCATION NEEDS

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

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

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

# A LETTER FROM OUR EXECUTIVE DIRECTOR TRACEY VITCHERS

It's no secret that the type and quality of sexuality education young men in the United States have received has been – and remains – largely dependent on cultural, political, and familial influences. It depends on where a young person is raised, the kind of K–12 school they attend, and the knowledge and comfort levels of the adults around them to speak on sexual health and wellness topics. This means that a college freshman may arrive at their institution of higher education with a full background of comprehensive sexuality education, no formal education at all, or any level in between. While some may start college with only a baseline knowledge of the biology of reproduction, others may have had in-depth sex education that covered consent and healthy relationships.

Previously, It's On Us found that less than half of college men in athletics self-reported receiving formal sexuality education in K–12 school settings, and almost none of them had received or remembered receiving consent education as part of that experience (Zenteno et al., 2023). Why does this matter, especially when looking at sexual violence prevention on campuses?

Effective prevention programming is not one size fits all. Yet, institutions of higher education overwhelmingly rely on cookie-cutter programs – often administered online – to educate incoming freshman on sexual violence and its prevention. These programs assume participants – regardless of gender, race, sexuality, previous educational experiences, or other factors – share similar baseline understandings of sexuality, consent, and healthy relationships. However, as this study shows, young men arrive at college with a wide range of formal and informal educational experiences related to sex and violence prevention. These individual experiences, and the biases they bring with them, have the potential to impact the efficacy – both positively and negatively – of the prevention strategies colleges provide.

Creating a culture of consent on college campuses requires prevention programming that is responsive to the diverse knowledge and needs of their students, including their previous experiences with sexuality education. It also requires us to lean into intersectional approaches to sexual health education that reflect their multifaceted identities. The diversity of students and their experiences can be a strength institutions lean into when hosting workshops or trainings on sexuality, consent, and sexual violence prevention.

It's On Us is committed to ensuring students have a right to an education free from harm. In order to create sustainable change on campuses, college and university administrators must also integrate sexuality education into their prevention strategies. The findings of *The Preparation Problem: How the System Ignores Young Men's Sex Education Needs* can provide critical data and insights that can shape the future of campus prevention education efforts.

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# 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 college 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 assault because we have created a culture of prevention within higher education.

## Why Men?

1. *Sexual and dating violence affects all of us.* Sexual and dating violence are not solely women's issues. Any person of any gender can experience violence. 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.* In connecting and resonating with other men, they 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**

Sexuality education that teaches young people about not only the physical aspects of sexuality, but also the cognitive, emotional, and social aspects, may lower the risk for sexual and dating violence (UNESCO, 2018, 2015). Yet, in the United States, there are systemic barriers and persisting resistance to providing a comprehensive approach to sexuality education in schools, often resulting in young people turning to alternative sources to find information. Once young men step onto a college campus, they are assumed to have a basic understanding of relationships and sexuality without regard for any educational deficits, leaving a large gap that may reduce the effectiveness of prevention programming. To better understand what educational deficits young men may bring to campus, the present report contains data to answer four questions: (1) what were college men's first experiences learning about sex?; (2) where did college men receive sexuality education prior to college?; (3) did community, school, religious, or online settings correspond more with abstinence-only or comprehensive approaches to sexuality education?; and (4) how does sexuality education prior to college predict sexual assault risk today? A U.S. national sample of 1,006 men, 18–25 years old and currently enrolled in college, completed an online survey reflecting on their sexuality education experiences prior to college. This report also focuses on two subpopulations: Black college men and LGBTQQA college men. Recommendations for how to address sexuality education knowledge gaps are included.

**Keywords:** Sexual Assault. 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

Ashlynn Profit, Executive Vice President of Communications and Content, Civic Nation

Jae Salinas, Director of Marketing Production, Civic Nation

Eryn Bennett Peterson, Creative Director, Civic Nation

Amy Moscowitz, Art Director, Wiltboh Studio

Olivia Solow-Niederman, Associate Director of Communications, Civic Nation

Brandi Stover, Press Assistant, Civic Nation

Kathryn Montiegel, Director, Web Strategy and Development, Civic Nation

Thank you to our partners at [A Call to Men](#) for being peer reviewers!

# 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, wellbeing, and dignity (UNESCO, 2024).

## **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.

## **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.

## **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.

## **Heterosexism**

Discrimination or prejudice against lesbian, gay, bisexual, and queer people based on the assumption that heterosexuality is the only normal and natural expression of sexuality.

## **Hierarchical Family and Gender Norms**

Beliefs about relationships, marriage, and family, including sexual behavior and domestic roles, that reinforce cisgender male dominance and cisgender female subservience.

## **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.

## **Homophobia**

Dislike or prejudice against gay, lesbian, bisexual, and queer people. This includes the fear of being perceived as gay by others.

## **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.

## **LGBTQQA**

An acronym for lesbian, gay, bisexual+, transgender, queer, questioning, and asexual/a-spectrum.

## **Nonbinary**

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

## **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 LGBTQQA communities as a term of pride and resistance, though it was historically used as a slur.

## **Reactance**

The psychological process of resisting influence that is perceived to threaten a person's freedoms, via their reassertion of autonomy, by shifting in the opposite direction of the perceived influence.

## **Sex**

A label assigned at birth based on genitals.

## **Sexual Assault**

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.

## **Sexual Orientation**

Emotional, romantic, or sexual attraction to other people.

## **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.

# **INTRODUCTION**

*“While sex is at best revolting and at worst rather painful, it has to be endured, and has been... since the beginning of time, and is compensated for by the monogamous home and by the children produced through it.” – Ruth Smythers, Sex Tips for Husbands and Wives from 1894*

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Adults have long passed down knowledge about sex to youth, although not always grounded in scientific evidence or optimism. Research has shown that when passed-down knowledge focuses on healthy skills, nonviolent attitudes, and the empowerment of individuals to make informed decisions about their own bodies, there is a reduction in sexual and dating violence risk among youth (Mathews et al., 2015, 2016; UNESCO, 2018, 2015). However, the politicization of sexuality education over the last 40 years has created systemic barriers that have made its implementation both challenging and controversial. Although the tradition of sharing knowledge about sex is engrained in our culture and the protective effects of sexual health education against violence is backed by decades of scientific research, formal education about sexual health is only required in 30 U.S. states, of which only 18 require it to include “medically accurate” information (Guttmacher Institute, 2021; National Conference of State Legislatures, 2020).

As sexual assault preventionists at the collegiate level aim to create effective programming, there is a chance that their students have encountered education about sexual health prior to attending college; yet, due to systemic barriers like lack of funding for formal education, varied policies at the state and local levels, and rampant misinformation about entire groups of people (for example, LGBTQQA students; see this report’s predecessor, [Erased In School, Educated Online](#)), it is increasingly less likely (at least for the time being) that they have gained proficiency in – or even learned – these skills. This implies that students are arriving at college with wildly varying levels of prior sexuality education, resulting in a major gap in their baseline level of knowledge about sex and relationships that current prevention strategies may not be addressing.

### **It’s On Us’ research program is focused on better understanding this potential gap in knowledge among college men.**

We were guided by two overarching research questions:

- ➔ **Does participation in sexuality education prior to college increase the likelihood that college men will be susceptible to the intended outcomes of campus prevention strategies?**
- ➔ **What existing college sexual assault prevention education strategies are more or less effective in supporting men who have had no formal sexual health education prior to college?**

The present report lays the groundwork for answering these questions by exploring three key features of college men’s prior experiences with sexual health education: the settings (both formal and informal) where they received sexuality education; the content communicated in each of these settings; and how these teachings influence them today.

## Background on Sexuality Education in the U.S.

The issue of access to sexuality education is systemic, meaning that its implementation, policies, and norms are shaped by our society's central structures: law, media, educational systems, and religious institutions. The following sections summarize how sexuality education became a systemic issue in the United States over the course of history, as well as how two competing paradigms of sexuality education emerged: comprehensive and abstinence-only. We define 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, wellbeing, and dignity” (UNESCO, 2024).

Abstinence-only education is defined as:

A lesson 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).

Through the rest of the report, we use “sexuality education” as an umbrella term for the broad array of curricula about sex and sexuality related topics measured herein.

## ***The Institutionalization of Fear-Based Sexuality Education and Hierarchical Family and Gender Norms***

The movement for institutionalized sexuality education started in the early 20th century. The aftermath of Reconstruction included a rising eugenics movement among white, middle-class people calling for limitations around who “should” reproduce, as well as a growing fear among white, middle-class Americans of venereal disease and “moral decline” affecting young white men engaging in sex outside of marriage (Allen, 1989; for example, see Barker, 1913). These efforts culminated in the social hygiene movement, setting out to educate the masses about how to avoid STIs and “moral impurity” (Bass & Coleman, 2022; SEICUS, 2021).

White-led propaganda campaigns and dangerous beliefs about race and gender began to shape approaches to sexuality education (Bass & Coleman, 2022; SEICUS, 2021). Black men were portrayed as violent deviants (Crenshaw, 1991; McGuire, 2010; Wells-Barnett, 2005); Black women as impure and immoral (Bell & Mattis, 2000; McNair & Neville, 1996; Srivivisan, 2021; West & Johnson, 2013); and white women as pure and unsexual (Deliovsky, 2008; McIntosh, 2018). Leveraging stereotypes and other fear-based messages about the dangers of advanced syphilis, the movement's foremost approach was to scare young white men into conforming to norms that its predominantly white, middle class, and mostly Christian leaders saw as the natural solution: restricting sex to the context of heterosexual marriage. After World War I, these efforts were institutionalized via the Chamberlain-Kahn Act of 1918. For the first time in U.S. history, the federal government allotted funding to high schools for educating youth about STIs like syphilis (SEICUS, 2021; Stern, 2015). Racist and sexist stereotypes around sexuality from this era continue to influence our systems and institutions today (Bass & Coleman, 2022; Blee,

2008; Bones & Mathew, 2020; McDaniel et al., 2025; Shah, 2015).

The movement to educate youth about sex then shifted toward a focus on family life. In the 1920s, the Catholic Church joined in by hosting physician-led lectures on the moral and medical dangers of sex before or outside of heterosexual marriage. In the 1930s and 1940s, the scientific community produced psychological and sociological research on how sex outside marriage could set up youth for future failure in married life. In 1942, penicillin emerged as a cure for syphilis, shifting the focus of this education onto family life and, in particular, the belief that sex outside marriage is impure and immoral.

The focus on family life emphasized white, middle-class norms around child rearing, money management, wedding planning, and other daily home management tasks. For white girls, this meant preparing to become the ideal housewife, while, for Black girls, this meant working low-wage and often abusive, domestic labor jobs to help support their own families (Harley, 1990; Wooten & Branch, 2012). This resulted in formal sexuality education quickly becoming institutionalized under two core beliefs: (1) sex outside marriage is dangerous and immoral (instilling feelings of “sex apprehension” in youth); and (2) hierarchical gender roles in families are the only way to avoid its risks.

## **The Emergence of Sexuality Education and an American Divide**

Out of the Civil Rights Movement and the Sexual Revolution of the 1960s and 1970s, advocates for racial, gender, and sexual liberation introduced the idea of “sexuality education.” In contrast to traditional “sex education,” *sexuality* education was designed to remain neutral to morality so that youth could draw their own conclusions and make their own informed decisions about sexual behavior. This new approach to education included information about birth control methods, teen pregnancy, masturbation, gender roles, and same-gender attraction. While this form of education was more comprehensive and less values-laden than its predecessor, it still favored white, heterosexual ideals of marriage. Alongside this shift to sexuality education arose the development of a scientific framework for the study of human sexuality, most notably marked with the publication of *Human Sexual Response* (Masters & Johnson, 1966), a dense collection of research on human sexual behavior and physiology. The formalization of sexuality education culminated with the founding of the American Association of Sex Educators, Counselors, and Therapists (AASECT) and the passing of Title X of the Public Health Service Act, which mandated family planning programs and sexuality education in communities. The federal funding allotted under Title X gave rise to a number of higher education degree programs, ultimately establishing sexuality studies as a formal scientific field of study (Bass & Coleman, 2022; U.S. Department of Health & Human Services, 2014). Community-based sexuality education also grew with the founding of nonprofits like Planned Parenthood, which focused on providing medically accurate and inclusive information about sex and relationships to youth (Bass, 2021; Bass & Coleman, 2022).

Still, the movement’s roots in white supremacy persisted. During this time, eugenics movements were still prominent, especially among progressive white feminists, who promoted coercive enforcement of birth control and the forced sterilization of BIPOC women (especially Indigenous women) and women with disabilities (Bass & Coleman, 2022; Porreca, 2019). Black feminist leaders grappled with the complexity of birth control as both a tool for racial violence and an advancement towards reproductive autonomy, leading to the flourishing of a Black feminist movement organized for “reproductive justice” (officially coined in the 1990s by Black

feminists in Chicago), sexual assault prevention, and domestic violence survivor support (Bass & Coleman, 2022; Ross et al., 2017).

Sexuality education faced other rising challenges, including misinformation campaigns, largely led by certain Christian churches, claiming that sexuality education was turning children away from their religion and encouraging teens to engage in premarital sex (SIECUS, 2021). Alongside the legalization of abortion in 1973, Americans grew increasingly torn over the role of sex in society.

## **The Politicization of Sexuality Education and the Rise of Abstinence-Only Education**

In the late 1900s, both dominating political parties in the U.S. contributed to major setbacks in the creation of accessible, relatable, and health-focused sexuality education for young people. The Reagan Administration led a powerful fight against the strides made toward sexuality education and reproductive justice, including passing the Adolescent Family Life Act (a.k.a “The Chastity Act”), which funneled funding into a new form of education: abstinence-only. This legislation also included a global gag rule on counseling and educational services on these subjects, mandating that those who received federal funding from the U.S. were forbidden to educate or encourage clients about all birth control options (Van der Meulen Rodgers, 2018). The rise of the HIV/AIDS epidemic in the 1980s also resulted in the massive spreading of misinformation and violent stigma against Black and LGBTQQA communities, making access to treatment more difficult (Bauer et al., 2017; Bauer et al., 2021; Purcell, 2021).

**Recent evidence studying people’s experiences with sexuality education across several generations shows that this stigma persists in classrooms today** (Astatke et al., 2024; Bishop et al., 2020). Grassroots movements led by Black and LGBTQQA communities arose in response to the Reagan Administration’s refusal to act on HIV/AIDS, pressing for sexual health education that allowed youth to take an active role in caring for their sexual health (Bass & Coleman, 2022; SIECUS, 2021).

In the 1990s, despite efforts from government officials advocating for sexuality education in Black and Brown communities, President Clinton signed abstinence-only education as a part of his welfare reform package (Bass & Coleman, 2022; SIECUS, 2021). Congress also passed additional funding streams for abstinence-only education in the 1990s. Still, Black feminists organized for the advancement of sexuality education and reproductive justice with the rise of organizations like SisterSong, a collective of Black feminists dedicated to reproductive justice (Roberts, 1997) asserting that sexual liberation is a human right (SisterSong, 2023). Steps like the Violence Against Women Act’s (VAWA) passage in 1994 and resulting federal funding for violence prevention, alongside the Center for Disease Control’s 2001 declaration that sexual assault is a public health crisis, created the opportunity for health promotion strategies like education about sexual health to be institutionalized in higher education.

The end of the first century of the mainstream U.S. movement for education on sexual health popularized two more core beliefs: (1) sexuality education must be comprehensive, covering a wide array of topics on human sexuality; and (2) as sexuality is a natural part of human existence, all people have the basic right to sexual health.

These core beliefs have shaped the debate over the last 20 years. The Obama Administration

pursued evidence-based comprehensive sexuality education through the Teen Pregnancy Prevention Program and the Personal Responsibility Education Program. Since then, the Trump Administration has rolled back this legislation's funding, prioritizing abstinence-only education and defunding federal agencies that have upheld the scientific advancement of human sexuality studies.

The 2010s saw an increase in primary prevention programming at the collegiate level with new prevention requirements through the Campus Sexual Violence Elimination [SaVE] Act (VAWA, 2013) and federal guidance around Title IX (U.S. Department of Education, 2011). Although the current moment involves backlash to social justice-oriented advances within higher education, including sexuality education and sexual assault prevention, there remains a growing commitment to develop effective strategies to reduce sexual assault and provide meaningful sexuality education for young people.

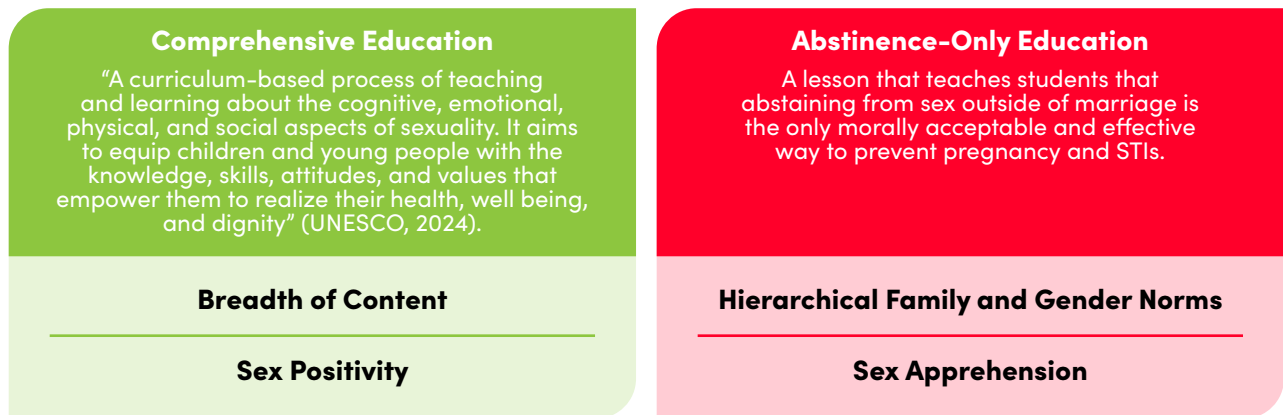
## THE PRESENT REPORT

As a part of our larger research program around sexuality education and improving sexual assault prevention strategies, we designed a study to peel back the layers of the relationship between college men's previous sexuality education and their susceptibility to primary prevention outcomes. The central goal of this report is to understand how college men recall their sexuality education experiences prior to starting college and how that education aligns (or does not align) with their current beliefs. To achieve this goal, we collected data from college men via a survey.

Although this study was exploratory in nature, we theorized that college men were most likely to receive sexuality education within four formal or informal settings: (1) community, (2) school, (3) online, and (4) religious (described in more detail in Table 7). We also theorized that most sexuality education college men received prior to college would feature content and values that aligned with either abstinence-only or comprehensive sexuality education. To capture which of these two paradigms college men's previous sexuality education were more aligned, we chose to operationalize the differences core to their approaches using four measures of educational features (displayed in Figure 1). Core to the **comprehensive approach** is the idea that sexuality education should be holistic, free of moral judgement, and focused on individual choice and bodily autonomy. Therefore, the two core features we chose are "breadth of content" (i.e., the range of topics covered) and "sex positivity" (i.e., openness and acceptance of a wide range of sexual behaviors, preferences, and orientations). As **abstinence-only approaches** are guided by a specific morality (as described above) and leverage fear-based messaging to deter youth from sex, the two core features we chose are "hierarchical family and gender norms"<sup>1</sup> (e.g., beliefs about relationships, marriage, and family, including sexual behavior and domestic roles, that reinforce cisgender male dominance and cisgender female subservience) and "sex apprehension" (e.g., moral and health-based negative judgements and fear of sexual behaviors). Figure 1 displays this breakdown visually.

<sup>1</sup> In our report, [Erased in School, Educated Online](#), which uses the same dataset as the present report, we used the phrase "traditional family and gender values." This phrasing was adjusted for improved precision in describing the measured construct.

**Figure 1.** Measured Features of Sexuality Education and Paradigm Alignment



This report utilizes the framework above to explore the impact of prior sexuality education through three in-depth, substantive inquiries:

1. What were college men's first experiences learning about sex?
2. Where did college men receive sexuality education prior to college?
3. Did community, school, religious, or online sexuality education settings correspond more with comprehensive or abstinence-only approaches to sexuality education?
4. How is sexuality education prior to college associated with current sexual assault risk?

Each section takes a deeper look into how college men are influenced by their past sexuality education. The report ends with recommendations for how this data can inform future research and primary prevention efforts on college campuses.

## Subgroup Analyses

Throughout the report, we focus on two subgroups of interest: Black college men and LGBTQQA college men. Despite systemic harms within sexuality education perpetuated throughout U.S. history and present day against these two communities, It's On Us previously [found](#) that among a sample of college athletes, LGBTQQA athletes and Black athletes were more likely to correctly distinguish healthy versus unhealthy relationships in vignettes of sexual and dating violence than the general sample of men (Zenteno et al., 2023). In this study, It's On Us also found that LGBTQQA athletes felt more comfortable discussing sexual assault than the general sample. These results were unsurprising considering the long history of community advocacy among these subgroups. Several analyses in the present report focus on Black and LGBTQQA college men to capture how these strengths emerge in the hopes that preventionists may be able to replicate these skills with other populations of college men.

In September 2025, It's On Us published [Erased in School, Educated Online](#), which takes a deeper dive into the analyses on LGBTQQA college men's experiences with sexuality education covered in this report.

# **METHODS**

## PARTICIPANT RECRUITMENT

We collected data via QualtricsXM, an online survey platform that obtains research participants by aggregating participant panel providers. Qualtrics distributed the survey with a goal of reaching 1,000 participants. To be able to focus on the subgroups of interest, we aimed for at least 25% of the sample identifying as LGBTQQA and at least 25% identifying as Black. Data collection opened on October 8, 2024 and closed on December 17, 2024. Participants included men ages 18–25 who were enrolled in college at the time of survey completion. Participants were recruited from panels that paid \$4.44–\$5.92 for completing the survey. Payments vary within this range as a result of differences in the method of payment (credit card points, airline miles, gift cards, cash, etc.) and determinations by each panel provider about adequate compensation for the survey. Qualtrics collected more than 1,000 participants in case any participants needed to be removed in data cleaning. There was a brief data collection pause beginning on October 30, 2024 when a participant brought a concern to the primary investigator regarding discrepancy between the payment amount listed in the information sheet and the amount participants agreed upon with the survey panel. The primary investigator consulted with the institutional review board (IRB) to inquire if a report needed to be filed. The IRB determined that because participants were recruited via an accurate payment amount and agreed to enter the study based on the amount listed by the panel *prior* to reading the discrepant information sheet, there was no consent violation. The primary investigator submitted an IRB application to adjust the language about the payment amount in the information sheet. Data collection resumed on November 6, 2024.

### Data Cleaning

In addition to meeting the demographic inclusion criteria above, two other criteria helped determine if participants would be removed from the final sample used for analyses. First, participants were required to pass at least two of three attention check questions placed throughout the survey (e.g., “It’s impossible to get this question wrong if I select the somewhat disagree bubble”). Second, participant data was scrubbed for nonsensical or copy/pasted open-ended responses. 4,073 survey panel participants opened the survey and completed the screener assessing eligibility for the study. However, only 2,015 of those who accessed the survey passed the screener and read the information sheet. Of those consenting participants, 1,009 were removed from the survey for missing two attention checks and an additional 14 were removed for nonsensical or copy-pasted open-ended responses. One participant was removed for writing in an open-ended response that he gave dishonest responses elsewhere in the survey. The final sample included 1,006 total college men, including 376 Black college men and 512 LGBTQQA college men.

## PROCEDURE

Panel participants accessed the survey via the online survey platform QualtricsXM. Those who met the inclusion criteria read the information sheet and started the survey. Participants first answered questions about when and where they learned about sex, including sexuality education settings. Participants were able to select up to three settings and were instructed to choose those they remembered the best. They then answered questions about the values taught in each sexuality education setting: breadth of content, sex positivity, hierarchical family

and gender norms, and sex apprehension. Following each scale, participants were asked if they currently agree with what they were taught in regards to each topic and why or why not. Next, participants completed predictors of sexual aggression, including the Hostility Toward Women (for straight, bisexual, queer, and questioning men only; Malamuth, 1986; Lonsaway & Fitzgerald, 1995) or the Lesbian Gay Bisexual Identity Scale (measuring internalized homonegativity; for gay/lesbian, bisexual, queer, and questioning men only; Mohr & Kendra, 2011). Finally, participants responded to additional questions about their sex-related attitudes and behaviors not included in the analyses covered in this report, but intended to allow the researchers visibility into potential moderating factors, such as pornography use. The full codebook and methods can be found on [Open Science Framework](#).

## MEASURES

Measures are listed in the order in which they were presented to respondents.

**First experience learning about sex.** Participants selected one option from a list of 18 ways that they may have first learned about sex and one “not listed” option which provided space to elaborate. This list was developed based on qualitative data on men in college athletics’ experiences with learning about sex collected by [Zenteno and colleagues](#) (2023). A second, open-ended question asked participants the age at which they first learned about sex. If participants selected “pornography,” a second question popped up asking how they first came across pornography.

**Sexuality education settings.** Participants selected up to three settings out of a list of nine where they received some form of sexuality education. We asked specifically about “sex education” (we used this term over “sexuality education” because it is more commonly used) received prior to attending college. We also stated that “by ‘sex education’ we mean a situation where a person OR an institution OR an organization with authority OR expertise shares educational information about sexuality, gender, relationships, and/or other related topics.” Participants were able to select up to three settings if they received sex education in more than one setting. Instructions suggested that participants select the three that they remember best. We chose the “remember best” suggestion because of the detail desired in the follow-up questions measuring the four features of interest (breadth of content, sex positivity, hierarchical family and gender norms, and sex apprehension). We also assumed that the settings they remembered best would have been those that were most influential on them today. A follow-up, open-ended question asking participants for further specification appeared for participants who selected “youth services center or after-school program,” “community event,” or “online.”

Prior to data analysis, the authors categorized each setting as either community, school, or religious. Prior to data collection, the research team had anticipated that online education would include social media and discussion forums, so the online item was originally planned to be included in the “community” category. However, participants’ open-ended descriptions of where online they received sexuality education were broader than the research team’s definition of community (e.g., pornography and national nonprofit websites). For all analyses, “online” was included as its own category of educational settings. Table 7 shows each of the settings and their category.

**Features of sexuality education.** For each of the sexuality settings that participants selected,

they were shown follow-up questions describing the following four features of the education received in that setting: breadth of content, sex positivity, hierarchical family and gender norms, and sex apprehension. These questions were designed to allow insight into the nature of the education received in each setting, as described above. Table 11 summarizes key information about each feature including example items and reliability statistics.

**Breadth of content.** To capture the range of sexuality education content covered in each setting, participants were shown a list of 13 topics to select from. Topics were chosen based on recommendations from the World Health Organization (2013) definition of what is included in comprehensive sexuality education curricula.

**Hierarchical family and gender norms.** These are defined as beliefs about relationships, marriage, and family, including sexual behavior and domestic roles, that reinforce cisgender male dominance and cisgender female subservience. To measure these rigid, hierarchical gender norms that are typical of historical notions of sexuality education, a scale was developed for this study adapted from Davis and Greenstein's (2009) Gender Ideology scale. The measured beliefs about marriage and sex assume women are subservient to men and that heterosexuality is the norm. The developed scale included five items, however, two items were removed for poor reliability. The final scale included three items.

**Sex positivity.** In this study, we define sex positivity as the belief that all people have a right to determine and act on their own sexual desires and behaviors free of judgement and that sex and sexuality are natural parts of human life. This was measured using items from the Sex Positivity Scale (Belous & Schulz, 2024) measuring affirmative beliefs and attitudes about sex. The final scale included four items as one item was removed for poor reliability.

**Sex apprehension.** Sex apprehension was developed for this study to measure fear-based moralistic beliefs about sex that are typical of abstinence-only sexuality education. This scale included statements of fear-including myths such as, "I was taught that masturbation leads to psychological problems" and moral judgements like, "I was taught that sex outside marriage is wrong." The scale originally included nine items, however, one item was removed due to poor reliability.

**Personal narrative about belief alignment.** Finally, to understand how they feel about these experiences, participants shared to what extent their current beliefs align with what they were taught about each sexuality education feature (sex positivity, hierarchical family and gender role values, and sex apprehension). Following each feature, respondents answered one item rated on a seven-point scale (1 = "Completely disagree," 7 = "Completely agree") and one open-ended item. For example, after completing the sex positivity scale, participants were asked: "Thinking about your current personal values, how much do you agree or disagree with what you were taught about sexual behaviors?" After completing all follow-up questions for a selected setting, participants were asked to complete an open-ended question about why they felt their current beliefs did or not align with those taught to them in that setting.

**Hostility Towards Women (HTW).** Hostility toward women is defined as negative and distrusting feelings towards women (Malamuth, 1986; Lonsaway & Fitzgerald, 1995). Men who have feelings of hostility toward women are more likely to commit sexual assault against women (Bosson et al., 2015; Parrott et al., 2012; Testa et al., 2019; Testa & Cleveland, 2017). Ray and Parkhill (2023) conducted a systematic review of research published between 1990 and 2020 confirming that this relationship is supported by decades of research using a diverse range of methodologies and populations of men. The Hostility Towards Women measure

is a 10-item scale measuring men's distrusting and hostile attitudes towards women (Malamuth, 1986; Lonsaway & Fitzgerald, 1995). Because its purpose is to predict the potential of sexual assault perpetration against women, this battery of questions was only fielded to respondents who identified as straight, bisexual, queer, or questioning, as individuals who may have a sexual interest in women. The questions include statements such as: "I think that most women would lie just to get ahead" and "I feel that many times women flirt with men just to tease them or hurt them." Responses for each question range from "strongly disagree" (1) to strongly agree (7) and were averaged to form the scale, Mean = 2.77, *Cronbach's alpha* = .86.

**Lesbian, Gay, Bisexual Identity Scale.** Internalized homonegativity is defined as negative feelings towards one's own same-gender attraction (mostly studied among lesbian, gay, and bisexual individuals), developed by applying societal discrimination like stigma and stereotypes to oneself (Mohr & Kendra, 2011). Very little research has examined risk factors for same-gender sexual assault; however, some research suggests that internalized homonegativity predicts domestic violence perpetration within same-gender couples (Berg et al., 2011; Trombetta et al., 2023; 2025). Participants responded to the internalized homonegativity subscale of Mohr and Kendra's (2011) Lesbian, Gay, Bisexual Identity Scale, a 10-item self-report measure. These questions include statements such as: "Admitting to myself that I'm a Gay/Bi/Queer person has been a very painful process" and, "If it were possible, I would choose to be straight." Responses to each statement range from "strongly disagree" (1) to strongly agree (7), and were averaged, Mean = 3.9, *Cronbach's alpha* = .80.

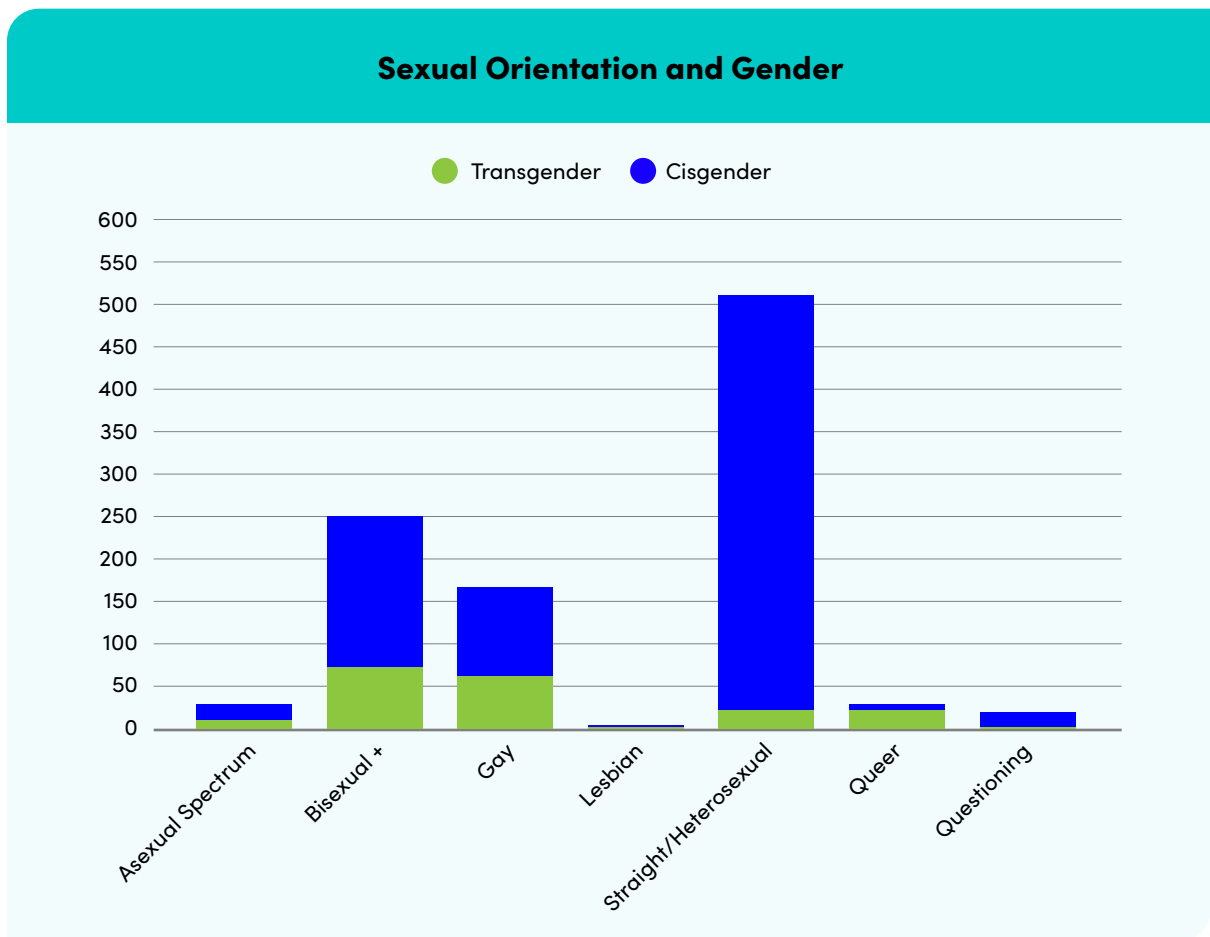
**WHO WAS IN THE SAMPLE?**

## SAMPLE DEMOGRAPHICS

A total of 1,006 college men currently enrolled in college in the United States were included in our sample. Ages ranged between 18–25 years old. Among this sample, 21% were 18–19 years old, 22% were 20–21 years old, 24% were 22–23 years old, and 33% were 24–25 years old. Of these college men, 18% were transgender (N = 184) and 82% were cisgender (N = 822).

Figure 2 below shows the sexual orientation and gender breakdown of the sample. While 51% (514 respondents) of the sample identified as straight/heterosexual, 512 of the respondents are counted in our LGBTQQA subgroup due to the inclusion of those identifying as transgender and also as straight/heterosexual.

**Figure 2.** Participant Sexual Orientation and Gender



There was overlap among the two oversampled subgroups, LGBTQQA college men and Black college men. Within the total sample, 57 participants (15% of the subgroup; 5.6% of the entire sample) self-identified as Black and transgender. There were 156 Black college men (41% of the subgroup) who identified with a sexual orientation other than straight/heterosexual. Table 1 breaks down sexual orientation by race.

**Table 1.** Breakdown of Sexual Orientation within Sample of Black College Men

<b>What is your sexual orientation?</b>	
<b>Response</b>	<b>N (%)</b>
Asexual Spectrum/Ace-Spec	9 (2.4)
Bisexual+ (including bi, pan, omni, etc.)	66 (17.6)
Gay	70 (18.6)
Lesbian	0
Straight/Heterosexual	220 (58.5)
Queer	6 (1.6)
Questioning	5 (1.3)
<b>Total</b>	<b>376 (100.0)</b>

Participants reported their ethnicity by checking all that applied in a multichoice list. An open-ended option was provided for participants if their ethnicity was not listed in the options provided. Eleven participants selected “not listed” but did not specify their ethnicity.

Participants also reported their religion (if any) and reported to what extent they consider themselves religious. Participants evenly ranged from not at all religious (1) to extremely religious (5),  $M = 2.47$ ,  $SD = 1.22$ . Of note, only 7% of the sample identified themselves as being “extremely religious.” Ethnicity and religiosity are summarized in Table 2.

**Table 2.** Ethnicity and Religion

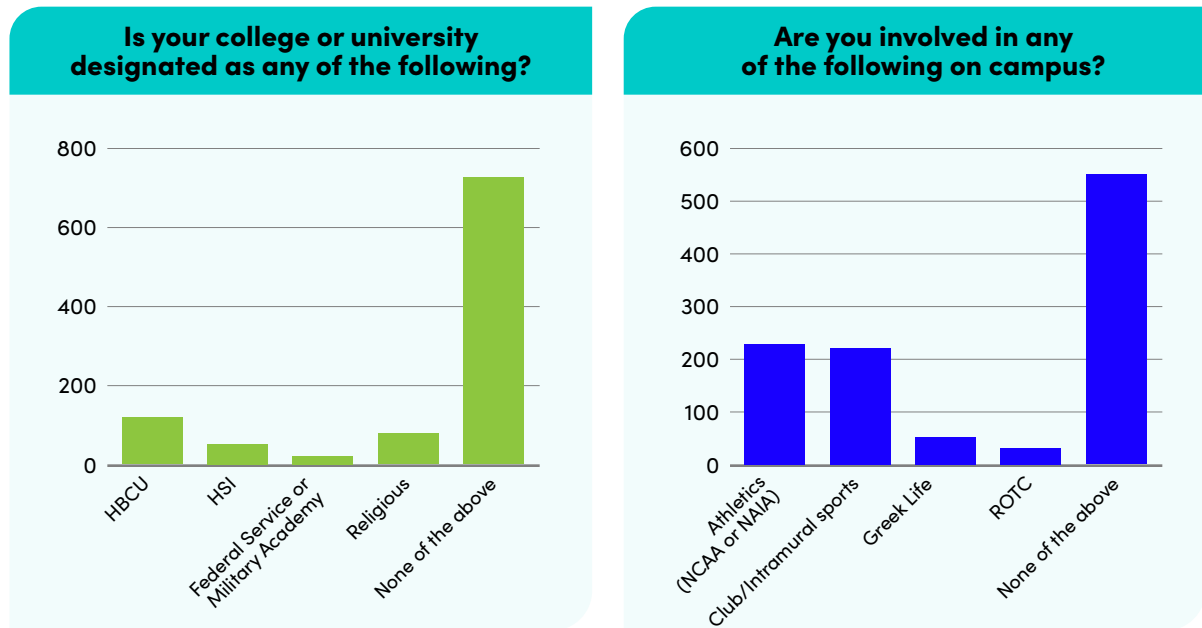
<b>Summary of Sample Demographics, N = 1,006</b>	
<b>Ethnicity</b>	
Arab or Middle Eastern	17 (1.7)
Black or African American	376 (37.4)
Hispanic or Latino	192 (19.1)
Native American or Alaskan Native	31 (3.1)
Pacific Islander	8 (0.8)
South and East Asian	76 (7.6)
White	474 (47.1)
Ethnicity Not Listed	11 (1.1)
<b>Religion</b>	
Agnostic	116 (11.5)
Atheist or none	151 (16.0)
Buddhism	16 (1.59)
Christianity	505 (50.2)
Hinduism	13 (1.3)
Islam	36 (3.6)
Judaism	25 (2.49)
Indigenous Religion	3 (0.30)
Paganism or Polytheistic	10 (1.0)
Spiritual (not religious)	115 (11.4)
Unspecified	5 (0.5)

Participants answered questions about what kind of college or university they attend: Historically Black College and University (HBCU), Hispanic Serving Institution (HSI), federal service or military academy, or religious institution. Notably, 14% of the total sample ( $N = 145$ ), 13% of the LGBTQQA sample, and 33% of the sample of Black college men ( $N = 125$ ) reported attending an HBCU. Of the total sample, 20 college men who attended an HBCU were not Black. Responses are summarized in Figure 3.

Participants reported if they were involved in any extracurriculars on campus, summarized also in Figure 3. Within the sample, 23% ( $N = 232$ ) were involved in athletics (NCAA or NAIA) and 23% were involved in club/intramural sports ( $N = 226$ ). Although unintentional, college athletes are overrepresented in this sample. Within our sample of Black college men, 30% participate in NCAA or NAIA athletics and 25% participate in club or intramural sports. The systemic exclusion of Black men from higher education and socioeconomic strains forced on Black communities has resulted in college athletics becoming a path for college affordability for some Black

men (Theune et al., 2020). As a result, Black men are overrepresented in college athletics, possibly accounting for this overrepresentation in our sample. This may also be the result of self-selection bias, if men in college athletics were more likely to choose to participate in the study because they recognized It's On Us due to our ongoing targeted work with this subgroup. Finally, it is also possible that survey panels are a particularly appealing way for college athletes to earn money with less time for other jobs or if their unique perspective is often sought out (although we did not find evidence for either of these explanations in the literature). This may be a limitation to the generalizability of the present study.

**Figure 3.** College Designation and Campus Involvement



As indicators of socioeconomic status, respondents shared if they were a Pell Grant recipient and the highest degree obtained by a parent; however, 37% of the sample reported that they were unsure of their Pell Grant status, leaving the research team to question the reliability of the measure. Of the sample, 39% have a parent who earned a high school diploma or GED, 14% an Associate's Degree, 29% a Bachelor's Degree, and 17.6% a Master's Degree or higher-advanced degree, like a Doctorate Degree.

### School-Based Education by State

As acknowledged above when discussing the history of sexuality education in the U.S., it is important to recognize that these experiences vary greatly based upon the state and local policies enacted where college men live. To gain more insight into the external environments where our sample may have been educated, we asked respondents to report the state where they attended high school, as well as the state where they attend college. With regard to the consistency of their external policy environment, 80% of respondents reported the same state for both high school and college. Additionally, while our sampling strategy was not focused on obtaining a representative sample of states, the sample population by state does align closely

with the 2020 Decennial Census (U.S. Census Bureau) population statistics by state for 18–25 year old men, providing evidence that our sample is generally representative of the national landscape of policies

As a further check on the representativeness of our sample from the perspective of the potential impact of the external policy environment (as it varies by state), we utilized the 2025 SIECUS overall grade for each respondent’s reported high school state (SIECUS, 2025). On an annual basis, SIECUS grades states on their state sex education policies, offering an overall grade created from a combination of the details on the requirement of sex education and the content in that curriculum, with A’s corresponding to having satisfied both of these components well and F’s indicating that a state has failed to do so. Across our sample, only two respondents were not able to be assigned a SIECUS grade due to attending high school in Guam. As seen in Table 3 below, the respondents’ high school states span the range of SIECUS grades, indicating that our sample is able to provide insights across the spectrum of institutional experiences prior to college.

**Table 3.** Distribution of SIECUS Grade in Survey Sample (N = 1,004)

SIECUS Grade	N (%)
A	202 (20.1)
B	47 (4.7)
C	278 (27.7)
D	261 (26.0)
F	216 (21.5)

**WHERE DID COLLEGE MEN  
RECEIVE SEXUALITY EDUCATION  
PRIOR TO COLLEGE?**

*In this section, we explore college men's first experiences learning about sex, the settings in which they received sexuality education, and the features describing each of these settings.*

## WHAT WERE COLLEGE MEN'S FIRST EXPERIENCES LEARNING ABOUT SEX?

As humans, our first encounter with a topic informs how we approach it moving forward. In recognition that formal sexuality education was not necessarily college men's first encounter with the topic of sex, we invited them to share when and where they learned about sex for the first time before diving more deeply into their educational experiences. To start, college men shared that they were between ages 11–12 years old when they first learned about sex ( $M = 11.7$ ,  $SD = 3.5$ ). In terms of distribution, about 63% (637 respondents) learned about sex for the first time at or before the age of 12 and 32% (320 respondents) first learned about sex in their teen years ( $13 \leq 17$  years old).

We then examined *how* college men learned about sex for the first time. Participants could pick from a list of ways they may have learned about sex or share another experience in an open-ended response. All options were summarized into four categories (Table 4): media, personal experience, interpersonal communication, or sexual assault. Some open-ended responses did not include enough detail to be re-coded at the item-level and were instead re-coded at the category-level. Participants were also able to select "I don't recall how I first learned about sex," and were added to the category, "unknown." Although this measure was intended to be a single-select option, due to an error during survey creation, participants were able to select more than one option in the list. While not intended, allowing respondents to select more than one option may give us more insight into how some respondents think of their first experience as an amalgamation of initial experiences versus one single moment. Frequencies are listed in Table 4 and are not mutually exclusive.

In general, rates were comparable between the full sample and the subgroups of interest. Most college men first encountered sex in various forms of media, hovering around 70% across the full sample and both subgroups. Over half of college men learned about sex for the first time in some kind of interpersonal communication, broadly meaning another person in their life taught them about sex, be it a family member, a peer, a teacher, or another community member. Only 29% of the total sample, 30% of Black college men, and 24% of LGBTQQA college men's first experience learning about sex was in a school health class or one-time presentation/workshop, indicating that the vast majority of college students are encountering sex prior to being taught about it in a formalized way in school.

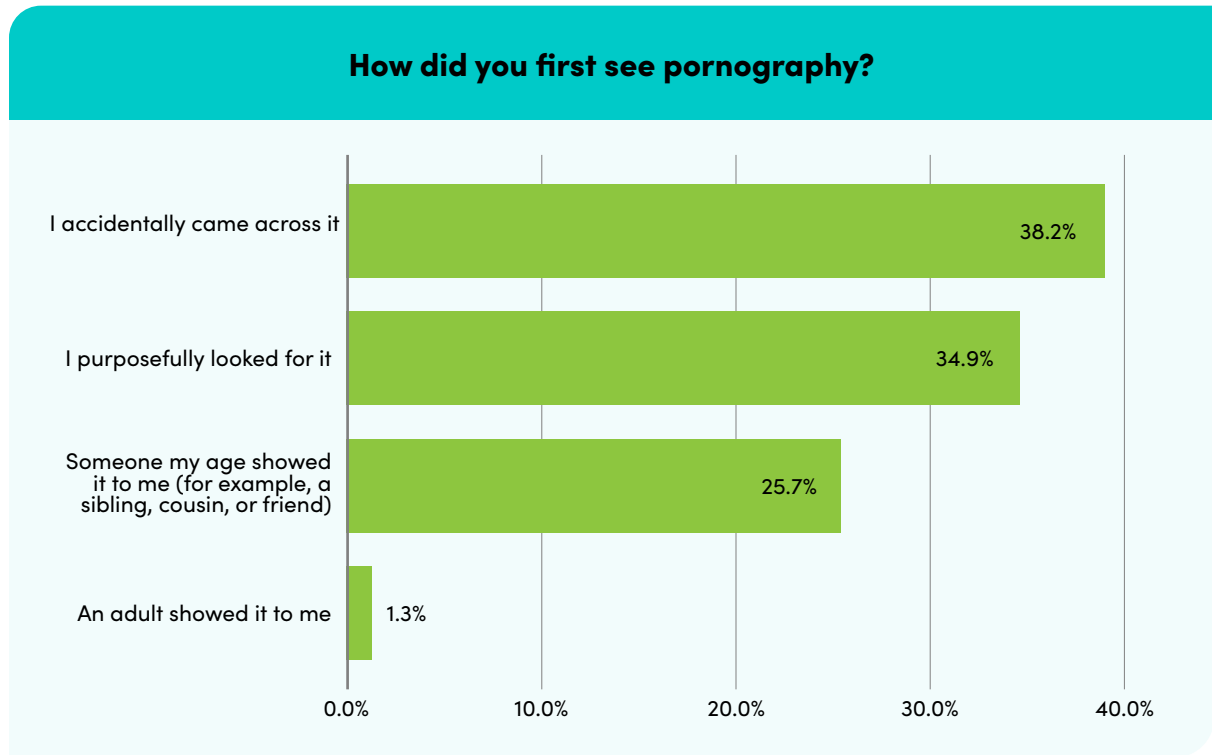
**Table 4.** How did you first learn about sex? Frequencies

<b>First Experience Learning about Sex</b>				
<b>Response</b>		<b>Frequency (%)</b>		
		<b>All Men (N = 1,006)</b>	<b>LGBTQQA Men (N = 512)</b>	<b>Black Men (N = 376)</b>
<b>Media</b>	In media like a TV show, book, video game, movie, or other	351 (34.9)	184 (35.9)	135 (35.9)
	Pornography (can include pornographic movies, magazines, websites, video games, ads, or other)	401 (39.9)	221 (43.2)	176 (46.8)
	Searched for “sex” (and related words) on the internet	249 (24.8)	142 (27.7)	94 (25.0)
	On social media	177 (17.6)	88 (17.2)	71 (18.9)
	Other media not listed	3 (0.3)	0	0
	<b>Total (selected any media)</b>	<b>689 (68.4)</b>	<b>375 (73.2)</b>	<b>271 (72.1)</b>
<b>Personal Experience</b>	Walked in on someone having sex	69 (6.86)	34 (6.6)	35 (9.31)
	In a sexual experience I wanted to have	66 (6.56)	27 (5.27)	29 (7.71)
	With a dating partner	77 (7.65)	26 (5.08)	31 (8.24)
	<b>Total (selected any personal experience)</b>	<b>174 (17.3)</b>	<b>76 (14.8)</b>	<b>79 (21.0)</b>
<b>Interpersonal Communication</b>	Someone my age (a sibling, cousin, friend, etc.) told me about it	285 (28.3)	141 (27.5)	99 (26.3)
	An adult had a conversation with me about it	22 (22.1)	100 (19.5)	81 (21.5)
	In school in a health class	247 (24.6)	107 (20.9)	97 (25.8)
	In school in one-time presentation/workshop	47 (4.67)	16 (3.12)	16 (4.26)
	In a religious setting (youth group, an after-school class, etc.)	23 (2.29)	7 (1.4)	8 (2.13)
	At a local community event	17 (1.69)	3 (0.6)	5 (1.33)
<b>Total (selected any interpersonal communication)</b>	<b>583 (58.0)</b>	<b>275 (53.7)</b>	<b>215 (57.2)</b>	
<b>Sexual Assault</b>	An unwanted sexual experience with someone of a similar age who was not a dating partner	30 (2.98)	22 (4.3)	9 (2.39)
	An unwanted sexual experience with a dating partner	15 (1.49)	7 (1.4)	2 (0.53)
	An unwanted sexual experience with an adult	37 (3.68)	23 (4.5)	12 (3.19)
	Other sexual assault not listed	2 (0.4)	2 (0.4)	0
	<b>Total (selected any sexual assault)</b>	<b>63 (6.3)</b>	<b>39 (7.6)</b>	<b>25 (6.6)</b>
<b>Unknown</b>	I don’t recall how I first learned about sex.	30 (2.98)	19 (3.7)	4 (1.06)
<b>Not listed</b>	Uncodable or did not specify	3 (0.3)	3 (0.6)	1

\*\*Participants were allowed to select more than one option

Of all of the options listed, pornography was selected the most frequently (40% overall) of the options offered around the first experience learning about sex, accounting for around half of Black and LGBTQQA’s college men’s experiences; and other media like a TV show, book, video game, movie, or other media came in as a close second (~35%). College men who selected pornography as their first experience learning about sex received a follow-up question asking how they first saw said pornography (Figure 5). From their responses, the majority of respondents who cited pornography as their first experience did so through their own efforts, either purposeful or accidental.

**Figure 4.** Frequencies of First Time Viewing Pornography



\*ONLY participants who selected “Pornography” for *First Experience Learning about Sex*

These results should be read with caution because there was no robust significance testing. However, they do align with a central finding of this study (and past It’s On Us research): media is a major informant for boys when it comes to sex. This is concerning because a recent meta-analysis (Hedrick, 2021) of 32 studies revealed that consumption of popular media is associated with acceptance of myths about rape that seek to justify it (e.g., “Men don’t usually intend to force sex on a woman, but sometimes they get too sexually carried away,” and “If a woman is raped, often it’s because she didn’t say ‘no’ clearly enough;” Burt, 1980; Lonsaway & Fitzgerald, 1995). The same study found that, when separated out, viewing pornography (whether violent or nonviolent) lead to an increased likelihood that viewers would accept these myths. These findings are unsurprising considering that rape is still highly normalized in mass media, this is an area of potential concern because the media can be a particularly unreliable and even dangerous source of information.

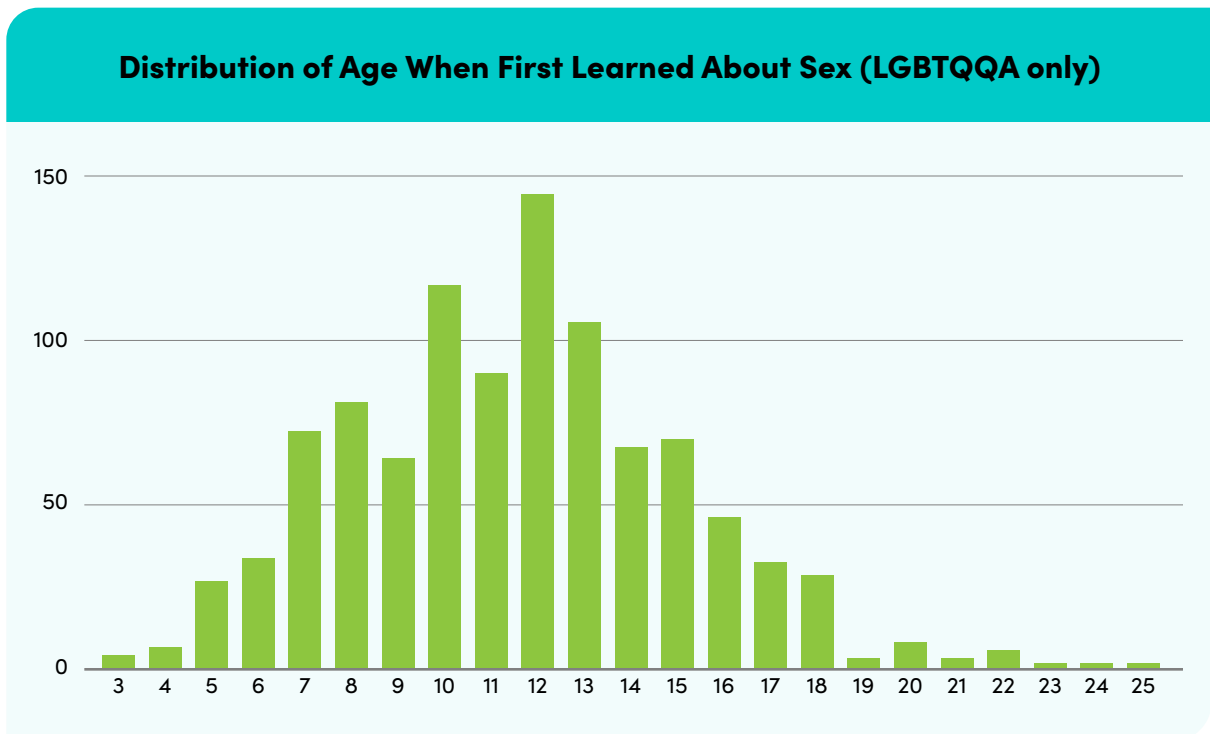
## Black College Men

There were no significant differences in Black college men's first experiences learning about sex as compared to the full sample.

## LGBTQQA College Men

We explored potential age differences when respondents first learned about sex between the LGBTQQA subgroup ( $M = 10.90$ ,  $SD = 3.53$ ) and the cisgender straight ( $M = 12.12$ ,  $SD = 3.38$ ) subgroups. We summarized ages into three categories determined prior to analyses: childhood ( $\leq 12$ ), teen years ( $13 \leq 17$ ), and young adulthood ( $18 \leq 25$ ). The full age distribution for this subgroup can be viewed in Figure 5 in order to understand the frequencies behind these categorical groupings. As shown in Table 6, in both groups, most participants first learned about sex in childhood, fewer in their teen years, and the fewest in young adulthood. However, the difference between learning in childhood versus teen years was more drastic for LGBTQQA college men, a difference that is statistically significant. LGBTQQA college men are more likely to have learned about sex for the first time in childhood than cisgender straight college men are; whereas cisgender straight college men are more likely to have learned about sex for the first time in their teen years than LGBTQQA college men.

**Figure 5.** Distribution of Age When First Learned About Sex (LGBTQQA only)



**Table 6.** Age Category When First Learned About Sex (Cisgender/Straight vs. LGBTQQA)

Age Category	Cisgender/ Straight (%)	Significant Difference*	LGBTQQA (%)
Childhood ( $\leq 12$ )	285 (57.4%)	<	352 (71.5%)
Teen years (13–17)	202 (39.3%)	>	118 (24.0%)
Young adulthood (18–25)	27 (5.25%)	Not significantly different	22 (4.5%)

\* $\chi^2 = 22.26$ ,  $df = 2$ ,  $p$ -value < .001. Residuals were determined using a Bonferroni adjustment, Childhood residuals =  $\pm 4.45$ ,  $p < 0.001$ ; Teen years residuals =  $\pm 4.69$ ,  $p < 0.001$

We also conducted follow-up comparisons to see if the way college men first learned about sex explained this age difference. We created four binary variables to see if college men selected at least one item (1 = at least one item selected, 0 = none selected) in each of the four defined categories: media, personal experience, interpersonal communication, and sexual assault. Two differences emerged:

First, LGBTQQA college men (54.43%,  $N = 375$ ) were more likely than cisgender straight college men (45.57%,  $N = 314$ ) to report that their first experience learning about sex was through some form of media,  $\chi^2(1, N = 1,006) = 10.92$ ,  $p < .001$ . However, in our sample, there was no difference in whether LGBTQQA college men reported being more or less likely than cisgender straight college men to seek out pornography on their own. In a qualitative study of LGBTQQA boys' sexual identity development, Robertson (2014) argues that as a result of rampant cisnormativity and heteronormativity in society, violating and recognizing a disconnect with heterosexual norms is a key moment in the process of self discovery. As media depictions of sex are predominantly heterosexual, early encounters with sex in media may stand out in LGBTQQA college men's memories because of the disconnect they feel with it. Although research on the salience of cisgender straight boys' gender and sexuality is very understudied, it's possible that because there may be a less obvious violation of societal norms for these boys, such encounters with media may not as easily come to mind when reflecting back. Cisgender straight boys are also held to strict gender norms (Murnen et al., 2023; Robertson, 2015) and these rigid norms are harmful (Wong et al., 2017) to boys' development. So, the far more common representation of heterosexuality in media paired with strict societal enforcement of masculinity may result in acceptance or at least warrant less attention than they do for LGBTQQA boys. More research is needed to understand what drives awareness of gender and sexuality for boys in childhood. Understanding the processes by which boys first learn about sex through media may have important implications for understanding sexual development (Robertson, 2014) and how educators and parents can support them in seeking out accurate and representative information for their sexual wellbeing.

Second, young cisgender straight men were more likely than LGBTQQA college men to report that their first time learning about sex was through interpersonal communication,  $\chi^2(1, N = 1,006) = 7.70$ ,  $p < .01$ . Although we did not differentiate parents from other adults in this section (the question only specified the option of "an adult had a conversation with me about it"), it is possible that parental hesitations to discuss sex and related topics may be driving this difference. Most parents discuss sexuality with boys in their teen years (Flores & Barroso, 2017; Wilson et al., 2010), however, qualitative research on parents of LGBTQQA youth has revealed

that many face discomfort talking to their children about same-gender sexuality because of their own gaps in knowledge (LaSala, 2015; Newcomb et al., 2018; Rose & Friedman, 2016). More research is needed to better understand this difference.

## Key Takeaways

In summary, the vast majority of college men learned about sex for the first time through the media and far fewer through interpersonal communication with adults or formal education like school. This is especially the case for LGTBQQA college men, who may learn about sex younger and more through media than cisgender straight college men. These findings support the case for comprehensive approaches to sexuality education that can provide youth with the tools they need to (a) navigate these messages when they encounter them, and (b) avoid the internalization of myths that normalize and excuse rape that are present in media (Hedrick, 2021). Sexuality education that critically examines gender and sexual orientation in popular portrayals of sex and relationships may aid boys in being critical of media messaging by establishing a baseline level of knowledge that can guide them in navigating it.

## IN WHICH SETTINGS DID COLLEGE MEN RECEIVE SEXUALITY EDUCATION PRIOR TO COLLEGE?

Moving on from their initial experience learning about sex, we next examined which formal and informal sexuality education settings were most commonly reported (Table 7). In the survey, participants received the following guidance: “We would like to know where you received sex education prior to attending college. For this question, we are defining ‘sex education’ as a situation where a person *OR* an institution *OR* an organization with authority *OR* expertise shares educational information about sexuality, gender, relationships, and/or other related topics.” As described above, they were then instructed to select up to three settings (if they received sexuality education in more than one), with the guidance that they should select the settings that they remember best. Their options included a list of nine sexuality education settings that were combined into four categories: community, school, religious, and online.

Overall, most college men (72.5%) receive sexuality education in a community setting, via a combination of conversations with family members (47.9%) and other trusted adults in their lives (25.7%). Previous research has shown that parental communication with children depends on several factors, such as perceived barriers and benefits (Wilson et al., 2010) and other personal factors, like parents’ experience of learning about sex from their own parents (Eastman et al., 2005; Kniveton & Day, 1999; Lehr et al., 2005; Wansley, 2007) and their own previous sexual behaviors (Guilamo-Ramos et al., 2008).

Just over one in five college men report receiving sexuality education online; and, among this group, 38% received sexuality education online but not in school. As mentioned previously, this data suggests that a large portion of college men turn to online sources for sexuality education, despite not having a baseline education to guide their navigation of online spaces.

Very few college men in our sample (4.5%) received sexuality education in a religious setting. Although some religious institutions provide sexuality education, to our knowledge, this tends to occur as part of premarital education (e.g., Catholic Pre-Cana or counseling with a Rabbi or Imam). As such, religious education may be more common around the age of marriage (during or after college) than the time frame before college that respondents were asked about by the survey.

**Table 7.** Full Sample Frequencies for Sex Education Setting

<b>In which of the following settings have you received sex education?</b>				
<b>Setting Category</b>	<b>Response</b>	<b>N (%)</b>		
		<b>All Men (N = 1,006)</b>	<b>LGBTQQA Men (N = 512)</b>	<b>Black Men (N = 376)</b>
<b>Community (N = 630)</b>	Conversations with family members (parents/guardians, aunts/uncles, cousins, siblings, etc.)	482 (47.9)	246 (48.0)	183 (48.7)
	Conversations with trusted adults (family friends, your friends' parents, neighbors, other members of your community. etc.)	258 (25.7)	127 (24.8)	123 (32.7)
	Youth services center or after-school program (NOT affiliated with your school; community center, camp, alumni group, local family or community center, athletics program, recreation center, etc.)	43 (4.0)	15 (3.0)	13 (3.5)
	Community event (a community panel, local health event, etc.)	22 (2.2)	9 (1.8)	8 (2.1)
	<b>Total Any Community</b>	<b>729 (72.5)</b>	<b>383 (74.8)</b>	<b>287 (76.3)</b>
<b>School (N = 732)</b>	Class or lesson(s) through your middle school	534 (53.0)	298 (58.2)	181 (48.1)
	Class or lesson(s) through your high school	451 (44.8)	243 (47.5)	183 (48.7)
	<b>Total Any School</b>	<b>732 (72.7)</b>	<b>399 (77.9)</b>	<b>281 (74.7)</b>
<b>Religious (N = 45)</b>	Class or lesson(s) through a religious institution (church/mosque/temple, including youth group, camp, or other religious programs)	45 (4.5)	21 (4.1)	16 (4.3)
<b>Online (N = 219)</b>	Online (sex educator on social media, online course not associated with school, etc.)	219 (21.2)	128 (25.0)	86 (22.9)
<b>I have never received any form of sex education.</b>		63 (6.3)	20 (3.9)	17 (4.5)
*Participants were allowed to select up to three of the given options from each of the nine given. During data analysis, settings were combined into four categories. "N" represents the number of unique participants who selected at least one choice within each given category.				

Unsurprisingly, the vast majority of boys do not report receiving consistent sexuality education throughout school prior to college. Although summary frequencies show that over 70% of college men reported receiving sexuality education in school at some point, a follow-up crosstabulation (Table 8) revealed that only 25% (N = 253) of college men received sexuality education in both middle and high school, 20% received sexuality education in high school but not middle school, and 28% received sexuality education in middle school but not high school.

**Table 8.** In which of the following settings have you received sex education?

	N (% of Total Sample)	
	Did Not Receive Sexuality Education in High School	Received Sexuality Education in High School
Did Not Receive Sexuality Education in Middle School	274 (27.24%)	198 (19.68%)
Received Sexuality Education in Middle School	281 (27.93%)	253 (25.15%)

Participants who selected a youth services center or after-school program, community event, and online were asked to specify where they received that sexuality education. Table 9 summarizes the open-ended responses coded by the primary author. Because only a few college men specified youth services or after-school programs (N = 43) and community events (N = 22), response numbers were too small to compare across the LGBTQQA or Black subgroups. A limitation to these findings is that some respondents wrote “school,” lacking other specificity. The authors interpret these responses as after hours programming held in schools, but this may also indicate that participants misinterpreted the question.

**Table 9.** Open-Ended Codes Summarizing Responses Specifying After-School Program or Community Event

Please specify the type of <u>youth services center or after-school program</u> where you received sex education.	Please specify the <u>community event</u> where you received sex education.
<ul style="list-style-type: none"> <li>• Religious program</li> <li>• Nonprofit</li> <li>• Therapy</li> <li>• Educational program</li> <li>• School</li> <li>• Community center or event</li> <li>• Juvenile detention</li> </ul>	<ul style="list-style-type: none"> <li>• Youth organization or program</li> <li>• Nonprofit or community center</li> <li>• School</li> <li>• Other youth (for example, a friend)</li> </ul>

Far more college men specified the sexuality education settings they encountered online, summarized in Table 10. Black college men were no more likely than other college men to turn to any particular online sources. However, LGBTQQA college men were more likely to turn to sexual health websites (e.g., Planned Parenthood, Mayo Clinic, etc.) and social media than cisgender straight men, who were more likely to report making general searches online (e.g., “I googled it”).

**Table 10.** Frequencies of Online Sex Education Settings by Populations of Interest

Please specify where online you received sex education.					
Code	Full Sample (N = 1,006)	LGBTQQA (N = 512)	Cisgender Straight Men (N = 494)	Black Men (N = 376)	Not Black Men (N = 630)
Educational program or course	15	10	6	6	10
Other online media	10	7	3	4	6
Porn website	33	18	15	14	19
School	12	5	5	1	9
Self-research (e.g., googling)	36	<b>12</b>	<b>25</b>	17	21
Sexual health website	20	<b>16</b>	<b>4</b>	7	12
Social media	92	<b>56</b>	<b>28</b>	24	60
Uncodable	19	10	9	3	16
<b>Total</b>	237	134	95	71	118
*Bolded numbers indicate a significant difference between columns. For example, more LGBTQQA college men (16) reported turning to a sexual health website than cisgender straight men (4).					

## Black College Men

Black communities have continuously organized for community-led sexuality education to reclaim empowerment and safety for Black youth in the face of systemic barriers to accessible sexuality education. As described above, the roots of modern day school-based sexuality education were founded in a eugenics movement that relied heavily on racist tropes about Black men and women’s bodies. These stereotypes and their modern manifestations continue to affect young people’s access to reliable and equitable sexuality education (Bishop et al., 2020), and perpetuate disparities in sexual health risks (Bay-Cheng et al., 2025; CDC, 2012). Because of the history of Black feminist movements to reduce this harm, we were curious if Black college men would be more likely than non-Black college men to receive sexuality education in a community setting. A Pearson’s chi-square test of significance<sup>2</sup> (see Appendix A) revealed that Black college men (76.3%) were significantly more likely than other college men (70.2%) to receive sexuality education in community settings,  $\chi^2(1, 1006) = 4.49, p < .05, \text{std. res.} = 2.12$ . Considering that Black college men received sexuality education at comparable

<sup>2</sup> We first ran a chi-square test of significance using Yates’s correction for continuity, which did not reveal any differences between these groups,  $\chi^2 = 1.0231, df = 1, p = 0.31$ . This result did not make sense to us, so we did further exploration. Yates’s correction is a more conservative estimate that can be used for smaller sample sizes where cell counts are less than five and researchers have argued that this correction is too stringent, especially for larger samples, instead arguing for other tests of significance (Campbell, 2017; Havlicek & Peterson, 1976; Serra et al., 2019). Guided by these recommendations, we chose instead to run a Pearson’s chi-square test without using Yates’s correction. It should be noted, however, that the analysis and subsequent report on the LGBTQQA sample found the relationship documented there using Yates’s correction.

rates to other college men across all other setting categories, community-based education may be a defining feature of Black college men's sexuality education experiences. Among those who received community-based education, 97% shared that parents and trusted adults delivered this education. Two systematic reviews spanning 1988–2012 (Sutton et al., 2014) and 1992–2022 (Quattlebaum, 2022) show that parent-child communication reduces sexual risk among Black youth, suggesting that it is an important protective factor.

## LGBTQQA College Men

Because systemic inequity has led to heteronormative sexuality education full of misinformation about queer people, we also hypothesized that LGBTQQA college men would be more likely than cisgender straight college men to turn to informal settings for sexuality education. It's On Us' initial report on this dataset published in 2025, [Erased in School, Educated Online](#) (McDaniel & Hilty, 2025), goes into more detail about this analysis and its interpretation. The results are also displayed in Appendix B of this report. As hypothesized, we found that LGBTQQA college men who received sexuality education in school also seek additional education online. These college men turned to reliable sources like medical and sexual health websites, likely to fill gaps in knowledge or challenge stigma taught in more formal settings.

### Key Takeaways

In alignment with the findings that college men first learned about sex through media, these analyses demonstrated that online sources are a prominent source of sexuality education for boys. This is especially true for LGBTQQA college men. Although LGBTQQA college men turned to reputable online sources, they also turned to social media, which like other online sources, poses the risk of misinformation and dangerous interactions. College men overall received sexuality education most often in community settings. This was especially true for Black college men, aligning with previous literature demonstrating that community-based education, like parent-child conversations, are commonly employed by Black parents to reduce sexual health risk. After completing these analyses, we wanted to know what college men remembered being taught in these settings to better understand how different settings may be more or less aligned with abstinence-only and comprehensive approaches to sexuality education.

## DID COMMUNITY, SCHOOL, RELIGIOUS, OR ONLINE SETTINGS CORRESPOND MORE WITH ABSTINENCE-ONLY OR COMPREHENSIVE APPROACHES TO SEXUALITY EDUCATION?

As mentioned above, we were particularly interested in understanding if certain settings would align more with comprehensive versus abstinence-only approaches to sexuality education (see Figure 1). For each sexuality education setting participants selected, college men also reported educational features (like the content and values) shared in that setting. Under our definition, more comprehensive approaches to sexuality education teach a greater breadth of content and teach more sex positive messaging; whereas abstinence-only approaches to sexuality education teach more hierarchical family and gender norms and have more fear-based (sex apprehensive) messaging. Table 11 describes each of the four key features, and the full survey can be found on [Open Science Framework](#).

**Table 11.** Scale Descriptives for Four Key Features of Sexuality Education

Feature	Example Item (Response scale)	Range of Means Across Settings	Alphas*	Notes
<b>Breadth of Content</b> Participants selected from 13 topics that were covered in a setting. Topics were chosen based on recommendations from the World Health Organization (2013).	Below is a list of topics, please select all topics that you learned about in [selected sex education setting]: Healthy conflict and communication in relationships. (Check boxes)	Medians = 4.05–6.14 SDs = 2.42–3.90	NA	Sum score across 13 items.
<b>Sex Positivity</b> Five items of the Sex Positivity Scale (Belous & Schulz, 2024) measuring affirmative beliefs and attitudes about sex.	I was taught that sex is a good thing (1 = Extremely untrue, 7 = Extremely true).	Means = 4.55–5.30 SDs = 1.01–1.47	.75–.85	Mean scored.
<b>Hierarchical Family and Gender Norms</b> This scale of three items was developed for this study and adapted from Davis & Greenstein (2009) to measure beliefs about marriage and sex that assume women are subservient to men and that heterosexuality is the norm.	I was taught that a man’s job is to earn money; a woman’s job is to look after the home and family (1 = Extremely untrue, 7 = Extremely true).	Means = 3.77–4.9 SDs = 1.14–1.70	.78–.89	Mean scored. This scale originally contained five items, two were removed for poor reliability.
<b>Sex Apprehension</b> This scale of seven items was developed for this study, informed by Belous & Schulz’s (2024) Sex Positivity Scale, to measure negative, fear-based, and moralistic attitudes and beliefs about sex.	I was taught that sex is something that has mostly negative consequences (1 = Extremely untrue, 7 = Extremely true).	Means = 3.94–4.83 SDs = 1.11–1.62	.73–.89	Mean scored. This scale originally contained nine items, two were removed for poor reliability.

\*Cronbach’s alpha is a way to look at how “reliable” a scale is. It tells us if the individual questions we asked worked well together as one scale. A rule of thumb for a good alpha is between .7 and .95 (while higher is better, a value too close to 1 can indicate that some items in the scale are redundant).

According to college men’s reports, only 40% of school-based education and 31.3% of community-based education covered healthy conflict and communication. Most school-based (74.3%) and over half of community-based (67.1%) and religious (55.6%) education covered consent/sexual communication. This is a concerning and important finding for prevention educators. Although some college men learned about consent/sexual communication in other ways, most college men (58% of the entire sample) have not been taught about consent/sexual communication in a formal sexuality educational setting. Community-based education may account for this gap in some college men, but there is likely a wide array of variance in the effectiveness of such lessons. This finding demonstrates that many young men may be completely lacking this necessary safety skill for sexual behavior when starting college. Table 12 displays the frequencies of sexuality topics (the breadth of content feature described above) covered in each educational setting.

**Table 12.** Frequency of Individual Content Topics Taught Across Four Categories of Sex Education Settings

Below is a list of topics, please select all topics that you learned about in [each selected setting] prior to attending college:				
Item	# Reported (% of N)			
	Community (N = 630)	School (N = 732)	Religious (N = 45)	Online (N = 219)
Sexually transmitted infections (STIs/STDs)	429 (68.1)	506 (69.2)	20 (44.4)	142 (64.8)
HIV/AIDS	340 (54.0)	427 (58.4)	16 (35.6)	19 (8.7)
Consent/sexual communication	423 (67.1)	421 (57.6)	25 (55.6)	17 (7.8)
History of sexuality education in the US	105 (16.7)	142 (19.4)	12 (26.7)	6 (2.7)
Racial context of sexuality in US	55 (8.73)	237 (32.4)	4 (8.89)	7 (3.1)
Gender/gender identity	246 (39.0)	370 (50.6)	22 (48.9)	17 (7.8)
Sexual anatomy (e.g., genitalia) and development	302 (47.9)	256 (35.0)	17 (37.8)	12 (5.4)
Sexual orientation	269 (42.7)	269 (36.8)	23 (51.1)	16 (7.3)
Relationships and love	398 (63.2)	228 (31.2)	31 (68.9)	17 (7.8)
Healthy conflict and communication in relationships	197 (31.3)	293 (40.1)	18 (40.0)	9 (4.1)
Types of sexual behavior (e.g., masturbation, digital, oral, anal, vaginal)	274 (43.5)	343 (46.9)	15 (33.3)	20 (9.1)
Contraception and birth control (e.g., the pill, condoms, natural family planning)	220 (34.9)	329 (45.0)	13 (28.9)	11 (5)
Menstruation, pregnancy, and childbirth	234 (37.1)	58 (7.93)	15 (33.3)	14 (6.4)

\*Cells are not mutually exclusive

## Perceived Past Sexuality Education Alignment with Current Personal Beliefs

We also wanted to explore how college men’s current beliefs did or did not correspond with the values they were taught in each of these settings. We expected community-based sexuality education to generally align more with college men’s current beliefs than school-based education. This hypothesis was supported by the data (Table 13; for full analyses see Appendix C).

**Table 13.** Visualization of Comparison of Personal Narrative Alignment with Features of Sexuality Education Across Settings

Sex Positivity	Hierarchical Family and Gender Norms	Sex Apprehension
Online > Community > School	Community > School	Community > School
	Online > School	

**Note.** Only significant differences are shown in the table.

Across all settings, college men felt that their current beliefs aligned less with school-based sexuality education than with that received in their community or online. Although schools tend to cover a wider breadth of topics, this lack of alignment suggests a disconnect with school-based education and its influence on boys’ development into early adulthood. Community-based education is more likely to be given by someone college men trust, like a friend, peer, family member, or neighbor, and thus may be more relatable and culturally relevant to their experiences, allowing boys to integrate the information they’ve received into their developing beliefs, attitudes, and sense of self. Additionally, these values may be modeled by community members rather than just stated as fact, like in a school-based setting where information is academic rather than personal. This is not to discount the need for school-based education, rather to suggest that schools may provide “breadth,” whereas communities may provide (more enduring) “depth.”

More research<sup>3</sup> is needed to understand how boys integrate school- versus community-based education into their belief systems throughout development. If supported by future research, this contrast may be an important finding for crafting more effective prevention programming. Alignment with community-based education speaks to how college men’s beliefs and attitudes are developed, as well as how we can go about nurturing attitudes that are protective against sexual violence. If college men have developed a “depth” in what they’ve learned from their communities, then our prevention efforts may less easily be integrated with them unless they too are culturally relevant and personal. Community-based delivery of prevention education may be a key to successful risk reduction and health promotion. However, more research is needed to better understand this relationship and what preventionists can do to leverage it. Future research should explore differences in how prevention information delivery to college men may influence their susceptibility to desired outcomes.

<sup>3</sup> This survey collected open-ended responses for college men to share why they felt their belief aligned or did not align with each sexuality education setting. However, these results are not included in the present report.

## Black College Men

Previous research has shown that Black parents tend to focus on reducing sexual health risk, addressing harmful stereotypes about Black bodies, and incorporating sex positivity when discussing sex with their children (Astle et al., 2025; Davidson Mhonde, 2026; Fletcher et al., 2015). For this reason, we hypothesized that for Black college men, community-based education would cover a wider breadth of content and have more sex positive values, lower hierarchical family and gender norms, and lower sex apprehension than education in other settings. To test this, we used linear mixed modeling (LMM) to compare each feature across all four categories of sexuality education settings. LMM's are a robust way to compare repeated measures data when there is not independence nor even groups (participants could select up to three settings; Bono et al., 2021; Cnaan et al., 1997). Estimated marginal means and confidence intervals are displayed in Appendix D, and a visual display of significant differences across settings is displayed in Table 14<sup>4</sup>.

**Table 14.** Black College Men: Linear Mixed Modeling Comparison of Features of Sex Education Across Settings

	Community	School	Religious	Online
Breadth of Content Covered	No significant differences [5.20]	No significant differences [5.41]	No significant differences [5.53]	No significant differences [4.83]
Sex Positivity	No significant differences [4.90]	No significant differences [5.06]	No significant differences [4.74]	No significant differences [5.19]
Hierarchical Family and Gender Norms	< Religious > School > Online [4.37]	< Community < Religious [4.11]	Highest of all settings [5.23]	< Community < Religious [3.96]
Sex Apprehension	> Online [4.36]	No significant differences [4.22]	No significant differences [4.46]	< Community [4.07]

**Note.** Brackets “[#]” indicate estimated marginal means or model-level averages for each setting. The breadth of content possible range was 0–13 topics selected; the other three features’ possible ranges are from 1–7, how true that a setting taught this value.

Sex positivity was moderately high across all settings, and sex apprehension was moderate overall, with online presenting less sex apprehensive messaging than community settings. Although the co-occurrence of high sex positivity and moderate sex apprehension seem counterintuitive at first, past research has shown that because systemic disparities lead to higher sexual health risks among Black youth, Black parents tend to emphasize reducing risk

<sup>4</sup> Because the differences across settings that we hypothesized were based on identity-specific systemic disparities for LGBTQQA and Black college men, we did not hypothesize differences in settings for the full sample of college men. However, we conducted LMM's on the full sample in the case that it may inform future research. These results are displayed in Appendix H.

when talking about sex (e.g., pregnancy and STI contraction; Hutchinson & Montgomery, 2007; Wyckoff et al., 2008). Fear-based messaging may result from this focus on risk reduction in order to counteract the systemically disproportionate risk facing Black youth.

Hierarchical family and gender norms were moderate across all settings except religious settings, which were higher than all other settings. To contextualize these findings, we must consider the effects of the systemic oppression of Black Americans. Bass and Coleman (2022) explain that Black Americans face “respectability politics,” defined as a hypervigilance which involves “the adjustment of visible appearance, behavior, and speech with the goal to minimize discrimination and prejudice” (p. 4). This hypervigilance in combination with the persistent hypersexualization of Black bodies and other systemic harms that lead to increased sexual health risk among Black youth (Bass & Coleman, 2022; Davidson Mhonde, 2026; Freeman, 2015) may lead some Black parents to enforce these hierarchical values with the intention of protecting youth from engaging in behaviors that could result in discrimination or health risk. This hypervigilance, as well as the intersectional nature of oppression (i.e., the effects of racism and sexism intertwined; Crenshaw, 1991), may explain the presence of moderate hierarchical family and gender norms.

White people’s control of Black men and women’s sexuality and reproduction dates back to chattel slavery in which white men established stereotypes of hypersexualization in order to ensure the continued reproduction of slave labor after the end of the transatlantic slave trade forced moving of Africans to North America (Bass & Coleman, 2022; Jacobs, 2017; Roberts, 1997). As a result, lingering norms about gender hierarchies may explain the presence of these values in community-based and religious sexuality education of Black boys. For example, recent public opinion research finds that some Black men (across age groups) still hold traditional views of gender roles, with 75% of Black men (compared to 59% of Black women) agreeing with the statement that: “Men should be the head of the household” (Woodbury et al., 2025). As with all communities, ongoing systemic racial and gender inequity continues to inform boys’ sexuality education. Black feminist thought remains at the forefront of how comprehensive approaches can continue to promote healthy behavior instead of focusing solely on reducing risk (Flowers, 2018).

Breadth of content was generally low across all settings, with each covering less than half of the listed topics. Because participants reported their perceptions of what they were taught, this may speak to the depth of community in Black college men’s past sexuality education. For one, if Black boys’ parents have conversations with them, they may not feel as much of a need to turn to online sources to cover a broad range of topics. Only certain topics (on average ~5) that they learned in school and religious settings may have stood out or felt relevant to them when reflecting back years later. This may then be comparable to the number of topics that were discussed in more depth in community settings. Alternatively, there may be precision missing in our measure. Fletcher and colleagues (2015) argued that Black parents discuss an array of themes related to sexuality that are not captured within the typical range of sexuality education topics. Some of these themes include self-respect, defining healthy sexuality, and media literacy (Akers et al., 2011; Dilorio et al., 2006; Wilson et al., 2010). Future quantitative research could make better use of qualitative data to compile a more comprehensive and accurate list of topics covered in community-based sexuality education, particularly as delivered by parents and other trusted adults.

Additional analyses examined if Black college men felt that their current beliefs aligned with what they were taught in each of these settings (full analyses in Appendix E). Black college men did not feel like their current beliefs aligned more with those taught in any one sexuality

education setting over another ( $ps > .30$ ). This could point to Black college men’s ability to integrate new knowledge into their existing belief systems. That is, if the foundations of their community-based sexuality education involves critical skills (Fletcher et al., 2015) and is grounded in preservation and safety from discrimination and risk, then Black college men may tend to pull the productive and useful pieces from each of these various sources of information and use them to inform their current thinking, rather than defaulting to one setting’s teachings over another.

## LGBTQQA College Men

Table 15 displays the results of the LMM comparing sexuality education settings on the same four features for LGBTQQA college men in our sample. Estimated marginal means and confidence intervals are displayed in Appendix F.

**Table 15.** LGBTQQA Men: Linear Mixed Modeling Comparison of Features of Sex Education across Settings

	Community	School	Religious	Online
<b>Breadth of Content Covered</b> Average # of topics out of 13	< Online < School [5.14]	> Community < Online [5.82]	No significant differences [4.76]	> Community > School [7.12]
<b>Sex Positivity</b> Average, 7 Maximum	< Online [4.74]	< Online [4.74]	No significant differences [4.91]	> Community > School [5.48]
<b>Hierarchical Family and Gender Norms</b>	> Online > School [3.95]	< Community [3.68]	> Online [4.42]	< Community < Religious [3.31]
<b>Sex Apprehension</b>	> Online [4.05]	> Online [3.92]	> Online [4.39]	Lowest of all settings [3.58]
<b>Note.</b> Brackets “[#]” indicate estimated marginal means or model-level averages for each setting. The breadth of content possible range was 0–13 topics selected; the other three features’ possible ranges are from 1–7, how true that a setting taught this value.				

For LGBTQQA college men, sex positivity was high overall, especially online. Young LGBTQQA men also shared that they learned about a broader range of topics online than in community or school settings. Online education experienced by this group was also lower than other settings in hierarchical family and gender norms and sex apprehension. This is consistent with the medical and sexual health-focused online resources that LGBTQQA college men reported using for online learning. Follow-up analyses revealed that LGBTQQA college men’s current beliefs were generally more aligned with online sources (see Appendix G). We concluded that

this was because LGBTQQA youth may be seeking out online spaces that are tailored to their needs. Young LGBTQQA men were more likely to report turning to social media for sexuality education, so these spaces may provide information given by other LGBTQQA individuals that is more 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 LGBTQQA college men. Results are explored in more detail in our report, [Erased in School, Educated Online](#).

Taken in context with the findings on Black college men, young LGBTQQA men's experiences turning to online spaces may create variance in these findings. For a firsthand account, see "[I Learned About Sex In Chat Rooms. That Shouldn't Be The Case In 2025.](#)" – an opinion editorial authored by activist Preston Mitchum. The sample size of college men who were both Black and LGBTQQA in our sample was too small to run a reliable analysis on this subgroup; however, more research is needed to better understand how the intersection of racism and homophobia may impact Black college LGBTQQA men's experiences of sexuality education.

## Key Takeaways

College men tended to feel that their current beliefs aligned more with community-based education than with other settings. An alarmingly few number of college men have received sexuality education in schools that they feel aligns with their current beliefs. This points to a potential limitation of current school-based education, in that it may not be influential for boys. Conversely, community-based education appears to have a promising effect on influencing the development of college men's beliefs and attitudes.

We asked if experiences with sexuality education prior to college can account for LGBTQQA and Black college men's ability to correctly distinguish healthy versus unhealthy relationships and dating violence (as raised and demonstrated in our previous study, [Prevention is a Team Sport](#); Zenteno et al., 2023). Based on these findings, it is possible that online and community-based sexuality education settings (respectively) may be more common sources of information; however, it was not strongly evident in the data that either setting provides baseline knowledge for recognizing unhealthy and abusive relationships among these two subgroups of college men. For LGBTQQA college men, online settings tended to be more sex positive and be a source for covering a broader range of topics. Black college men may rely more on their community-based education as compared to other sexuality education settings. Across the board, sex positivity was moderately high in Black college men's sexuality education experiences. Because community-based education has been used within Black communities to protect youth against discrimination and systemically high sexual health risk, this community-based education may lay solid foundations for Black college men to integrate knowledge across various sexuality education settings. However, both of these settings present challenges. Some online spaces provide promising resources for LGBTQQA boys looking to fill in gaps in knowledge; yet, these spaces still offer risks for misinformation and engagement in dangerous interactions with others. In addition, although communities are powerful and important sources of information, Black college men in our sample shared inconsistencies in messaging within these settings.

Taken altogether, these findings demonstrate a severe lack of comprehensive sexuality education experiences among college men. Currently, parents and communities may be working to fill this systemic gap and LGBTQQA boys may be seeking to fill it on their own. However, as demonstrated in the data, the information provided in these settings are still prone to inaccuracies, gaps, and biases. Self- and community-protection actions are vital, but do not address the systemic failure of providing all boys with reliable, accurate, and inclusive education that teaches them with the skills they need to care for their sexual health and have safe, fulfilling relationships.

**HOW IS SEXUALITY EDUCATION  
PRIOR TO COLLEGE  
ASSOCIATED WITH CURRENT  
SEXUAL ASSAULT RISK?**

The next step in our overall research program on sexuality education will focus on addressing college men's actual sexual assault prevention needs based on the sexuality education they received prior to college. To lay the groundwork for this subsequent research, we examined the relationship between sexuality education prior to college with respondents' current risk factors for sexual assault. Specifically, we examined if the interaction between the values taught in past sexuality education (sex positivity, hierarchical family values, and sex apprehension) would influence current beliefs that increase college men's risk for sexual assault (hostility towards women and internalized homonegativity, each described below).

Because sexual assault on college campuses is rooted in systemic gender inequity (Centers for Disease Control and Prevention, 2024; Jewkes & Garcia-Moreno, 2002; Tharpe et al., 2013), risk factors for sexual assault are not uniform across straight men and queer men's experiences. To achieve better precision in measuring risk in the following analysis, we broke the sample down in two ways: college men with attraction to women and college men with same-gender attraction (those who identified as: lesbian<sup>5</sup>, gay, bisexual, queer, questioning, and asexual). For college men with attraction to women, we operationalized sexual assault risk as hostility towards women (distrust and anger towards women; Lonsaway & Fitzgerald, 1995). For college men with same-gender attraction, we operationalized sexual assault risk as internalized homonegativity (applying stigmas about same-gender attraction to oneself; Mohr & Kendra, 2011). This section is similarly organized to examine these two subsamples and their risks separately.

## SEXUALITY EDUCATION AND HOSTILITY TOWARDS WOMEN AMONG COLLEGE MEN WITH ATTRACTION TO WOMEN

One dominating theory of risk for sexual assault perpetration for men with attraction to women is the Confluence Model of Sexual Aggression (Malamuth, 2021; Malamuth & Briere, 1986; Malamuth et al., 1993, 1996). The Confluence Model is an empirical framework for capturing multiple interacting factors that predict men's perpetration of sexual assault. The model includes two constellations of risk factors: hostile masculinity (believing that men are superior to women) and impersonal sex (viewing sex as gratification rather than connection). For this study, we focused on the hostile masculinity constellation, which includes hostility towards women, sexual dominance over women, and acceptance of violence. As described in the introduction, throughout history, common narratives taught in sexuality education relied on stereotypes that women are subservient to men and not to be trusted. Hierarchical family and gender norms, as well as sex apprehension, are deeply rooted in the belief that men are superior to women. As such, we expected that college men with attraction to women would be more likely to hold hostile feelings towards women if they received sexuality education that taught them hierarchical family and gender norms and sex apprehension (fear-based messaging). Conversely, because sex positivity emphasizes sexual autonomy, choice, and empowerment for all people (Williams, 2015), we were curious to see if it may act as

<sup>5</sup> We debated including men who identify as lesbians in the men with attraction to women subsample, however, because, to our knowledge, hostility towards women has not been validated with lesbians and the LGBTI scale has been, we kept them in the men with "same-gender" attraction subsample.

a protective factor, resulting in lesser feelings of hostility toward women. Specifically, we hypothesized that:

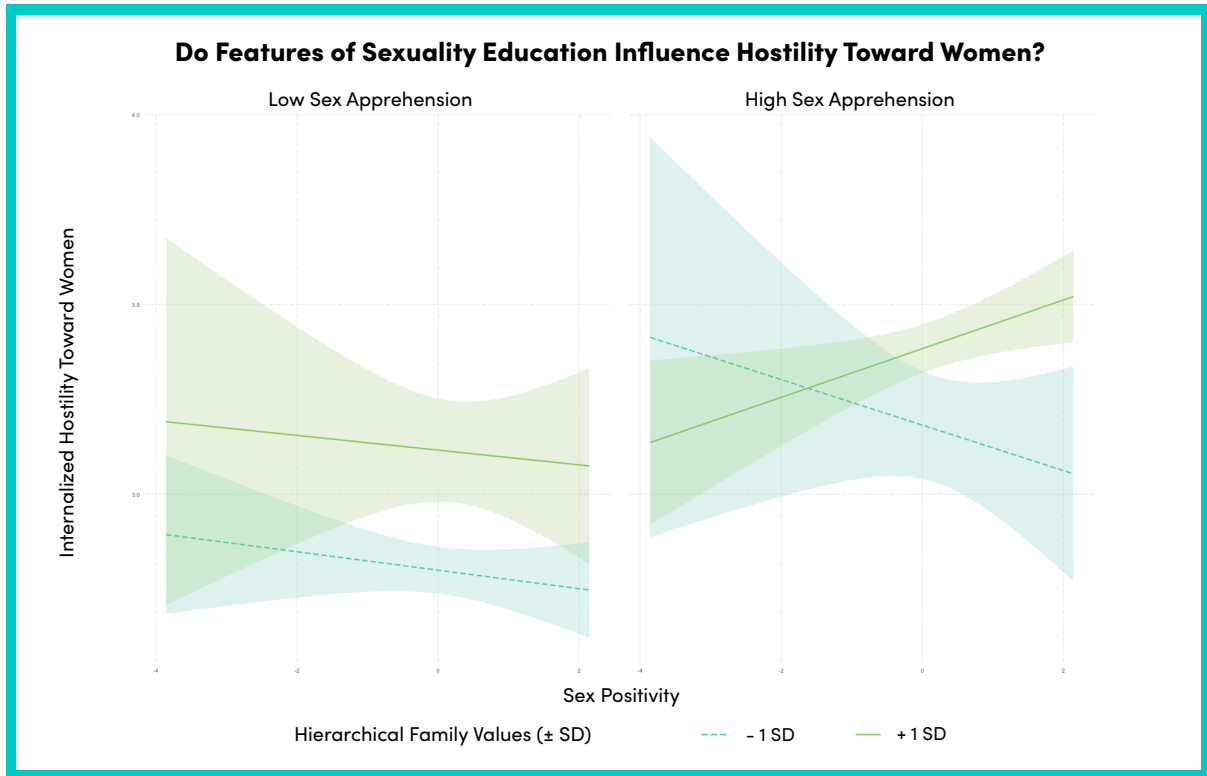
1. Being taught sex apprehension and hierarchical family values would lead to an increase in hostility towards women;
2. Being taught sex positivity would lead to a decrease in hostility towards women; and
3. Being taught sex positivity would act as a “buffer” against teachings of hierarchical family and gender norms and fear-based messaging, leading to a decrease in hostility towards women.

Results are shown in Table 16 and Figure 6.

**Table 16.** Three-Way Interaction between Features of Sexuality Education on Hostility Toward Women

Predictors (Features of Sexuality Education)	B	SE	t
<b>Model 1</b>			
<b>Intercept</b>	<b>3.09**</b>	<b>0.022</b>	<b>142.80</b>
Sex positivity	0.04	0.020	1.91
<b>Hierarchical family values</b>	<b>0.18**</b>	<b>0.015</b>	<b>11.78</b>
Sex positivity and hierarchical family values	0.02	0.011	1.63
<b>Model 2</b>			
<b>Intercept</b>	<b>3.11**</b>	<b>0.03</b>	<b>123.15</b>
Sex positivity	-0.01	0.03	-0.46
<b>Hierarchical family and gender norms</b>	<b>0.09**</b>	<b>0.02</b>	<b>4.11</b>
<b>Sex apprehension</b>	<b>0.15**</b>	<b>0.03</b>	<b>5.14</b>
Sex positivity and hierarchical family and gender norms	0.02	0.02	1.15
Sex positivity and sex apprehension	0.01	0.02	0.41
Hierarchical family and gender norms and sex apprehension	-0.02	0.01	-1.50
<b>Sex positivity and hierarchical family and gender norms and sex apprehension</b>	<b>0.02*</b>	<b>0.01</b>	<b>2.39</b>
<p><b>Note.</b> Scale responses for the three predictor variables (sex positivity, sex apprehension, and hierarchical family and gender norms) were averaged across all sexuality education experiences of each participant (up to three) and were centered.</p>			

**Figure 6.** Three-Way Interaction between Features of Sexuality Education on Hostility Toward Women



Of the three examined values taught in respondent’s reported sexuality education experiences, hierarchical family and gender norms and sex apprehension each had their own effect on college men with attraction to women’s hostile attitudes towards women.

Participants who were taught stronger hierarchical family values in their sexuality education experiences tended to report higher hostility toward women overall, regardless of sex positivity or sex apprehension. These taught values may indeed reinforce existing gender hierarchies or patriarchal norms. Additionally, participants who were taught to be apprehensive about sex tended to have higher hostility towards women overall. These findings imply that moralistic and fear-based sexuality education may be contributing to college men with attraction to women’s risk for sexual assault perpetration.

Whether or not sex positivity in previous sexuality education acts as a “buffer” and reduces college men’s hostile feelings towards women depends on whether they were also taught hierarchical family and gender norms and/or sex apprehension,  $R^2 = .20$ ,  $F(7, 749) = 27.91$ ,  $p < .001$  (Table 16 and Figure 6). Sex positivity leads to lower hostility towards women if their sexuality education was also less fear-based and less oriented towards hierarchical family and gender norms. In support of our hypotheses, sexuality education that is sex positive, avoids fear-based messaging, and does not teach hierarchical family and gender norms may deter college men with attraction to women from developing hostility towards women.

However, the relationship changes entirely if sexuality education experiences included high levels of all three features (sex apprehension, hierarchical family and gender norms, and

sex positivity). If college men's past sexuality education experiences were highly fear-based and oriented towards hierarchical family and gender norms, then hostility towards women increased as sex positivity increased. Although this was not an expected relationship, there is precedence in the literature to explain it. Three potential explanations for this phenomenon are described below:

**First, sex positivity may clash against values that perpetuate a gender hierarchy (sex apprehension and hierarchical family and gender norms), leading to reactivity or a perceived threat to boys' existing beliefs.** Possibly, for boys who have been taught that sex is something they should be afraid of and that women should play a subservient role in relationships, the idea that people (including women) can exercise sexual agency feels like a challenge to those beliefs. The result of this is an iatrogenic, that is, the opposite of the intended effect. Although sex positivity is expected to challenge and peel away at hierarchical and moralistic beliefs, it instead clashes against the beliefs, inciting boys to double down on a moral high ground or a desire for punishment towards women which may develop into hostile feelings into college age. Bosson and colleagues (2015) found a similar effect when presenting social norms that were egalitarian or protective of women to men who held preexisting beliefs to the contrary. Social norms that were expected to incite safe behaviors towards women actually resulted in an increased likelihood that men would choose aggression towards a woman in a laboratory proxy for sexual assault. They posited that this was the result of "reactance" which is defined in psychology as resisting an influence that is perceived to threaten one's freedoms via the reassertion of autonomy by shifting in the opposite direction of the perceived influence (Brehm, 1966).

In this case, sex positive messaging threatens the existing beliefs (sex apprehension and hierarchical family and gender norms), so these boys shift towards the opposite direction of sex positivity, doubling down on existing beliefs. If this is the case, hostility towards women could develop over time out of the preservation of these other learned values.

**Second, and alternatively, college men may experience a misattribution of cognitive dissonance as a result of conflicting beliefs.** If college men have been taught that "sex is scary" (sex apprehension) and "relationships must conform to rigid gender roles" (hierarchical gender and family values), but also "people should be able to make their own decisions about sex and that's a good thing" (sex positivity), they may not be able to "fit" this belief in their other more fear-based and hierarchical values. The conflicting beliefs would lead to tension or frustration – a phenomenon known in psychology as "cognitive dissonance" (Festinger, 1962; Harmon-Jones & Mills, 2019). In order to reduce their discomfort, they may misattribute the source of the dissonance. In this case, rather than blaming the conflicting beliefs taught in sexuality education, these college men blame women because they are receiving mixed information about women. Misattribution may reduce dissonance but would not necessarily change their beliefs (Zanna & Cooper, 1974; Wright et al., 1992). Over time, feelings of hostility towards women may emerge as a result of this misattribution of dissonance.

**Finally, a third explanation points to the importance of the specifics of sex positive messages.** Sex positive messaging, particularly in its limited operationalization in this study, might not necessarily challenge gender hierarchy. In our shortened measure of sex positivity and in the original scale from Belous and Shulz (2022), there was no explicit challenge of rigid gender norms around sexual behavior. It may be the case that college men who were taught

all three of these features in sexuality education found alignment between them. For these men, sex positivity as presently operationalized may validate the belief that their sexuality is autonomous and worthy of celebration, while others' sexuality (especially women's) is not. This aligns with hegemonic norms around masculinity that are rooted in the same longstanding gender norms historically taught in sexuality education. To cite Ruth Smythers (1894) again: "Most men, if not denied, would demand sex almost every day," and "Most men are by nature rather perverted, and if given half a chance, would engage in quite a variety of the most revolting practices" (p. 42). Statements like "I was taught that sex is not a taboo subject for discussion" and "I was taught that sex is a good thing" (Belous & Schulz, 2022) do not necessarily challenge this limiting view of masculinity and men's sexual behavior. Sex positivity remains a protective value core to comprehensive approaches; however, this data points to the need for sex positivity paired with the deconstruction of the systemic power structures that reproduce gender inequity.

Further research into this effect is necessary to support any one of these explanations. To start, establishing temporal precedence (that one variable comes before another) of exposure to the presented values would help tease the process apart. For example, it's possible that college men did not have a single education that was highly sex positive, highly sex apprehensive, and highly rigid about gender hierarchies. Rather, they received education across several experiences and in more than one setting, the nuances of which could not be fully explored here. Establishing sex apprehension and hierarchical family and gender norms as baseline beliefs that are being challenged by the introduction of sex positivity in a different setting would better support the case for reactance or cognitive dissonance. Future research could test if this effect remains, depending on who presents this information. At the same time, our data shows that there are inconsistencies within similar settings where sexuality education is taught. Future research could test how receiving conflicting values in the same setting versus different settings may influence this effect. Finally, future research could also tease apart what about sex positivity leads to this effect, by testing if an operationalization of sex positivity that is more explicit about challenging gender hierarchies would result in the same effect. Although there is not a definitive explanation as to why this effect exists, it is clear that sex positivity alone may not be a promising buffer for the reduction of sexual assault risk among college men with attraction to women because its effect is conditional.

## **SEXUALITY EDUCATION AND INTERNALIZED HOMONEGATIVITY AMONG COLLEGE MEN WITH SAME-GENDER ATTRACTION**

Sexual assault risk among college men with same-gender attraction is far less studied than it is among men with attraction to women. However, internalized homonegativity is one factor that has emerged in the literature as related to both perpetration and victimization among this population. Internalized homonegativity is the process by which people who experience same-gender attraction (mostly studied among lesbian, gay, and bisexual individuals) encounter societal discrimination like stigma and stereotypes and apply it to themselves (Mohr & Kendra, 2011). This emerging body of literature has found that internalized homonegativity is consistently associated with domestic violence perpetration and victimization within same-gender couples (Berg et al., 2011; Trombetta et al., 2023; 2025). Researchers have theorized that this risk results from individuals taking the internalization of homonegativity mapped onto their own identity and projecting it onto their same-gender partners (Badenes-Ribera et

al., 2019). Hierarchical family and gender norms as well as sex apprehension perpetuate the cultural belief that same-gender attraction is abnormal and shameful. Therefore, we expected that college men with same-gender attraction would be more likely to have internalized homonegativity if they received sexuality education that taught them hierarchical family and gender norms and sex apprehension (fear-based messaging). Conversely, because sex positivity emphasizes individuals' choice, bodily autonomy, and even the celebration of sex, we were curious to see if it may act as a protective factor or a buffer against internalized homonegativity. Specifically, we hypothesized that:

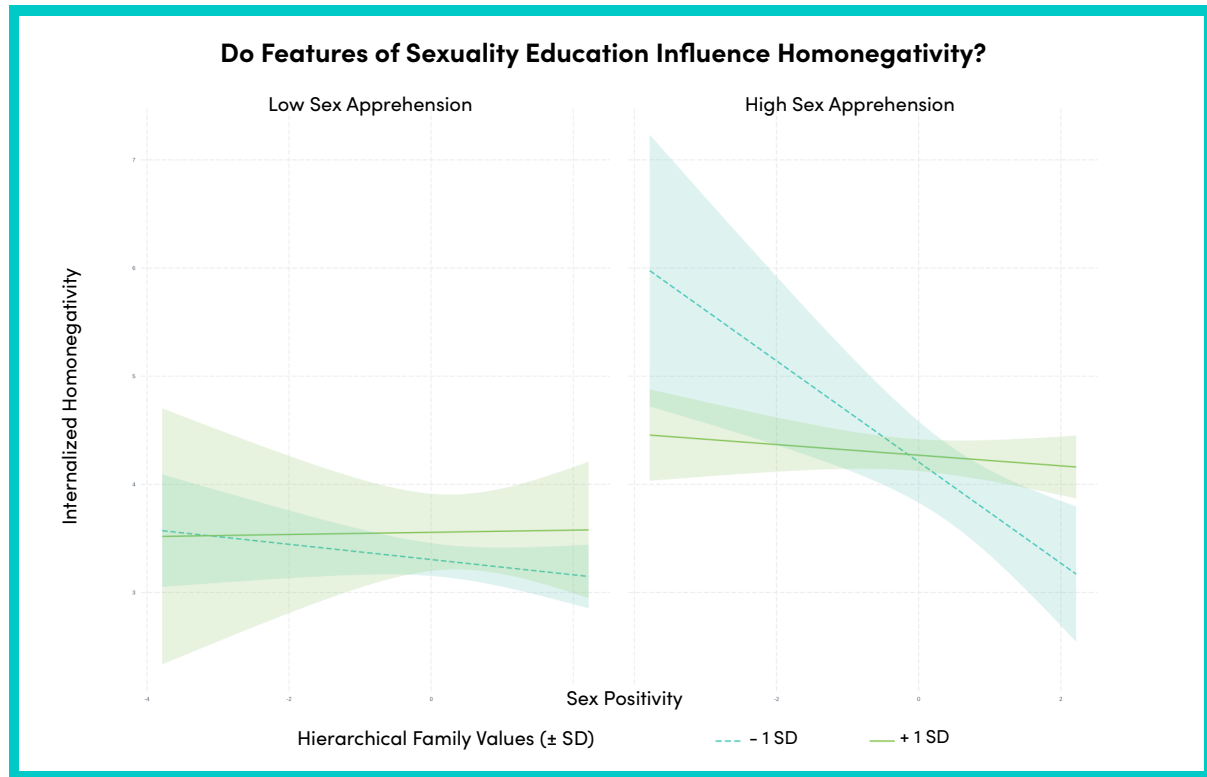
1. Being taught sex apprehension and hierarchical family values would lead to an increase in internalized homonegativity;
2. Being taught sex positivity would lead to a decrease in internalized homonegativity; and
3. Being taught sex positivity would act as a "buffer" against teachings of hierarchical family and gender norms and sex apprehension, leading to a decrease in internalized homonegativity.

Table 17 and Figure 7 below display the results of this analysis.

**Table 17.** Three-Way Interaction between Features of Sexuality Education on Internalized Homonegativity

Predictors (Features of Sexuality Education)	B	SE	t
<b>Model 1</b>			
<b>Intercept</b>	<b>3.79**</b>	<b>0.052</b>	<b>72.50</b>
Sex positivity	-0.01	0.046	-0.25
<b>Hierarchical family values and gender norms</b>	<b>0.27**</b>	<b>0.034</b>	<b>7.78</b>
Sex positivity and hierarchical family and gender norms	0.02	0.025	0.70
<b>Model 2</b>			
<b>Intercept</b>	<b>3.83**</b>	<b>0.062</b>	<b>62.03</b>
<b>Sex positivity</b>	<b>-0.14*</b>	<b>0.057</b>	<b>-2.53</b>
Hierarchical family and gender norms	0.051	0.055	0.93
<b>Sex apprehension</b>	<b>0.35**</b>	<b>0.072</b>	<b>4.80</b>
Sex positivity and hierarchical family and gender norms	0.080	0.042	1.92
Sex positivity and sex apprehension	-0.10	0.051	-1.91
Hierarchical family and gender norms and sex apprehension	-0.03	0.026	-1.02
<b>Sex positivity and hierarchical family and gender norms and sex apprehension</b>	<b>0.05*</b>	<b>0.017</b>	<b>2.73</b>
<p><b>Note.</b> Scale responses for the three predictor variables (sex positivity, sex apprehension, and hierarchical family and gender norms) were averaged across all sexuality education experiences of each participant (up to three) and were centered.</p> <p>*Significant, <math>p &lt; .05</math></p> <p>**Significant, <math>p &lt; .001</math></p>			

**Figure 7.** Three-Way Interaction between Features of Sexuality Education on Internalized Homonegativity



A three-way multiple regression revealed that there was a main effect of both sex positivity and sex apprehension on internalized homonegativity. That is, being taught sex positive values in prior sexuality education regardless of other taught values buffered against current internalized homonegativity. This supports our hypothesis that if college men with same-gender attraction were taught that their sexuality is normal and positive, they are less likely to have internalized negative stereotypes about people who experience same-gender attraction.

There was also a main effect of sex apprehension such that, regardless of other taught values, the more sex apprehension (i.e., the more fear-based messaging) that college men with same-gender attraction were taught in past sexuality education, the more they held feelings of internalized homonegativity. Unsurprisingly, this means that if college men with same-gender attraction were taught that their sexuality is morally wrong and that they will be punished for their sexuality, they are more likely to feel negatively about their own sexual orientation.

There was also a significant three-way interaction such that the relationship between sex positivity learned in sexuality education and current feelings of homonegativity changes based on whether or not past sexuality education also included hierarchical family and gender norms and sex apprehension. When college men with same-gender attraction were taught more sex apprehension but less hierarchical family and gender norms, there was a steep decline in their internalized homonegativity as sex positivity increased. Internalized homonegativity is at its highest when sex apprehension is higher but hierarchical family and gender norms are lower.

To aid in understanding these results, we developed a metaphor. We can think of internalized homonegativity as a physical structure. In our research, we asked how strong a gust of wind (sex positivity taught in sexuality education) would need to be to knock over the physical

structure (internalized homonegativity). We couldn't answer this question without knowing the strength of the foundation (hierarchical family and gender norms taught in sexuality education), and how well the brick and mortar (sex apprehension taught in sexuality education) were laid to build the structure up. In this metaphor, hierarchical family and gender values are the foundation because they set a heteronormative framework for sexuality and are foundational for the cultural homonegative stigma and stereotyping that can be internalized. Sex apprehension is the brick and mortar because this set of beliefs adds a moral judgement and a fear for acting beyond the confines of hierarchical norms.

According to these results, the stronger the foundation (hierarchical family and gender norms), the more the structure can withstand stronger gusts of wind from sex positivity – no matter how well the bricks are put together (sex apprehension). Notably, the foundation is merely the stable base, so on its own can only go so high. In one sense, because hierarchical family and gender norms are heteronormative, women are ultimately the target of the stereotypes presented in these lessons. In this sense, although college men with same-gender attraction's sexual orientation is stigmatized and systemically oppressed, if they identify with these notions of masculine superiority, being taught hierarchical family and gender norms may buffer against college men with same-gender attraction's internalization of negative feelings about themselves if they also internalize men's superiority. Alternatively, being taught hierarchical family and gender norms may act as a buffer if they reveal a larger context of gender inequity to boys. Because of stereotypes that college men with same-gender attraction are more effeminate or in some cases not considered "real men," college men with same-gender attraction, especially those who are also transgender, are placed lower in the gender hierarchy and face discrimination about their masculinity and gender presentation (Anderson, 2020; Cohen et al., 2009; Connell & Messerschmidt, 2005; Taywaditep, 2002). As a result, an increased awareness of gender hierarchies may be another variable at play in this relationship. If being taught hierarchical family and gender norms triggers this awareness in these boys, they may be more likely to question gender hierarchies, which in turn may protect (to an extent) against internalizing negative stereotypes and stigma. This awareness variable was not measured in this study, so future research is needed to test this process.

These results should be taken with careful consideration because people with same-gender attraction face the challenge of unpacking heteronormative cultural beliefs in complex ways as stigma and stereotypes often conflate their gender identity and sexual orientation (Anderson, 2020; Blumell & Rodriguez, 2020; Edwards, 2004). Further, lesbian, bisexual, gay, queer, and questioning men each bring different experiences and perspectives from each other. This subgroup also included the majority of our sample of transgender college men (89%), who also bring experiences of their own gender and sexual orientation development that are distinct from those of cisgender college men with same-gender attraction. More research is needed to better understand the interplay between gender and sexual orientation among college men with same-gender attraction and the process through which it impacts their self view and subsequent sexual beliefs and behaviors.

Imperfectly fit in this metaphor is that with a weaker foundation of hierarchical family and gender norms, it may be possible to build the structure (internalized homonegativity) higher if the bricks are assembled well (higher sex apprehension), even though the foundation is weak. That is, because of the moralistic and fear-based messaging that sex apprehension attacks the character and morals behind sexual orientation without the buffer of hierarchical family and gender norms, the internalization of homonegativity is more likely – especially in the absence of the other buffer of sex positivity, explaining the highest point on the graph. The

structure can in turn be collapsed (internalized homonegativity decreases) if the gust of wind (sex positivity) is strong enough. Because sex positivity directly challenges the beliefs taught in sex apprehensive approaches to sexuality education, it acts as a buffer against internalizing homonegativity. As human beings, we tend to more readily accept positive views of ourselves over negative ones as a form of self protection (Alicke & Sedikides, 2009; Sedikides, 2021). The basic function of the brain to accept positive beliefs about oneself contributes to our overall psychological and physical wellbeing. When applied to sexual orientation identity, positive self views can reduce stress resulting from stereotypes and stigma (Bowlen, 2020). While this research points to the complexity in potentially reeducating this population, sex positivity taught in sexuality education may build positive self-views that buffer against or replace sex apprehension taught in sexuality education for college men with same-gender attraction.

# **SUMMARY OF FINDINGS**

The purpose of this study was to explore college men's experiences with sexuality education prior to arriving on campus in order to inform how primary prevention can more effectively address gaps in protective factors among college men that result from variation in their previous sexuality education. Taken together, the results of this report provide powerful lessons for parents, researchers, preventionists, and educators: (1) media, although full of risk, is a dominant and early sexuality educator of college men; (2) college men receive sexuality education in a variety of settings, yet, each comes with challenges and information gaps; and (3) the values taught in sexuality education have serious consequences for the way college men view themselves and their sexual partners.

At the beginning of this report, we laid out four research questions used to achieve this goal. Important takeaways for each question are summarized below:

### ***What Were College Men's First Experiences Learning About Sex?***

More than half of college men learned about sex for the first time by age 12. This is an alarming finding considering that this first encounter with sex was most often through some form of media. Research has demonstrated that media messages can be either harmful or helpful for sexual development, depending on its content (Collins, 2004; Collins et al., 2003). Media including film and television, video games, pornography, and more informs expectations about relationships (e.g., Gamble & Nelson, 2016), influences perceptions of gender roles (Blackburn & Scharrer, 2019), and increases the likelihood of internalizing myths that justify rape (Hedrick, 2021). This risk was particularly heightened for LGBTQQA college men, who were even more likely to learn about sex for the first time earlier in childhood.

### ***Where Did College Men Receive Sexuality Education Prior to College?***

Community settings, like conversations with family members or trusted adults, were the most common place college men received sexuality education prior to attending college. Black college men are even more likely to receive sexuality education in a community setting than non-Black college men. These results support the notion that parents and other trusted adults may be foundational for educating Black youth about sexual health (Quattlebaum, 2022; Sutton et al., 2014). Only one in four of college men remembered receiving sexuality education in both middle school and high school, pointing to a lack of impactful, consistent education through the schools. LGBTQQA college men who also received sexuality education in school also tend to turn to online sources more than cisgender straight college men, but fortunately these men tend to turn to reliable online sources like medical or sexual health websites. Slightly fewer (about one in five) college men remembered receiving sexuality education online. Very few college men remembered receiving sexuality education in a religious setting. These results support the above notion that media, especially online spaces, are major sexual health educators of boys and adds that current school-based education may be insufficient for meeting the needs of all boys.

### ***Did Community, School, Religious, or Online Settings Correspond More with Abstinence-Only or Comprehensive Approaches to Sexuality Education?***

For both the general sample of college men and the sample of LGBTQQA college men, online settings tended to most align with comprehensive approaches to sexuality education. For these samples, online settings included a wider breadth of content and more sex positive messaging than community and school settings; they also contained fewer hierarchical family

and gender norms and less sex apprehension than community and religious settings. This once again highlights the complexity of online spaces and media as a venue for sexuality education. Online spaces can be a resource for filling in gaps in knowledge left by other sexuality education settings; however, this benefit must be weighed against the potential for misinformation or other harmful messages or interactions. Conversely, for Black college men, no one setting stood out as more aligned with either a comprehensive or abstinence-only approach to sexuality education. This may point to the complex nature of sexuality education targeting Black youth that must weigh the balance between narratives that promote healthy sexual behaviors – which may be more positive and cover broader topics related to sexuality – but also warn against health risk that has resulted from historical and systemic harms against Black communities – which may manifest as fear-based or traditional values.

Of note, less than half of school-based education and less than a third of community-based education covered healthy conflict and communication in relationships, and only slightly over half received education about consent/sexual communication in a school-based setting. Taken with our findings that media is a major sexuality educator for boys as well as media's potentially risky effects on sexual behaviors, this finding points to a serious concern: boys are encountering sex and relationships in the media without adult guidance around communication and healthy conflict skills. This phenomenon may lead to internalization of the messages taught about these topics in media that could negatively impact their relationships and sexual behaviors into young adulthood and college, particularly if their college-level sexuality education does not confront this reality in a meaningful way.

### ***How Does Sexuality Education Prior to College Predict Sexual Assault Risk Today?***

Examining the impact of sexuality education on sexual assault risk factors was done through two paradigms, breaking up our sample based on the gender(s) for which they reported attraction. Hierarchical family and gender norms and sex apprehension, which are core to abstinence-only approaches to sexuality education, contribute to feelings of hostility towards women, a validated risk factor for sexual assault, among college men with attraction to women. While we hoped sex positivity could act as a buffer to these values, we found that receiving sex positive values in sexuality education may increase feelings of hostility towards women among college men with attraction to women if they were also taught sex apprehension and hierarchical family and gender norms. College men with same-gender attraction were generally less likely to have internalized homonegativity if they were taught sex positivity in past sexuality education; however, this is a less effective strategy if they were also taught hierarchical family and gender norms. Findings for both groups of men point to the need for pairing sex positivity with the deconstruction of underlying beliefs about gender hierarchies. The differences in effects of sex positivity on these two groups' current risky beliefs are explained by differences in gender norms and stereotypes about masculinity that have resulted from systemic gender inequity and heteronormativity experienced throughout their development.

## **STRENGTHS AND LIMITATIONS OF THE PRESENT STUDY**

This study has several strengths and limitations. The data we collected is entirely self-reported and, although we measured past experiences, cross-sectional. Understanding men's perceptions of their experiences with sexuality education is vital information for

understanding their internal processes. However, this data is limited by the quality of college men's memory reflecting on their childhood and teenage years. Future research could compare men's current attitudes and beliefs based on state and local policies (as described above), possibly in conjunction with the recollection of those who received the education. Qualitative research could also more directly examine the curriculum in schools or discussions held by parents and in other community settings with boys. Longitudinal studies could follow college men's development by recruiting boys before they start college and tracking their development over time.

This study measured attitudes and beliefs that put college men **at risk** for sexual assault but did not measure behaviors. Hostility towards women is a validated and replicated risk factor (Ray & Parkhill, 2023). However, it is only a measure of risk, not a measure of actual sexual assault perpetration. This study also did not test the full path model to see if hostility towards women moderates past sexuality education values and sexual assault behaviors. Along with self-reported measures of sexual assault perpetration (e.g., Sexual Experiences Survey; Koss & Gidycz, 1985; Koss et al., 2024), several behavioral laboratory proxies for sexual assault have been created to more precisely measure behavioral outcomes (Abbey, 2023). Future research should look at how sexuality education experiences influence college men's sexual behavior, not just their risk factors.

This study oversampled LGBTQQA college men, providing insight into a highly understudied population. This sample included nearly 200 transgender men, a subpopulation that is even more understudied and often ignored in this body of literature altogether. A limitation of this report is that we grouped LGBTQQA men together, however, many distinct experiences exist within this group, particularly when it comes to sexuality education. Although systemic harm creates shared experiences across LGBTQQA identities, it is vital that research continues to understand their unique experiences. For example, this study included bisexual, queer, and questioning college men in both analyses examining sexual assault risk, pointing to complexity in their experiences of gender and sexuality. Asexual college men were also included in our sample, but only represented a small portion of it. Asexuality is a spectrum, and not all asexual people experience same-gender attraction and may not identify with the LGBTQQA community as a whole. Further research is needed to shed light on this subpopulation to better serve their needs.

Black college men are also not a monolith. The intersections of sexual orientation, gender, and other socialized experiences like socioeconomic status impact Black college men's experiences. Unfortunately, despite oversampling both populations, sample size prevented our ability to analyze the subset of our population identifying as both Black and queer, and our measure of socioeconomic status was not reliable. Systemic economic disparities that have been created to marginalize Black communities may create differences in sexuality education experiences among young men. Although there is a strong foundation of research examining Black parents' communication with youth about sexual health, more research is needed to understand how Black parents and communities can be supported in their efforts to reduce sexual health risk and promote safety amidst the larger societal context. As well, sexuality education research as a whole cannot ignore the ways that systemic racism has impacted the state of sexuality education in the United States, and must continue to examine the ways in which it persists in all forms of sexuality education targeted at any youth. The gender norms, family values, and sexual morality measured herein were all created by white supremacist eugenicists. As researchers and educators, we must continue to not only face that reality, but find new paths forward to create education under egalitarian paradigms.

**WHAT CAN WE DO ABOUT IT?**

## SUPPORT COLLEGE MEN'S SEXUAL DEVELOPMENT (EARLIER AND MORE COMPREHENSIVELY)

First, developmentally appropriate sexuality education must start earlier and cover a broad range of topics. If boys are encountering sexual content at young ages, especially in media, it is important to build a strong foundational knowledge to help them navigate the information they might come across. Schools and parents can teach media literacy and engage youth in media safety practices. For example, adults can show youth examples of relationships in media and challenge them to think critically about what they are viewing (e.g., what is the creator trying to tell us? Is this relationship being depicted this way to be real or to be entertaining? What might this situation look like in real life? Is this story following a stereotype we've heard before?). Adults can monitor media viewing to ensure age-appropriate content and reduce exposure to potentially harmful content. Adults can also work with teens to agree on using safety tools and monitoring social media usage (Akter et al., 2022). A helpful resource for adults to implement media literacy education is [Media Literacy Now](#).

Second, sexuality education must avoid using fear-based, moralistic teachings and rigid heterosexual gender values that may contribute to belief systems putting boys at risk of committing violence. Rather than relying on stereotypes or tropes, sexuality educators of all kinds should instead help boys navigate their own understandings of masculinity and sexuality in affirming and equitable ways. Additionally, as our findings demonstrate that introducing sex positivity is not necessarily sufficient to combat these messages, educators must be prepared to get at the root of these beliefs and help boys work through sexist and racist norms around sex early, as this may help reduce the possibility of internalizing beliefs that are linked to perpetration. Community organizations and schools could host conversations about masculinity by taking advantage of youth-oriented programming that addresses gender inequity, relationship skills, and healthy sexual behaviors. For example, It's On Us' partner, [A Call To Men](#), provides trainings and educational resources for schools and community organizations about promoting healthy manhood. The Center for Disease Control also has the [Sexual Violence Prevention Resource for Action](#) that shares research-backed prevention approaches and example programs for communities and parents to implement to help boys navigate healthy masculinity.

Third, violence prevention programming must be tailored to the needs of college students by meeting them where they actually are. Violence prevention in higher education often comes from the lens of reducing risk and raising awareness by telling college men how to avoid sexually assaulting someone. This advice is not only polarizing for college men<sup>6</sup>, but also irrelevant when our systems have denied them the foundational skills and baseline level of knowledge they need for safe, healthy, and fulfilling relationships. Especially for young men with attraction to women, introducing values that challenge inequitable beliefs alone may result in the opposite of the intended effect. Violence prevention programming in higher education must consider the knowledge and skills that may be missing as well as those that may be present and adjust to them. That is, violence prevention must consider how college men's past learned values may influence their current ability to integrate new information

<sup>6</sup> It's On Us' past research [Prevention is A Team Sport](#) documents how disempowering and unhelpful it can be to tell college men the equivalent of "don't rape" rather than engaging and educating them in service of being part of the solution. As emphasized at the outset of this report, as an organization, It's On Us is oriented around building a movement of students by giving students of all identities, especially college men, the tools to combat sexual assault.

into their belief system. More research is needed on how best to provide information that challenges college men's current beliefs. It's On Us' [The Playbook 2.0](#) is one promising program moving in this direction. *The Playbook 2.0* presents students in college athletics with skills and knowledge to promote healthy relationships and mental health, as well as reduce sexual assault.

## PARENTS AND COMMUNITIES NEED SUPPORT

In this research, college men reported that their current beliefs are more aligned with what they were taught in online and community sexual health education. Yet, despite the importance of community education, parents and other adults face barriers to teaching youth about sexuality education including: not knowing how, feeling too embarrassed or uncomfortable, not thinking about it, or not finding the time and energy (Malacane & Beckmeyer, 2016; Punjani et al., 2025; Wilson et al., 2010). This is especially true for parents and caregivers of LGBTQQA youth, who may experience even more discomfort because of their own gaps in knowledge about same-gender sexuality (LaSala, 2015; Newcomb et al., 2018; Rose & Friedman, 2016). However, research has shown that parent-child communication about sex is vital for reducing sexual health risk (Santa Maria et al., 2015; Sutton et al., 2014; Widman et al., 2016). Given the current lack of government funding for sexuality education, community efforts could create educational opportunities for influential adults to build their knowledge and confidence around communicating with boys about sexual health by:

- Fundraising for local sexual violence/domestic violence organizations to provide training and education, as well as support groups for parents;
- Fundraising to send local educators and leaders to conferences or trainings hosted by professional sexual health organizations;
- Advocating for higher pay and ongoing education for teachers;
- Forming educational circles to read and learn about sexual health together;
- Partnering with local libraries to provide sexual health resources to families;
- Partnering with local recreational and health centers to create community spaces for conversations about sexual health; and
- Collaborating with local hospitals or other health facilities to provide free educational support groups.

Making these offerings open to caregivers and teachers could provide the opportunity for consistent messaging across boys' educational experiences at school and at home.

Institutions of higher education can also have major impacts on the communities where they are located. Colleges and universities could invest back into their local communities by:

- Supplying financial support for educational opportunities for parents, educators, and youth;
- Providing free classroom spaces for community education;

- Sponsoring volunteer events or fundraisers to pay for sexual health and violence prevention programming in communities; and
- Building partnerships with K–12 institutions to share access to libraries or other educational resources for educators and youth.

By educating parents, educators, and youth in their communities, colleges and universities are investing in future students who can bring their sexual health skills and knowledge to campus. With or without government funding, communities must take seriously their responsibility to build up their knowledge in order to provide quality, accurate, and equitable sexuality education for boys.

## ADVOCATE FOR SYSTEMS CHANGE

As documented at the outset of this report, the history of sexuality education has been impacted and shaped by forces not informed by science, research, or an interest in true sexuality education that properly prepares boys. Ultimately, our systems must change in order to create widely accessible sexuality education that is both comprehensive and effective. Communities are powerful agents of change — as shown throughout the history of sexuality education, grassroots efforts have driven widespread change. We can push for systemic change by:

- Pressuring local school boards and state governments to pass policies and invest in medically accurate sexuality education;
- Organizing to pass policies at the state and local level that improve access to sexual health resources through increased funding;
- Advocating for funding and standards for comprehensive sexuality education at the federal level; and
- Allying ourselves with researchers across disciplines to continue to stand up for the importance of preserving and continuing to advance scientific progress.

## INVEST IN MORE RESEARCH

More funding for research is also deeply needed. In addition to the many places throughout this report where a need for further research is noted, the field as a whole is underfunded. For example, while there are many resources on the current state of sexuality education in K–12 schools, there are surprisingly few analyses that try to relate policy at the state level to the quality of sexuality education received by students in this country (see: Atkins & Bradford, 2021; Proulx et al., 2019; Carr & Packham, 2017). Since we did collect state-level data from our respondents and utilized the SIECUS overall grades to validate the representativeness of our sample from a state policy standpoint, we initially attempted to use this survey data to briefly explore how state-level laws and curriculum (as measured by the SIECUS overall grade) may influence the education our respondents report being exposed to as additional context for our findings in a post-hoc exploratory analysis. However, as our instrument was not designed around analyzing this, we were confronted with several challenges such as: state self-reports

not capturing the entirety of the state-driven sexuality education received by respondents, timing issues around the use of current SIECUS data not necessarily corresponding the policy environment when institutional education was received by the respondents, and, as with all analyses of state-level policy, the reality of a potential disconnect between state-level policy and the school-level implementation experienced by respondents. Even with those many caveats, though, a chi-square test of independence did show a significant association between both the overall SIECUS grade and sex ed settings reported ( $\chi^2 = 49.123$ ,  $df = 28$ ,  $p\text{-value} = 0.0081$ ), as well as when focused on the institutional setting in particular ( $X\text{-squared} = 10.693$ ,  $df = 4$ ,  $p\text{-value} = 0.0302$ ), as that is where we would expect to see the strongest impacts of the state-level policy. We believe this indicates the importance of doing future research to understand the complexities of the relationship between state-level sexuality education policy and the experience of those receiving it, but did not have the ability to do so in this analysis.

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# APPENDIX

## Appendix A. Settings Where Black College Men Received Sexuality Education

Setting	Black Men (N = 376)	Non-Black Men (N = 630)
Never Received Any	17 (4.5%)	46 (7.3%)
Any School	281 (74.7%)	451 (71.6%)
Any Community	287 (56.1%)	442 (70.2%)
Any Religion	16 (4.3%)	29 (4.6%)
Any Online-Based	86 (22.9%)	133 (21.2%)

### Crosstabulation of Race by All Selected Sexuality Education Settings

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.			
	Black Men (N = 376)	Not Black Men (N = 630)	
No sex education	17	46	
Community	43	76	
School	70	132	
Online	11	18	
Religious	0	1	
Community + School	147	218	
Community + Religious	6	5	
School + Religious	3	10	
Community + Online	21	31	
Religious + Online	0	0	
School + Online	23	42	
Community + School + Online	28	38	
Community + School + Rel	4	10	
School + Religious + Online	3	1	
Comm + School + Religious + Online	0	0	

Pearson's Chi-squared test

$$\chi^2 = 13.162, df = 13, p\text{-value} = 0.4354$$

## Appendix B. Young LGBTQQA Men Experiences with Sexuality Education

Setting	LGBTQQA Men (N = 512)	Cisgender Straight Men (N = 494)
Never Received Any	19 (3.7%)	44 (8.9%)
Any School	399 (77.9%)	333 (67.4%)
Any Community	319 (62.3%)	311 (63.0%)
Any Religion	21 (87.5%)	24 (4.9%)
Any Online-Based	128 (25.0%)	91 (18.4%)

### Crosstabulation of LGBTQQA by All Selected Sexuality Education Settings

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 %)	
	Cisgender and Straight (N = 494)	LGBTQQA (N = 512)
None	43 <sub>a</sub> (68.3)	20 <sub>b</sub> (31.7)
Community	74 <sub>a</sub> (62.2)	45 <sub>b</sub> (37.8)
School	99 <sub>a</sub> (49.0)	103 <sub>a</sub> (51.0)
Online	13 <sub>a</sub> (44.8)	16 <sub>a</sub> (55.2)
Religious	1 <sub>a</sub> (100)	0 <sub>a</sub> (0.0)
Community + School	167 <sub>a</sub> (45.8)	198 <sub>a</sub> (54.2)
Community + Religious	5 <sub>a</sub> (45.5)	6 <sub>a</sub> (54.5)
School + Religious	6 <sub>a</sub> (46.2)	7 <sub>a</sub> (53.8)
Community + Online	26 <sub>a</sub> (50.0)	26 <sub>a</sub> (50.0)
Religious + Online	0 <sub>a</sub> (0.0)	0 <sub>a</sub> (0.0)
School + Online	19 <sub>a</sub> (29.2)	46 <sub>b</sub> (70.8)
Community + School + Online	29 <sub>a</sub> (43.9)	37 <sub>a</sub> (56.1)
Community + School + Religious	9 <sub>a</sub> (64.3)	5 <sub>a</sub> (35.6)
School + Religious + Online	2 <sub>a</sub> (50.0)	2 <sub>a</sub> (50.0)
Community + Religious + Online	1 <sub>a</sub> (50.0)	1 <sub>a</sub> (50.0)

<sub>a, b</sub> Subscripts are used to denote significantly significant differences between cell counts across rows, , significant at  $|\pm 1.96|$

**Appendix C. Full Sample of College Men: Linear Mixed Modeling Comparing Current Belief Alignment with Features Taught in Past Sexuality Education Settings**

**Estimated Marginal Means for Current Belief Alignment with Features Taught in Past Sexuality Education Settings**

**Thinking about your current personal values, how much do you agree or disagree with what you were taught about...?**

Sexuality Education Feature	Setting	Mean Alignment (EMM)	Std. Error	95% Confidence Interval
<b>Sex Positivity</b>	Community	5.08	0.058	[4.97, 5.19]
	Institutional	4.89	0.053	[4.78, 4.99]
	Online	5.39	0.099	[5.20, 5.58]
	Religious	4.92	0.210	[4.51, 5.33]
<b>Hierarchical Family and Gender Norms</b>	Community	3.65	0.045	[3.56, 3.74]
	Institutional	3.51	0.041	[3.43, 3.59]
	Online	3.78	0.076	[3.63, 3.93]
	Religious	3.57	0.162	[3.25, 3.89]
<b>Sex Apprehension</b>	Community	3.62	0.043	[3.53, 3.70]
	Institutional	3.46	0.040	[3.38, 3.54]
	Online	3.65	0.073	[3.51, 3.79]
	Religious	3.52	0.155	[3.22, 3.83]

Note. Models were fit using Restricted Maximum Likelihood (REML).

<sup>1</sup> REML criterion at convergence = 7,490.1

<sup>2</sup> REML criterion at convergence = 6,429.1

<sup>3</sup> REML criterion at convergence = 6,287.6

**Sex Positivity – Pairwise Comparisons (Tukey-adjusted)**

**Thinking about your current personal values, how much do you agree or disagree with what you were taught about sexual behaviors?**

Predictor	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	<b>5.08</b>	<b>0.057</b>	<b>1,741.2</b>	<b>88.36</b>	<b>&lt; .001</b>
<b>Community vs. School</b>	<b>0.19</b>	<b>0.065</b>	<b>1,595</b>	<b>2.91</b>	<b>&lt;.05</b>
<b>Community vs. Online</b>	<b>-0.31</b>	<b>0.105</b>	<b>1,639</b>	<b>-2.96</b>	<b>&lt;.05</b>
Community vs. Religious	0.16	0.213	1,592	0.75	0.88
<b>School vs. Online</b>	<b>-0.50</b>	<b>0.103</b>	<b>1,651</b>	<b>-4.84</b>	<b>&lt; .001</b>
School vs. Religious	-0.03	0.212	1,597	-0.14	0.9
Online vs. Religious	0.47	0.228	1,619	2.06	0.17

### Hierarchical Family and Gender Norms: Pairwise Comparisons (Tukey-adjusted)

Thinking about your current personal values, how much do you agree or disagree with what you were taught about family and gender norms?

Predictor	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	<b>3.65</b>	<b>0.044</b>	<b>1,734.6</b>	<b>82.02</b>	<b>&lt; .001</b>
<b>Community vs. School</b>	<b>0.14</b>	<b>0.050</b>	<b>1,585</b>	<b>2.72</b>	<b>&lt; .05</b>
Community vs. Online	-0.13	0.081	1,629	-1.59	0.39
Community vs. Religious	0.08	0.164	1,579	0.47	0.97
<b>School vs. Online</b>	<b>-0.26</b>	<b>0.080</b>	<b>1,640</b>	<b>-3.32</b>	<b>&lt; .01</b>
School vs. Religious	-0.06	0.163	1,583	-0.36	0.98
Online vs. Religious	0.21	0.176	1,606	1.17	0.65

### Sex Apprehension – Pairwise Comparisons (Tukey-adjusted)

Thinking about your current personal values, how much do you agree or disagree with what you were taught about sexuality?

Predictor	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	<b>3.62</b>	<b>0.043</b>	<b>1,719.6</b>	<b>83.44</b>	<b>&lt; .001</b>
Community vs. School	<b>0.15</b>	<b>0.048</b>	<b>1,558</b>	<b>3.24</b>	<b>&lt; .01</b>
<b>Community vs. Online</b>	<b>-0.03</b>	<b>0.078</b>	<b>1,599</b>	<b>-0.43</b>	<b>0.97</b>
Community vs. Religious	0.09	0.157	1,543	0.59	0.94
School vs. Online	-0.19	0.076	1,611	-2.47	0.07
School vs. Religious	-0.06	0.156	1,547	-0.41	0.98
Online vs. Religious	0.12	0.168	1,570	0.74	0.88

**Appendix D. Black College Men Sample: Linear Mixed Modeling**  
**Comparing Features Taught Across Past Sexuality Education Settings**

**Estimated Marginal Means for Features Taught Across Past Sexuality Education Settings**

Sexuality Education Feature	Setting	Mean (EMM)	Std. Error	95% Confidence Interval
<b>Breadth of Content<sup>1</sup></b>	Community	5.20	0.183	[4.84, 5.56]
	Institutional	5.41	0.174	[5.07, 5.75]
	Online	5.53	0.301	[4.94, 6.12]
	Religious	4.83	0.679	[3.49, 6.16]
<b>Sex Positivity<sup>2</sup></b>	Community	4.90	0.0717	[4.76, 5.04]
	Institutional	5.06	0.0683	[4.93, 5.19]
	Online	5.19	0.1140	[4.97, 5.42]
	Religious	4.74	0.2540	[4.24, 5.24]
<b>Hierarchical Family and Gender Norms<sup>3</sup></b>	Community	4.37	0.0903	[4.19, 4.54]
	Institutional	4.11	0.0861	[3.94, 4.27]
	Online	3.96	0.1430	[3.67, 4.24]
	Religious	5.23	0.3170	[4.61, 5.86]
<b>Sex Apprehension<sup>4</sup></b>	Community	4.36	0.0718	[4.22, 4.50]
	Institutional	4.22	0.0692	[4.08, 4.35]
	Online	4.07	0.1060	[3.86, 4.28]
	Religious	4.46	0.2240	[4.02, 4.90]

Note. Models were fit using Restricted Maximum Likelihood (REML).

<sup>1</sup> REML criterion at convergence = 3,127.4

<sup>2</sup> REML criterion at convergence = 1,933.3

<sup>3</sup> REML criterion at convergence = 2,221.9

<sup>4</sup> REML criterion at convergence = 1,893.0

**Breadth of Content: Pairwise Comparisons for Black College Men (Tukey-adjusted)**

Setting	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	<b>5.20</b>	<b>0.183</b>	<b>617.8</b>	<b>&lt; .001</b>	<b>5.20</b>
Community vs. School	-0.205	0.216	369	.777	-0.21
Community vs. Online	-0.327	0.328	448	.752	-0.33
Community vs. Religious	0.375	0.690	455	.948	0.38
School vs. Online	-0.122	0.324	451	.982	-0.12
School vs. Religious	0.580	0.689	459	.834	0.58
Online vs. Religious	0.702	0.732	463	.772	0.70

**Sex Positivity: Pairwise Comparisons for Black College Men (Tukey-adjusted)**

Setting	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	<b>4.90</b>	<b>0.072</b>	<b>606.1</b>	<b>68.40</b>	<b>&lt; .001</b>
Community vs. School	-0.162	0.079	354	-2.04	.18
Community vs. Online	-0.297	0.122	414	-2.44	.07
Community vs. Religious	0.160	0.257	410	0.62	.93
School vs. Online	-0.136	0.120	418	-1.13	.67
School vs. Religious	0.321	0.257	413	1.25	.59
Online vs. Religious	0.457	0.272	418	1.68	.34

**Hierarchical Family and Gender Norms: Pairwise Comparisons for Black College Men (Tukey-adjusted)**

Setting	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	<b>4.37</b>	<b>0.090</b>	<b>605.5</b>	<b>48.39</b>	<b>&lt; .001</b>
Community vs. School	<b>0.260</b>	<b>0.099</b>	<b>351</b>	<b>2.63</b>	<b>&lt; .05</b>
Community vs. Online	<b>0.410</b>	<b>0.152</b>	<b>409</b>	<b>2.69</b>	<b>&lt; .05</b>
Community vs. Religious	<b>-0.869</b>	<b>0.321</b>	<b>404</b>	<b>-2.71</b>	<b>&lt; .05</b>
School vs. Online	0.150	0.150	413	1.00	.750
School vs. Religious	<b>-1.129</b>	<b>0.320</b>	<b>407</b>	<b>-3.52</b>	<b>&lt; .01</b>
Online vs. Religious	<b>-1.279</b>	<b>0.340</b>	<b>412</b>	<b>-3.76</b>	<b>&lt; .01</b>

**Sex Apprehension: Pairwise Comparisons for Black College Men (Tukey-adjusted)**

Setting	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	<b>4.36</b>	<b>0.072</b>	<b>564.5</b>	<b>60.80</b>	<b>&lt; .001</b>
Community vs. School	0.145	0.068	325	2.13	.14
<b>Community vs. Online</b>	<b>0.293</b>	<b>0.106</b>	<b>357</b>	<b>2.76</b>	<b>&lt; .05</b>
Community vs. Religious	-0.095	0.223	344	-0.43	.97
School vs. Online	0.148	0.105	360	1.41	.50
School vs. Religious	-0.240	0.223	346	-1.08	.70
Online vs. Religious	-0.388	0.237	350	-1.64	.36

**Appendix E. Black College Men: Linear Mixed Modeling Comparing Current Belief Alignment with Features Taught Past Sexuality Education Settings**

**Estimated Marginal Means for Current Belief Alignment with Features Taught in Past Sexuality Education Settings**

**Thinking about your current personal values, how much do you agree or disagree with what you were taught about...?**

<b>Sexuality Education Feature</b>	<b>Setting</b>	<b>Mean Alignment (EMM)</b>	<b>Std. Error</b>	<b>95% Confidence Interval</b>
<b>Sex Positivity</b>	Community	5.20	0.085	[5.03, 5.37]
	Institutional	5.29	0.081	[5.13, 5.45]
	Online	5.35	0.146	[5.06, 5.64]
	Religious	5.13	0.325	[4.49, 5.77]
<b>Hierarchical Family and Gender Norms</b>	Community	3.71	0.069	[3.58, 3.84]
	Institutional	3.70	0.065	[3.58, 3.83]
	Online	3.78	0.118	[3.55, 4.02]
	Religious	3.66	0.263	[3.14, 4.17]
<b>Sex Apprehension</b>	Community	3.74	0.065	[3.61, 3.87]
	Institutional	3.72	0.062	[3.59, 3.84]
	Online	3.71	0.111	[3.49, 3.93]
	Religious	3.74	0.245	[3.26, 4.23]

*Note. Models were fit using Restricted Maximum Likelihood (REML).*

<sup>1</sup> REML criterion at convergence = 2,778

<sup>2</sup> REML criterion at convergence = 2,439

<sup>3</sup> REML criterion at convergence = 2,346.6

**Sex Positivity: Pairwise Comparisons for Black College Men (Tukey-adjusted)**

**Thinking about your current personal values, how much do you agree or disagree with what you were taught about sexual behaviors?**

Predictor	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	<b>5.20</b>	<b>0.085</b>	<b>640.6</b>	<b>61.04</b>	<b>&lt; .001</b>
Community vs. School	-0.09	0.095	593	-0.93	0.79
Community vs. Online	-0.15	0.154	618	-0.96	0.77
Community vs. Religious	0.07	0.327	596	0.22	0.99
School vs. Online	-0.06	0.152	619	-0.39	0.98
School vs. Religious	0.16	0.328	600	0.49	0.96
Online vs. Religious	0.22	0.349	603	0.63	0.92

**Hierarchical Family and Gender Norms: Pairwise Comparisons for Black College Men (Tukey-adjusted)**

**Thinking about your current personal values, how much do you agree or disagree with what you were taught about family and gender norms?**

Predictor	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	<b>3.71</b>	<b>0.068</b>	<b>644.9</b>	<b>54.20</b>	<b>&lt; .001</b>
Community vs. School	0.01	0.077	598	0.07	.99
Community vs. Online	-0.08	0.125	624	-0.60	0.93
Community vs. Religious	0.05	0.266	603	0.19	0.99
School vs. Online	-0.08	0.123	625	-0.65	0.91
School vs. Religious	0.05	0.266	607	0.17	0.99
Online vs. Religious	0.13	0.283	610	0.45	0.97

**Sex Apprehension: Pairwise Comparisons for Black College Men (Tukey-adjusted)**

**Thinking about your current personal values, how much do you agree or disagree with what you were taught about sexuality?**

Predictor	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	<b>3.74</b>	<b>0.065</b>	<b>638.6</b>	<b>57.26</b>	<b>&lt; .001</b>
Community vs. School	0.02	0.072	585	0.32	0.99
Community vs. Online	0.03	0.116	609	0.27	0.99
Community vs. Religious	-0.00	0.247	585	-0.02	0.99
School vs. Online	0.01	0.115	610	0.07	0.99
School vs. Religious	-0.03	0.247	589	-0.11	0.99
Online vs. Religious	-0.04	0.263	592	-0.14	0.99

**Appendix F. LGBTQQA College Men: Linear Mixed Modeling Comparing Features Taught Across Past Sexuality Education Settings**

**Estimated Marginal Means for Features Taught Across Past Sexuality Education Settings**

Sexuality Education Feature	Setting	Mean (EMM)	Std. Error	95% Confidence Interval
<b>Breadth of Content<sup>1</sup></b>	Community	5.14	0.167	[4.81, 5.47]
	School	5.82	0.151	[5.52, 6.12]
	Online	7.12	0.255	[6.62, 7.62]
	Religious	4.87	0.613	[3.66, 6.07]
<b>Sex Positivity<sup>2</sup></b>	Community	4.74	0.0707	[4.60, 4.88]
	School	4.74	0.0638	[4.61, 4.86]
	Online	5.48	0.109	[5.27, 5.70]
	Religious	4.91	0.263	[4.39, 5.42]
<b>Hierarchical Family and Gender Norms<sup>3</sup></b>	Community	3.95	0.0907	[3.78, 4.13]
	School	3.68	0.0826	[3.52, 3.84]
	Online	3.31	0.136	[3.04, 3.58]
	Religious	4.42	0.323	[3.78, 5.05]
<b>Sex Apprehension<sup>4</sup></b>	Community	4.05	0.0674	[3.92, 4.18]
	School	3.92	0.0616	[3.80, 4.04]
	Online	3.58	0.100	[3.38, 3.78]
	Religious	4.39	0.237	[3.92, 4.85]

Note. Models were fit using Restricted Maximum Likelihood (REML).

<sup>1</sup> REML criterion at convergence = 4,337.7

<sup>2</sup> REML criterion at convergence = 2,760.8

<sup>3</sup> REML criterion at convergence = 3,279.1

<sup>4</sup> REML criterion at convergence = 2,859.6

**Breadth of Content: Pairwise Comparisons (Tukey-adjusted)**

Predictor	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	<b>5.14</b>	<b>0.167</b>	<b>855.2</b>	<b>30.87</b>	<b>&lt; .001</b>
<b>Community vs. School</b>	<b>-0.68</b>	<b>0.193</b>	<b>508</b>	<b>-3.52</b>	<b>&lt; .05</b>
<b>Community vs. Online</b>	<b>-1.98</b>	<b>0.284</b>	<b>625</b>	<b>-6.96</b>	<b>&lt; .001</b>
Community vs. Religious	0.28	0.625	642	0.44	.97
<b>School vs. Online</b>	<b>-1.30</b>	<b>0.275</b>	<b>617</b>	<b>-4.74</b>	<b>&lt; .001</b>
School vs. Religious	0.95	0.621	644	1.53	.42
<b>Online vs. Religious</b>	<b>2.25</b>	<b>0.657</b>	<b>657</b>	<b>3.43</b>	<b>&lt; .05</b>

**Sex Positivity: Pairwise Comparisons (Tukey-adjusted)**

Predictor	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	<b>4.74</b>	<b>0.071</b>	<b>856.4</b>	<b>67.13</b>	<b>&lt; .001</b>
Community vs. School	0.004	0.083	515	0.05	1.00
<b>Community vs. Online</b>	<b>-0.74</b>	<b>0.122</b>	<b>639</b>	<b>-6.09</b>	<b>&lt; .001</b>
Community vs. Religious	-0.17	0.268	662	-0.62	.93
<b>School vs. Online</b>	<b>-0.75</b>	<b>0.118</b>	<b>631</b>	<b>-6.34</b>	<b>&lt; .001</b>
School vs. Religious	-0.17	0.266	664	-0.64	.92
Online vs. Religious	0.58	0.281	677	2.05	.17

**Hierarchical Family and Gender Norms: Pairwise Comparisons (Tukey-adjusted)**

Predictor	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	<b>3.95</b>	<b>0.091</b>	<b>846.5</b>	<b>43.61</b>	<b>&lt; .001</b>
<b>Community vs. School</b>	<b>0.27</b>	<b>0.100</b>	<b>491</b>	<b>2.72</b>	<b>&lt; .05</b>
<b>Community vs. Online</b>	<b>0.64</b>	<b>0.149</b>	<b>586</b>	<b>4.31</b>	<b>&lt; .001</b>
Community vs. Religious	-0.46	0.328	589	-1.41	.49
School vs. Online	0.37	0.144	581	2.57	.05
School vs. Religious	-0.74	0.326	591	-2.25	.11
<b>Online vs. Religious</b>	<b>-1.11</b>	<b>0.345</b>	<b>603</b>	<b>-3.20</b>	<b>&lt; .05</b>

**Sex Apprehension: Pairwise Comparisons (Tukey-adjusted)**

Predictor	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	<b>4.05</b>	<b>0.067</b>	<b>841.9</b>	<b>60.15</b>	<b>&lt; .001</b>
Community vs. School	0.13	0.073	483	1.79	.28
<b>Community vs. Online</b>	<b>0.47</b>	<b>0.109</b>	<b>571</b>	<b>4.35</b>	<b>&lt; .001</b>
Community vs. Religious	-0.34	0.240	570	-1.41	.50
<b>School vs. Online</b>	<b>0.34</b>	<b>0.105</b>	<b>567</b>	<b>3.26</b>	<b>&lt; .05</b>
School vs. Religious	-0.47	0.238	572	-1.96	.20
<b>Online vs. Religious</b>	<b>-0.81</b>	<b>0.252</b>	<b>583</b>	<b>-3.22</b>	<b>&lt; .05</b>

**Appendix G. LGBTQQA College Men: Linear Mixed Modeling Comparing Current Belief Alignment with Features Taught in Past Sexuality Education Settings**

**Estimated Marginal Means for Current Belief Alignment with Features Taught in Past Sexuality Education Settings**

**Thinking about your current personal values, how much do you agree or disagree with what you were taught about...?**

<b>Sexuality Education Feature</b>	<b>Setting</b>	<b>Mean Alignment (EMM)</b>	<b>Std. Error</b>	<b>95% Confidence Interval</b>
<b>Sex Positivity</b>	Community	4.79	0.089	[4.61, 4.96]
	Institutional	4.65	0.079	[4.50, 4.81]
	Online	5.56	0.143	[5.28, 5.84]
	Religious	4.58	0.343	[3.91, 5.25]
<b>Hierarchical Family and Gender Norms</b>	Community	3.33	0.069	[3.19, 3.46]
	Institutional	3.36	0.062	[3.24, 3.48]
	Online	3.76	0.110	[3.54, 3.97]
	Religious	3.34	0.261	[2.83, 3.85]
<b>Sex Apprehension</b>	Community	3.29	0.067	[3.16, 3.42]
	Institutional	3.26	0.060	[3.15, 3.38]
	Online	3.61	0.105	[3.40, 3.81]
	Religious	3.29	0.246	[2.81, 3.78]

*Note. Models were fit using Restricted Maximum Likelihood (REML).*

<sup>1</sup> REML criterion at convergence = 4,187.8

<sup>2</sup> REML criterion at convergence = 3,619.8

<sup>3</sup> REML criterion at convergence = 3,522.3

**Sex Positivity: Pairwise Comparisons for LGBTQQA College Men (Tukey-adjusted)**

**Thinking about your current personal values, how much do you agree or disagree with what you were taught about sexual behaviors?**

Predictor	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	<b>4.79</b>	<b>0.089</b>	<b>949.5</b>	<b>53.92</b>	<b>&lt; .001</b>
Community vs. School	0.13	0.100	843	1.31	0.56
<b>Community vs. Online</b>	<b>-0.78</b>	<b>0.157</b>	<b>887</b>	<b>-4.95</b>	<b>&lt; .001</b>
Community vs. Religious	0.20	0.348	866	0.59	0.94
<b>School vs. Online</b>	<b>-0.91</b>	<b>0.151</b>	<b>881</b>	<b>-6.00</b>	<b>&lt; .001</b>
School vs. Religious	0.07	0.346	870	0.21	0.99
<b>Online vs. Religious</b>	<b>0.98</b>	<b>0.367</b>	<b>880</b>	<b>2.67</b>	<b>&lt; .05</b>

**Hierarchical Family and Gender Norms: Pairwise Comparisons for LGBTQQA College Men (Tukey-adjusted)**

**Thinking about your current personal values, how much do you agree or disagree with what you were taught about family and gender norms?**

Predictor	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	<b>3.33</b>	<b>0.069</b>	<b>939.8</b>	<b>48.24</b>	<b>&lt;.001</b>
Community vs. School	-0.03	0.076	823	-0.37	0.98
<b>Community vs. Online</b>	<b>-0.43</b>	<b>0.119</b>	<b>865</b>	<b>-3.58</b>	<b>&lt;.01</b>
Community vs. Religious	-0.01	0.264	837	-0.04	.99
<b>School vs. Online</b>	<b>-0.40</b>	<b>0.115</b>	<b>860</b>	<b>-3.48</b>	<b>&lt;.01</b>
School vs. Religious	0.02	0.263	842	0.07	.99
Online vs. Religious	0.42	0.279	852	1.49	0.44

**Sex Apprehension: Pairwise Comparisons for LGBTQQA College Men (Tukey-adjusted)**

**Thinking about your current personal values, how much do you agree or disagree with what you were taught about sexuality?**

Predictor	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	<b>3.29</b>	<b>0.067</b>	<b>927.5</b>	<b>49.47</b>	<b>&lt; .001</b>
Community vs. School	<b>0.03</b>	<b>0.072</b>	<b>807</b>	<b>0.45</b>	<b>0.97</b>
<b>Community vs. Online</b>	<b>-0.31</b>	<b>0.112</b>	<b>846</b>	<b>-2.79</b>	<b>&lt;.05</b>
Community vs. Religious	0.00	0.249	814	0.01	.99
<b>School vs. Online</b>	<b>-0.35</b>	<b>0.108</b>	<b>842</b>	<b>-3.19</b>	<b>&lt;.01</b>
School vs. Religious	-0.03	0.248	818	-0.12	0.99
Online vs. Religious	0.32	0.263	828	1.20	0.63

**Appendix H. Full Sample of College Men: Linear Mixed Modeling Comparing Features Taught Across Past Sexuality Education Settings**

*\*Please note, we did not hypothesize about these differences, but they are included for reference for future research.*

**Estimated Marginal Means for Features Taught Across Past Sexuality Education Settings**

<b>Sexuality Education Feature</b>	<b>Setting</b>	<b>Mean Alignment (EMM)</b>	<b>Std. Error</b>	<b>95% Confidence Interval</b>
<b>Breadth of Content<sup>1</sup></b>	Community	5.07	0.116	[4.84, 5.30]
	School	5.67	0.109	[5.46, 5.89]
	Online	5.87	0.191	[5.49, 6.24]
	Religious	4.96	0.411	[4.16, 5.77]
<b>Sex Positivity<sup>2</sup></b>	Community	4.83	0.0465	[4.73, 4.92]
	School	4.83	0.0435	[4.75, 4.92]
	Online	5.29	0.0754	[5.14, 5.44]
	Religious	4.87	0.1610	[4.56, 5.19]
<b>Hierarchical Family and Gender Norms<sup>3</sup></b>	Community	4.17	0.0602	[4.05, 4.29]
	School	3.87	0.0568	[3.76, 3.98]
	Online	3.77	0.0944	[3.59, 3.96]
	Religious	4.56	0.1980	[4.18, 4.95]
<b>Sex Apprehension<sup>4</sup></b>	Community	4.18	0.0454	[4.09, 4.27]
	School	4.05	0.0429	[3.96, 4.13]
	Online	3.91	0.0699	[3.78, 4.05]
	Religious	4.26	0.1440	[3.98, 4.55]

*Note. Models were fit using Restricted Maximum Likelihood (REML).*

<sup>1</sup> REML criterion at convergence = 8,076.0

<sup>2</sup> REML criterion at convergence = 5,088.6

<sup>3</sup> REML criterion at convergence = 5,890.7

<sup>4</sup> REML criterion at convergence = 4,950.7

**Breadth of Content: Pairwise Comparisons (Tukey-adjusted)**

Predictor	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	<b>5.07</b>	<b>0.116</b>	<b>1,605.2</b>	<b>43.59</b>	<b>&lt; .001</b>
<b>Community vs. School</b>	<b>-0.601</b>	<b>0.138</b>	<b>966</b>	<b>-4.36</b>	<b>&lt; .001</b>
<b>Community vs. Online</b>	<b>-0.795</b>	<b>0.209</b>	<b>1,172</b>	<b>-3.79</b>	<b>&lt; .001</b>
Community vs. Religious	0.108	0.419	1,191	0.26	.99
School vs. Online	-0.194	0.206	1,179	-0.94	.78
School vs. Religious	0.709	0.418	1,193	1.70	.33
Online vs. Religious	0.903	0.447	1,223	2.02	.18

**Sex Positivity: Pairwise Comparisons (Tukey-adjusted)**

Predictor	Estimate	Std. Error	df	t-value	p-value
<b>Intercept (Community)</b>	4.826	0.046	1,596	103.85	< .001
<b>Community vs. School</b>	-0.007	0.0537	946	-0.130	.99
<b>Community vs. Online</b>	<b>-0.462</b>	<b>0.0820</b>	<b>1,129</b>	<b>-5.633</b>	<b>&lt; .001</b>
Community vs. Religious	-0.047	0.1640	1,132	-0.286	.99
<b>School vs. Online</b>	<b>-0.455</b>	<b>0.0806</b>	<b>1,137</b>	<b>-5.646</b>	<b>&lt; .001</b>
School vs. Religious	-0.040	0.1630	1,134	-0.245	.99
Online vs. Religious	0.415	0.1750	1,163	2.366	.08

**Hierarchical Family and Gender Norms: Pairwise Comparisons (Tukey-adjusted)**

Predictor	Estimate	Std. Error	df	t-value	p-value
Intercept (Community)	4.169	0.060	1,566	69.29	< .001
<b>Community vs. School</b>	<b>0.301</b>	<b>0.0646</b>	<b>895</b>	<b>4.662</b>	<b>&lt; .001</b>
<b>Community vs. Online</b>	<b>0.395</b>	<b>0.0998</b>	<b>1,026</b>	<b>3.961</b>	<b>&lt; .001</b>
Community vs. Religious	-0.395	0.2000	1,003	-1.978	.20
<b>School vs. Online</b>	0.094	0.0981	1,034	0.961	.77
School vs. Religious	-0.696	0.1990	1,005	-3.500	<b>&lt; .01</b>
Online vs. Religious	-0.790	0.2140	1,029	-3.699	<b>&lt; .01</b>

**Sex Apprehension: Pairwise Comparisons (Tukey-adjusted)**

<b>Predictor</b>	<b>Estimate</b>	<b>Std. Error</b>	<b>df</b>	<b>t-value</b>	<b>p-value</b>
Intercept (Community)	4.179	0.045	1,545	92.16	< .001
<b>Community vs. School</b>	<b>0.131</b>	<b>0.0469</b>	<b>873</b>	<b>2.797</b>	<b>&lt; .05</b>
<b>Community vs. Online</b>	<b>0.266</b>	<b>0.0728</b>	<b>985</b>	<b>3.650</b>	<b>&lt; .01</b>
Community vs. Religious	-0.085	0.1450	956	-0.581	.94
School vs. Online	0.135	0.0716	993	1.880	.24
School vs. Religious	-0.216	0.1450	958	-1.489	.45
Online vs. Religious	-0.350	0.1560	979	-2.248	.11

