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How Sex Education Effects Sexual Practices: The relationship between high school sexual health education and subsequent sexual practices in high school and college

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The relationship between high school sexual health education and subsequent sexual practices in high school and college

A thesis submitted in partial fulfillment of the Bachelor's Degree in Psychology

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I would also like to acknowledge the forced removal of the indigenous people from their land in Hartford, Connecticut on which I conducted this research. It is the territory of the Mohegan, Mashantucket Pequot, Eastern Pequot, Schaghticoke, Golden Hill Paugussett, Nipmuc, and Lenape Peoples. It is critical to understand the longstanding history that has brought us all to reside on this land, and to seek to understand our place within that history. Land acknowledgements do not exist in a past tense, or historical context: colonialism is a current and ongoing process, and we need to build our mindfulness of our present participation.
That said, simply an acknowledgement does not suffice in the activism we all need to engage in to support our local indigenous communities.

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Abstract

This study sought to determine the relationship between high school sexual health education programming and subsequent sexual behaviors in high school and college, asking three primary research questions: How does the comprehensiveness of an individual's sex education program in high school influence their sexual behaviors in high school in terms of frequency, agency, pleasure, and safety? How does the comprehensiveness of an individual's sex education in high school influence their sexual behaviors in college in terms of frequency, agency, pleasure, and safety? And among those who took sexual health education courses, what is the relationship between curricular characteristics and students' identities?

This study answered these questions through both qualitative and quantitative means with a survey sent to a collegiate undergraduate population asking students to reflect on their sexual health education participation in high school and subsequent sexual practices in high school and college. There were two primary findings of this study: that more abstinence-plus sex education content was positively correlated with higher frequencies of sexual practices in high school and that the socioeconomic status (SES) of an individual impacted access to the sexual health education programs students experienced in terms of duration and content.

These findings have implications for how we design and implement sexual health education programming across the United States.

Keywords: high school sexual health education, sexual behaviors

Introduction

The Multiple Meanings of Sexual Behaviors

On January 26, 1998, when President Bill Clinton, in regards to his relationship with his intern Monica Lewinsky, infamously maintained that, "I did not have sexual relations with that woman," he not only initiated an impeachment process but also struck a nerve with sex researchers around the world (Bogart et al. 2000, p. 109). Unbeknownst to President Clinton, his then very public position that the oral-genital contact, that he and Ms. Lewinsky engaged in at the time, did not constitute sex or "sexual relations" as he described it, reflected a much larger, but up until that point, rather limited conversation about how we as a society operationalize, moralize, and classify sexual behaviors for ourselves and for each other. Clinton's proclamation to the world demanded that previously private conversations about sex enter a much more public domain, motivating researchers to begin to understand how different groups define sex in theory and in practice, an opportunity that might have been much less accessible before 1998.

Sanders and Reinisch (1999) were some of the first resarchers to leverage this social and political controversy to benefit scientific discovery, surveying 599 undergraduate students in the Midwest about their sexual behaviors and asking them to classify if those behaviors constituted sex or not. They found that almost all (99.5%) of respondents regarded penile-vaginal intercourse as sex, 81% considered penile-anal intercourse to be sex, and 40% thought that oral-genital contact counted as sex (Sander & Reinisch, 1999). These findings have been replicated numerous times across different populations. For example, Pitts and Rahman (2001) found similar results in their study of 314 undergraduates in the United Kingdom; the overwhelming majority considered penile-vaginal intercourse as sex (99.5%), most considered penile-anal intercourse as sex (81.0%), and few considered oral-genital contact as sex (40.2%), reflecting

larger societal trends about implicit hierarchies of sexual behaviors. It is important to recognize that although this research demonstrates consistent stability with how specific undergraduate populations categorize sexual behaviors, there still exists a wide variety of beliefs and nuances that lie below the surface.

For instance, one respondent in a study conducted by Sonenstien, Ku, and Pleck (1997), which investigated young men's interpretations of sex, reported believing that "touching a woman's breast constituted having sex" (p. 109). Some studies introduced a further complicating dimension to their lists of sexual behaviors and asked participants if the presence or absence of an orgasm would alter how sexual labels were applied. Bogart et al. (2000) addressed the issue of orgasm and found that the undergraduate students in their study were more likely to label a behavior as sex in narratives they read about two people, Jim (he/him) and Susie (she/her), if it culminated in orgasm for both people involved, but interestingly, respondents believed that Jim would be more likely to label a behavior as sex if it culminated in orgasm for him, regardless of the outcome for Susie. Additionally, the study participants believed that if neither partner had an orgasm during the sexual behavior, Susie, not Jim, would be more likely to consider the behavior to be sex, supporting cultural notions that orgasm is less important to women-identified people in sexual behaviors. Clearly, investigating how people define sex and why they have arrived at those interpretations evokes many more questions than it answers. Since the 1990s, researchers have expanded upon some of those questions, moving beyond questions of how we classify sex and sexual behaviors and investigating other related epistemological concepts like virginity and abstinence, that also are important in fully understanding the many dimensions of sexuality.

Virginity

Although related directly to sex and sexual behaviors, virginity operates as its own independent construct and can carry very specific significance and meaning for individuals. Carpenter (2001) explored how undergraduate populations approached the subjective experiences of virginity through semi-structured interviews with 61 students about the meanings they ascribe to the concept of virginity loss. Similar to previously mentioned studies which investigated definitions of sex, results from the Carpenter (2001) study found that there were analogous discrepancies in terms of which sexual behaviors constituted a loss of virginity. Specifically, around 20% of participants said that they would name oral-genital contact as virginity loss, even though many studies have replicated the results that around 40% of undergraduates see oral-genital contact as sex (see Sander & Reinisch, 1999 and Pitts and Rahman, 2001), implying that for this undergraduate population, virginity loss differs, both conceptually and in practice, from sex.

Another study conducted on a group of adolescents (mean age=16.3 years) reinforced the above findings, demonstrating that 70.6% of this population believed that virginity was preserved in cases of genital-oral contact (Bersamin, Fisher, Walker, Hill & Grube, 2007). Additionally, 16.1% of respondents believed that virginity was also preserved after engaging in anal sex and even 5.8% indicated this to be the case after an individual engages in penile-vaginal intercourse, the most common threshold for a loss of virginity. Bersamin, Fisher, Walker, Hill, and Grube (2007) contend that a potential reason for these seemingly contradictory beliefs may be a result of a lack of sexual experience as they found that “sexual experience was a significant predictor of how adolescents defined virginity” (p. 7).

Gardner (2015) conducted a study attempting to understand undergraduate students' reflections of their sexual health education more thoroughly in high school and found that every participant mentioned virginity in some capacity during the interview process, most discussing how messages about virginity were inconsistent, even antithetical between classroom and social environments. One participant reflected that their sex education in high school "gave you the idea that virginity was something to be desired," although there existed many other social determinants, like social status or number of years in school, outside of the classroom that complicated that message for many students (Gardner, 2015, p. 131).

A variety of "interpretive frames" of conceptualizing virginity emerged in Carpenter's (2001) study across the two genders they investigated. Results indicated that women in their study were more likely to interpret virginity as a gift (61% of women vs 36% of men), while men were more likely to interpret it as stigmatizing (57% of men vs 21% of women). Additionally, almost half of the respondents (n=26) considered nonconsensual sexual behaviors, including rape, to constitute virginity loss, with one participant (Karen, 21, heterosexual) reflecting that "[Rape] would definitely be intercourse, so I wouldn't consider them a virgin. Unfortunately." (Carpenter, 2001, p. 132). These more nuanced understandings about virginity as a concept demonstrate how context, personal and social perceptions, and cultural beliefs influence how it is defined across differing groups of individuals.

Abstinence

The concept of abstinence has also been explored in various studies. In 1998, the same year that President Clinton was addressing the nation about his supposed lack of sexual relations, the Center for Disease Control (CDC) announced their own definition of abstinence: "refraining from vaginal, anal, or oral intercourse" (Byers, Henderson & Hobson, 2009, p. 666). On first

analysis of this definition, it appears to be a straightforward statement, but upon closer inspection, its exclusion of a multitude of sexual behaviors reflects a lack of precision in understanding about the term that has been replicated in a number of studies.

Byers, Henderson and Hobson (2009) questioned the very nature of the relationship between sex and abstinence, asking if the two concepts necessarily exist as mutually exclusive ideas or if the boundary between sex and abstinence for many is a more obscure and circumstantial one. Unsurprisingly based on previous findings about definitions of sex and virginity, students in their study illustrated levels of ambiguity related to how they defined abstinence and there was little consensus about which specific sexual behavior beyond penetrative ones-- be it oral-genital contact, mutual masturbation, or genital fondling--was abstinent behavior. Interestingly, 8% of respondents believed that penile-vaginal intercourse with orgasm to still be abstinent behavior, despite this behavior existing as the arguable antithesis of abstinence. This finding has been replicated by Horan, Philips, and Hagan (1998) who found that out of the 1,101 undergraduates surveyed, 24% reported anal intercourse to be abstinent behavior, 37% reported oral-genital contact to be abstinent behavior, and 10% reported penile-vaginal intercourse to be abstinent behavior. Clearly, there is a lack of consensus among individuals, and undergraduate populations in particular, about what abstinence looks like in practice.

Interestingly, one study looked to explore discrepancies between student, instructor, and director understandings of abstinence in abstinence-only programs in Texas, revealing that two very distinct orientations emerged: one, an additive dimension of abstinence that centered the incorporation and practice of certain positive behaviors, and the other, a more negative approach consisting mostly of which behaviors to avoid (Goodson, Suther, Pruitt & Wilson, 2003).

Between the students, instructors, and directors, there existed a fair amount of incongruence in terms of which behaviors would be considered abstinent, with student beliefs typically existing as broader and more permissive. For example, while about half of the directors (50%) and instructors (42%) believed oral-genital contact to be sex and therefore would not be considered abstinent behavior, only 17% of the participants of the programs considered this behavior to be in conflict with their definitions of abstinence. The study also found that directors and instructors were more likely to believe that individuals should not watch explicit forms of media, like pornography, in order to fully abstain from sex, extending notions of abstinence beyond sexual behaviors between individuals. As researchers have begun to more thoroughly investigate how individuals define and practice various sexual behaviors, stark contradictions have been uncovered in multiple dimensions of these concepts. Yet, this inconsistency in the ways we define and approach sex has consequences beyond simply phenomenological or etymological discrepancies, and these phenomena are important to investigate.

Differences in Meaning Across Groups

As illustrated in the literature above, there exist numerous differences in meaning for concepts related to sex between individuals, but studies have also explored patterns in these topics across different groups of people, particularly among queer[1] communities. When preliminary studies began to investigate definitions and practices of sex, their own very limited methodological approaches to the concepts unfortunately replicated and strengthened structures of heteropatriarchal exclusion within the context of sexual behaviors. How researchers

[1]I am using "queer" in this context as a standing term for the 2sLGBTQQIA+ (2-spirit, lesbian, gay, bisexual, transgender/trans, queer, questioning, intersex/intergender, asexual/allosexual, pansexual/pangender inclusive of all other sexual and gender orientations not represented in this very finite list) community, although I acknowledge that not all people identity with this term and there is an important and painful history of using this term against people in a derogatory and discriminatory context that should not be forgotten.

operationalized sex, in part, reflected how they as individuals understood the practice and behaviors, and in the 1990s, the vast majority of researchers were wealthy, college-educated, cis, White men who, through no fault of their own, had an intrinsically myopic understanding of sex and their perspectives were confirmed and reinforced by an audience with the same or similar demographic characteristics. Therefore, although researchers sought to develop more nuanced understandings of how human begins define and practice sex, in many cases, they only reproduced more nuanced understandings of how wealthy, college-educated, cis, White men defined and practiced sex. This can be clearly seen in the extremely limited scope of the sexual behaviors (e.g., only including survey items about penile-vaginal intercourse or other heteronormative sexual behaviors that exclude many individuals of the queer community) or the demographic makeup of the participants (e.g., samples limited to primarily heterosexual, White, male respondents) in many of the studies that are understood to be foundational in this field. While there are cultural considerations and resource limitations to take into account that could act as mitigating forces, the fact is that not only does much of our understanding about sex and sexual behaviors comes from an extraordinarily narrow perspective, but also we continue to rely on those preliminary models to frame our societal understandings of sex, only strengthening the power of that initial restricting lens. This is not to say that the perspective of wealthy, college-educated, cis, White men about sex is not relevant, but it cannot be the only perspective that holds weight in how we continue to discuss, define, and practice sex because, more than ever, we are just beginning to understand how different groups approach sex in vastly different ways.

In the past decade, there have been a number of studies centering on the experiences of queer individuals and their definitions of sex and sexual behaviors, although significantly more resources need to be dedicated to this vastly diverse community to more thoroughly understand

the topics at hand. One study specifically surveyed bisexual women about how, if at all, their sexual definitions and behaviors changed between interactions with men and women, finding that they "included more behaviors in their behavioral definition of having sex with a woman than their behavioral definition of having sex with a man," and that some of the behaviors (e.g., oral-genital contact) that the women in the study would classify as sex with woman, they did not as readily define as sex with men (Schick et al., 2016, p. 583). Similarly, Horowitz and Spicer (2013) conducted a comparison of heterosexual and lesbian young adults' definitions of sex in the United Kingdom and found that lesbian women were more likely to rate non-penetrative genital stimulation (with sex toys or manually) as "having sex" than their heterosexual counterparts. Sewell, McGarrity & Strassberg (2017) recruited participants of all ages (18 to 77, M=27.11, SD= 10.32) from the Salt Lake City Pride Festival and surveyed the sample on their specific definitions and sexual behaviors. In contrast to the findings of the studies of Sander & Reinisch (1999) and Pitts and Rahman (2000), which found that about 80% of respondents consistently considered penile-anal intercourse as sex and about 40% considered oral-genital contact as sex, Sewell, McGarrity & Strassberg (2017) discovered that 90% of gay men considered both "insertive anal intercourse" and "receptive anal intercourse" as sex, and that 62% of gay men and 77% of gay women considered oral-genital contact to be sex as well (p. 828).

Once our frameworks begin to divert from traditionally narrow models held in place, differences in how groups define and practice sex emerge. Sex has different meanings for individual people, but it also has different meanings across groups, like the queer community. What were thought to be certain fundamental notions about sex are being challenged and reinterpreted, as researchers apply more diverse and intersectional lenses and perspectives to the

approaches they are implementing, to the questions they are asking, to the populations being investigated. There remains a tremendous amount to be learned about sex and sexual behaviors across groups and we should use progress as a motivating force to fund research to ask these same questions of elderly Black queer men, or of wealthy Latina transwomen, or of refugees who have intellectual disabilities, or of homeless Hmong youth–the list is endless and constantly evolving. The point is that every voice and every experience has value and deserves a place in this field; it is imperative to keep expanding and stretching until it does.

Sexual Behavior in the United States

Increasingly across the developed world, certain sexual behaviors are becoming more normalized and accepted societally, despite attempts by certain groups to resist these behavioral changes. Since the second half of the twentieth century, people have been engaging in sexual behaviors at earlier ages, especially before marriage (Weaver, Smith, & Kippax, 2005). Today, sex and sexual behaviors are often seen as distinct from marriage in ways that were either not possible in previous times or carried so much societal stigma that it limited people's freedom to choose what behaviors they wished to engage in for themselves. There are a multitude of reasons why people chose to abstain from sexual behaviors until marriage or until they believe they are ready, but only until recently and still only in certain cultures is premarital sex and sexual choice viewed as a right and a freedom, not as a sin (Weaver, Smith, & Kippax, 2005). It is essential to separate out the reality of sexual behaviors in the United States from the stigma that have been historically attatched to those behaviors. Important to consider is that not all high school and college students, the population relevant to this current study, are engaging in sexual behaviors, but many are, and I believe we have a responsibility to educate, inform, protect, and liberate those individuals in relation to their own sexual identities.

The Guttmacher Institute conducted an exhaustive examination of trends in high school student sexual behavior from 2013-2017 and found that 40% of high school students reported having had sex, the lowest percentage collected since 1991 (*Most Sexually Active U.S. High School Students Make Decisions That Support Their Sexual Health*, 2018). Across a temporal axis, 20% of ninth grade students reported having had sex compared to 57% of twelfth grade students. Although the majority of sexually active high school students (54%) indicted contraception use, one in five sexually active ninth grade students and one in ten sexually active twelfth grade students reported not using any method of contraception during their last sexual activity, indicating a need for further education about the availability of contraception (*Most Sexually Active U.S. High School Students Make Decisions That Support Their Sexual Health,* 2018). A review of survey data from 2019 confirmed the results of the Guttmacher Institute, finding that nationally, 38% of high school students reporting having sex and 88% of students reporting using some form of contraception during last sexual activity (Lindberg, Pleasure, & Douglas-Hall, 2020). Yet, this seemingly high percentage of contraception use by high schoolers may be misleading because access to confidential and affordable contraceptive care is not equally available to minors across all states. Specifically, “only 23 states explicitly allow minors to consent to contraceptive care, and only 6 states explicitly protect the confidentially of individuals insured as dependents,” creating a significant barrier for high schoolers in certain states to access contraception if they decide to become sexually active (Lindberg, Pleasure, & Douglas-Hall, 2020, Disscussion Section).

Although college students typically engage in more sexual behaviors than high school students, less than half report consistent contraception use during sexual activity and less than one quarter report being tested for HIV (Schmidt, 2014). This may be in part because studies

investigating the nature of sexual behaviors in undergraduate populations have found sexual attitudes and environments to be much more permissive on college campuses and that students are more likely to engage in casual sexual activity than in high school (Gute, Eshbaugh, & Wiersma, 2008). An extensive annual survey of sexual behaviors of the University of Michigan's student body indicated that 60% of respondents said they primarily engage in sexual activity for pleasure, 40% expressed it was motivated out of love, and 24% answered it was driven by a desire to be wanted (*The 2020 Statement Sex Survey,* 2020). Importantly, the survey also found that while the majority of students believed that other students are having sex once or twice a week or less, the results demonstrated that only 24% of respondents reported this frequency of behavior was true for their college semester, with 40% of respondents indicating they had not had sex at all in the semester the survey was conducted. So while it is true that in American culture, sexual behaviors are becoming more societally acceptable at younger ages, there are large numbers of students who remain abstinent for a variety of reasons. Yet, in certain environments such as college campuses, where sexual practices are often paired with a lack of protection and inaccurate information, the results can be harmful for all parties involved.

Harm, Discrimination, and Sexual Behaviors

According to the U.S. Department of Justice, 35.8% of sexual assaults occur when the person is between the ages of 12 and 17 and currently one in three teens experience relationship abuse (Revised Draft Health Education Framework, 2019). The CDC reported in 2010 that 42.2% of female rape victims were first assaulted before the age of 18 and that 12.3% of females and 27.8% of male rape victims were first assaulted before the age of 10 (Revised Draft Health Education Framework, 2019). In the United States, the average age for a child to be first brought into sex trafficking is currently between 11 to 14 years old (Revised Draft Health Education

Framework, 2019). Although the national teen pregnancy rate has been declining over the past 20 years, the United States continues to lead the developed nations with the highest rates, around 17.4 births per 1,000 females between the ages of 15 and 19 (Revised Draft Health Education Framework, 2019). There is much harm related to sex, and these statistics alone should motivate us to teach more and teach better sexual health education to the young people of America. It is also crucial to understand the sexual risk and threat more completely for groups of young people with marginalized identities from an intersectional approach, specifically queer students, BIPOC (Black, Indigenous, People of Color) students, and disabled students and students with disabilities[2].

Queer students are more at risk for victimization and discrimination, mental health concerns, sexual violence, and other adverse outcomes related to sexual health. Specifically, queer students are more likely to initiate sexual activity at a younger age, engage in sexual activity with more partners, have sex under the influence of drugs or alcohol, experience dating violence, use fewer condoms or other forms of contraception during sexual activity, contract STIs and HIV, and experience teen pregnancy than their heterosexual peers (*Lack of comprehensive sex education putting LGBTQ youth at risk*, n.d.*)*. Transgender youth are at an even greater risk for sexual violence, with 24% of trans students reporting being forced to have sexual intercourse compared to 4% of cisgender male students and 11% of cisgender female students (Brown & Quirk, 2019). Within schools, queer students face hostile social

[2]This is an intentional use of both identity-first language (e.g. autistic person) and person-first language (e.g. person with autism) in order to be most inclusive of vast communities of people. For the purposes of concision, I am making the conscious decision to use identity-first language, but this is in no way an attempt to minimize the experience of people who use person-first language for themselves. When using person-first language, it is important to recognize that it is most commonly utilized by non-disabled people as a default in attempts (regardless of intent) to prioritize their own comfort over the identity of others, often resulting in the minimization of the disabilities for many. However, if a person choses to use person-first language to identify themselves, this should always be respected.

environments–routinely encountering homophobic slurs, victimization, and discrimination from their peers–which contributes to queer students experiencing worse educational outcomes, lower self-esteem, and higher rates of depression than their heterosexual peers (Goldfarb & Lieberman, 2021). One study reported that queer youth face 14 times the risk of depression and suicide from the constant internalization of homophobic messages than heterosexual youth (Mustafa, 2019).

The racism and classism that BIPOC students face are highlighted clearly in the statistics of sexual health inequities. Black, Native, and Latinx students suffer disproportionality from STIs, teen pregnancy, and sexual assault (Masucci, 2016). Moreover, of those aged 13-24 years old, 55% of the HIV/AIDS cases occur among Black Americans, even though this demographic group comprise only 13% of the country's population (Breunig, 2017). Black adolescents also have higher rates of sexual activity and tend to show significantly different attitudes about sex relative to White adolescents (Breunig, 2017), but the vast majority of sexuality research has been grounded within White normative context (Masucci, 2016). Black students, regardless of age, often face "adultification" from teachers and are treated as more adult-like than they are, stereotyped and hypersexualized more often, and punished more severely as a result of this view (Connell & Elliot, 2009, p. 90). The field of sexuality research also was incorporated into the eugenics movements and the government-sponsored forced sterilization of groups of women, consisting almost exclusively of Latinx and Indigenous women (Masucci, 2016). Additionally, Black and Lantinx teens are three times more likely to live in poverty as White teens and are also three times more likely to experience teen pregnancy, contributing to a harmful cycle of poverty in which "very young mothers stay poor, and their children go on to experience teen pregnancy, poverty, and lower academic outcomes" (*Comprehensive Sex Education and Academic Success,* 2010, p. 2). Studies show that only 51% of teen mothers earn their high school diploma by age

22 compared to the 89% of women who do not give birth in their teens (Kohler, Manhart & Lafferty, 2008,) and that the lowest performing schools are often the most affected by teen pregnancy (*Comprehensive Sex Education and Academic Success,* 2010). In this system, poor BIPOC students stay poor and lack access to educational programs that could prevent or mitigate some of these outcomes, but are instead othered and ostracized by yet another institution of supposed social support.

Disabled students are also excluded from conversations related to sexual health, particularly pleasure, even though some disabled populations face some of the highest rates of sexual violence (#SevenTimes, n.d.). There is a common stereotype that disabled people are inherently uninterested in sex or unable to express sexual desire. However, reality presents a much more complex and nuanced picture of sex and sexuality for disabled communities. Of course, there are asexual and agender disabled people as there are asexual and agender non-disabled people, but for many disabled people, sexual health and desire is central to their wellbeing. However, when disabled people do express their sexuality or sexual desires, they are often portrayed as “hypersexual” or having “uncontrollable urges” that should be othered and feared (*Sexual health education for young people with disabilities*, n.d.).

Another consequence of this exclusion is the vastly higher rates of sexual assault among disabled populations. Intellectually and developmentally disabled people are sexually assaulted at a rate seven times higher than those without disabilities, a risk increased for women-identified disabled people, with women-identified intellectually disabled people assaulted at a rate twelve times higher than their male-identitied counterparts (#SevenTimes, n.d.). The specific needs of disabled popoulations must be addressed because of the negative effects they experience . Different types of disabilities, whether physical, intellectual, emotional, or a combination, may

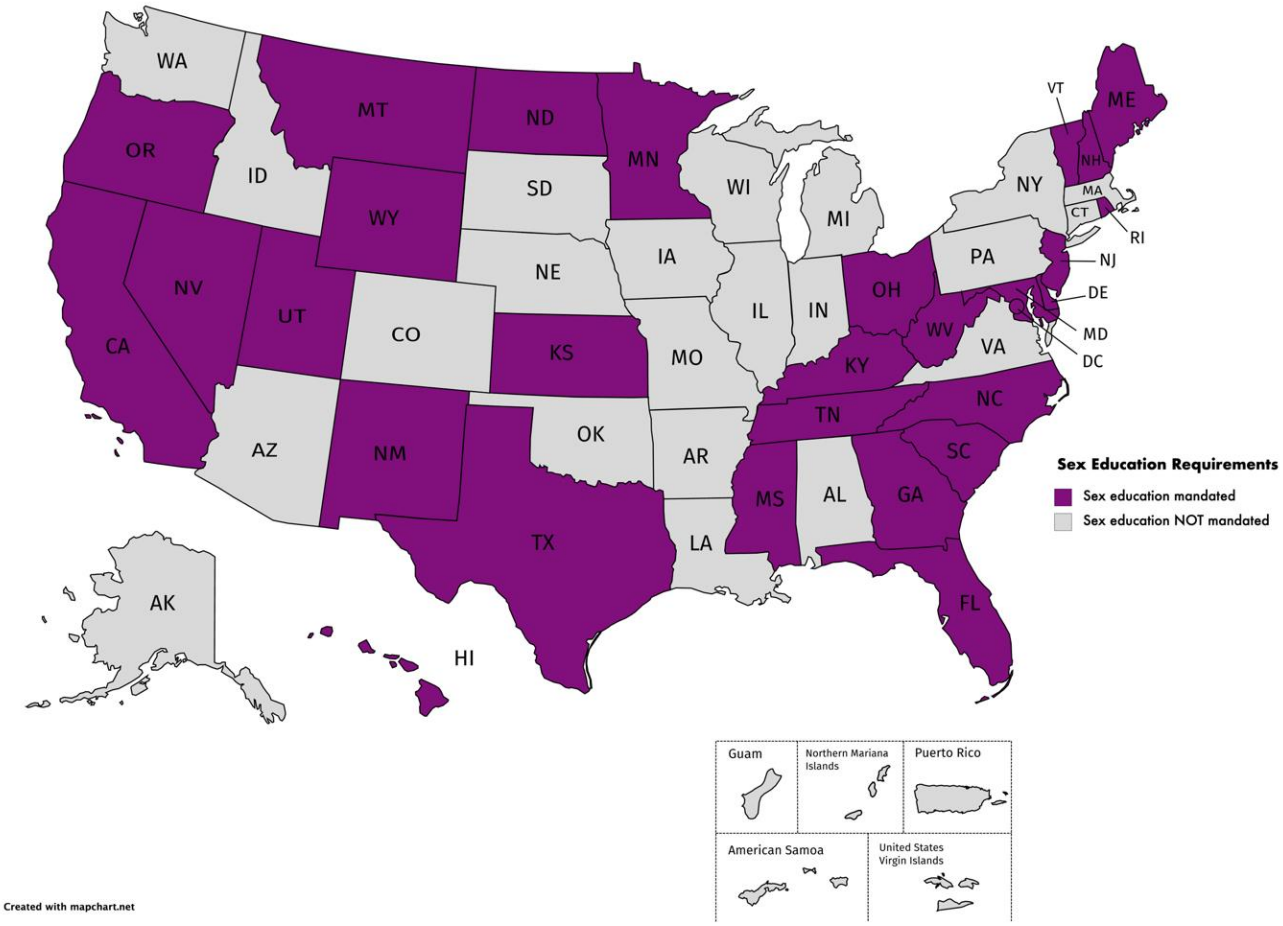
require different needs for optimal sexual health and wellbeing, but those differences should be acknowldged not dismissed or ignored.

It is important to emphasize that these vulnerabilities are not inherent to or the fault of disabled populations, but rather a reflection of the structures in place that create these vulnerabilities or the opportunity for people to exploit these vulnerabilities. Disabled people are often targeted for sexual abuse because there is an assumption that they are physically weaker, more easily manipulated, and will have difficulty reporting or testifying later (Shapiro, 2018). Unfortunately, because the sexual health and freedoms of disabled populations are not prioritized or even recognized at their most basic level, vital education about consent and abuse often does not get taught, and many disabled people are unable to report assault or even have the language to know that it occurred. Like queer and BIPOC students, disabled students are left out of conversations of sexual health and wellbeing, despite the fact that they face some of the most significant inequities regarding their sexual health and safety.

Sexual Health Education in the United States

Although federal law does not require any form of sex education in schools, there are 39 states and the District of Colombia that mandate sex education and STI/HIV instruction (SIECUS State Profiles, 2020). The map below represents the states (shaded in purple) that mandate sex education.

Figure 1. Sex Education Requirements in the United States



Yet, of those 39 states and the District of Columbia, 35 of the states require schools to stress, not just cover, abstinence, 15 of the states do not require the sex education taught to be age-appropriate, medically accurate, culturally responsive, or evidence-based, and 9 states explicitly require teachers to portray queer people negatively or prohibit them from mentioning queer people at all in the sex education curricula (SIECUS State Profiles, 2020). Only 16 states require instruction on condoms or other forms of contraception, only 8 states require sex education to cover consent, and only 11 states have policies that include queer-inclusive

curricula (SIECUS State Profiles, 2020). Although more than half of the states currently mandate it, clearly, not all sex education is created equal.

Types of Sex Education Programs

Since its conception in the United States, the varying goals and underlying philosophies of sexual health education produced a wide range of programs across the country. Because there is no federal mandate to teach a uniform sexual health education curriculum across the country, it is up to the discretion of individual states to determine what is important for students to know about their own sexual development. This means that the content, the depth, and scope of these programs are dependent on these fundamental principles created by each state, and, unfortunately, these differences create vast inequities in the outcomes for students. There are differences between the three major categories of sexual health education: abstinence-only, abstinence-plus, and comprehensive that need to be explained before delving into an analysis of the outcomes and efficacy of the programs[3]. Abstinence-only programs narrowly define sexual behavior through promoting "romantic notions of marriage, moralizing, [and] fear of STDs," and much of the information spread through these programs is scientifically incorrect and explicitly damaging to healthy sexual development (Stanger-Hall & Hall, 2011, p. 9). Studies have shown that abstinence-only models may actually promote high-risk sexual behaviors in teens and even into adulthood as these programs fail to properly educate students about the realities of sexual health, wellness, and development (Kohler, Manhart, & Lafferty, 2008). Because of these outcomes, the Society for Adolescence Medicine determined that abstinence-only approaches to sexual health are "ethically flawed," (Stanger-Hall & Hall, 2011, p. 9) while other scholars argue

[3]Importantly, the reality of the categorization of health education in the United States is a much more nuanced picture, including abstinence-stressed, but for the purposes of this review, I have simplified the wide variety of programs into these three major categories

that a federal endorsement of abstinence-only sex education would violate the First Amendment right to information for students enrolled in the programs (Breunig, 2017). Despite the potentially harmful shortcomings of these programs, 29 states still require abstinence to be stressed, not just covered, in the health education programs (SIECUS State Profiles, 2020).

Fortunately for students, there are other, more extensive sex education programs that not only exist, but according to a United Nations conference in 1994, are a fundamental human right (United Nations Population Fund, 2010). Abstinence-plus sex education programs provide age-appropriate and medically-accurate information on a wide-variety of topics such as "human development, relationships, decision-making, abstinence, contraception, and disease prevention" (Connecticut State Department of Education, 2012, p. 10). These programs are primarily a harm prevention and reduction model, focusing on reducing rates of such as teen pregnancy, STIs, and abuse. Abstinence-plus sex education should be seen as the baseline standard for sexual health education programs.

Comprehensive sex education programs, (CSE), build on the baseline concepts included in abstinence-plus sex education and cover a wider array of topics that encompass the "biological, sociocultural, psychological, and the spiritual dimensions of sexuality," while working to promote culturally inclusive and diverse information (Connecticut State Board of Education: Hartford, 2009, p. 1). A significant difference between abstinence-plus and CSE programs is that the outcomes of CSE extend far beyond prevention education, but seek to enhance the possibilities for young people's sexual freedoms, health, and happiness. The foundations of these programs are in trauma-informed, queer-inclusive, disability-centered, pleasure-focused, and racially-sensitive education. Although true CSE is rare, when it is integrated and prioritized, CSE provides a powerful foundation of access to sexual freedom and

reproductive justice, allowing students to build more equitable futures for themselves and for others.

Outcomes of Sexual Health Education

No definitive behavior changes

Although many sexual health education programs can have meaningful impacts on student behavior, some curricula have been found to lead to no conclusive changes as a result of programming. For instance, a 2007 report analyzing four different abstinence-only programs showed that the students who are enrolled in these sex education programs compared to a control group who did not receive any formal sex education were no more likely to have chosen to not engage in sex six years post interventions (Schmidt, 2014). Walcott, Chenneville, & Tarquini (2011) found a similar result, showing little difference between the safer sex practices of students of students who received a comprehensive or abstinence-only model. These findings can be explained in terms of social cognitive theory (Bandura, 1989), which suggests that we learn through observing others. According to this model of learning, the acquisition of knowledge is "impacted by a model of reciprocal causation in which environmental, personal, and behavioral factors interact and influence on another bi-directionally" (Schmidt, 2014, p. 19). This means that even the best intentioned comprehensive sexual health education programs can be ineffective in terms of behavior change if there is an inadequate understanding of each student and each topic, with environmental, personal, and behavioral factors in mind. Research indicates that "one's values, beliefs, and attitudes about sex are as important as, if not more important than, knowledge alone," so it is critical to understand and work within the confines of the values, beliefs, and attitudes of the audience rather than ascribe one's own values onto the group to have the most effective program (Walcott, 2011 p. 830). Providing sex education information alone is

not sufficient for behavior change; it is the integration and application of that knowledge with a person's own values and beliefs that will ultimately lead to shifts in behavior.

While Walcott, Chenneville, & Tarquini (2011) showed no discernible difference between the safer sex practices amongst the students, they did find the students who had received the comprehensive program "were more knowledgeable about HIV, perceived sexuality education to be more helpful, and were more likely to be taught peer negotiation skills" (Schmidt, 2014, p. 18). Outcomes of this nature are critical, particularly when considering findings from the research of DeHart and Birkimer (1997) where they determined that "positive attitudes and expectations for prevention significantly predicted the intention to try to have safer sex, which, in turn, significantly predicted condom use with a partner" (Walcott, 2011, p. 830). It is critical to determine which metrics will be used to assess a programs efficacy and which behavioral outcomes will be deemed important for the success of a program. If we only emphasize outcomes that focus on sex, instead of also addressing student's attitudes surrounding sex and sexuality, sexual safety, or sexual freedoms, we will be limited in our ability to accurately evaluate the efficacy of sex education programs. This myopia in the evalution of progams can also further silence the experiences of marginalized students, such as queer, BIPOC, and disabled students, whose voices and stories might not be heard through statistics solely based on pregnancy rates and condom usage (Bodnar & Tornello, 2019).

Negative health outcomes for abstinence only-programs

While some studies have found that certain curricula may have no discernable impact on student sexual behaviors, other researchers have determined that some programs, particularly abstinence-only programs, lead to negative outcomes in terms of sexual health. This was demonstrated in a study by Synovitz, Herbert, Kelley, & Carlson (2002) in which they surveyed

the sexual knowledge of college students from four Louisiana universities and discovered that although most of the students had received school-based sex education, the average score on the test was a 55.39%. Other studies reveal the potential negative outcomes that can result from abstinence-only programs. For instance, Bodnar & Tornello (2019) found that not only did the abstinence-only curriculum have no impact on teen pregnancy or termination rates, there was an increase in the rates of STIs from the group who received the program after the intervention. Despite receiving basic information about some aspects of sex in these programs, it appears that students cannot apply that information either in theory or in practice, revealing how some curricula have the potential to not only be ineffective, but also harmful for student's future health outcomes. However, there are many programs that yield positive behavior changes, typically with more comprehensive material and holistic approaches to student health.

Positive health outcomes for abstinence plus programs

Abstinence plus sex education programs that center prevention and harm reduction as the primary outcomes are shown to be effective in reducing teen pregnancy, STI rates, and number of sexual partners, as well as increasing contraception use during sexual activity. A study using data from the National Survey of Family Growth determined that young people ages 15-19, who received more comprehensive sex education were 50% less likely to report a pregnancy than those who received abstinence-only education (Kohler, Manhart & Lafferty, 2008). Similarly, another study found that states providing sex education covering contraception and condom use, in addition to abstinence, showed the lowest teen pregnancy rates compared to states that taught abstinence-only sex education (Stanger-Hall & Hall, 2011). Other studies examining the effectiveness of sex education programs discovered that programs covering abstinence-plus sex education topics successfully delayed the onset of sexual activity for youth receiving these

programs, reduced the frequency of sexual activity and number of sexual partners, and increased contraceptive use, including birth control and condoms (*Comprehensive Sex Education and Academic Success,* 2010). These outcomes are especially important for public health because "adolescents who initiate sexual intercourse early are less likely to use contraception and are at higher risk for STDs and pregnancy" (New Jersey Department of Education, 2013, p.15). Research findings consistently counter the major fears and criticisms that more comprehensive sex education programs will lead to earlier initiations of sex or increased sexual behaviors in teens. Rather these programs appear to delay the onset of sex and promote healthier behaviors when sexual activity does occur. These programs provide medically accurate information about pregnancy prevention, STIs, contraception, and healthy sexual behaviors, which results in consistent positive outcomes for students in terms of their sexual activity, behavior, and safety. Yet, an emphasis solely on behavior changes as the primary outcome of sex education limits the understanding about the potential benefits of more comprehensive programs.

Positive psychological development for comprehensive programs

Results of the 2008 Preventing School Harassment survey in California showed that in the 154 schools with over 1,200 students it evaluated, there were higher reports of safety and support and lower levels of bullying in schools which taught LGBTQ+-inclusive curricula (Snapp et al., 2015). Other studies found lower rates of homophobia, including stereotyping about gender norms and usage of homophobic slurs, in schools that created LGBTQ+-inclusive environments through a variety of measures including inviting queer speakers to the classroom to talk about their experiences and incorporating queer literature that centers narratives of LGBTQ+ characters (Goldfarb & Lieberman, 2021). In addition to decreasing homophobic behaviors in schools, providing queer-inclusive comprehensive sex education also increased the normalization

of queer experiences among both LGBTQ+ and straight students, promoted empathy and appreciation for queer students and culture, bolstered awareness of LGBTQ+ terminology, and increased acceptance of trans and gender-nonconforming youth (Goldfarb & Lieberman, 2021). Because of a decreased environment of harassment and homophobia, a rigorous three-wave longitudinal study across 6 high schools found that the addition of LGBTQ+-inclusive sex education curricula resulted in lower reports of suicidality and parasuicidality[4] in addition to fewer sexual partners, less drug and alcohol use before sexual activity, less teen pregnancy, and better school attendance for queer students (Goldfarb & Lieberman, 2021). These programs have been shown to be most effective when conversations are not a one-time occurrence, but rather are on-going and additive discussions starting as early as preschool. Children of this age not only demonstrate the ability to understand and discuss issues related to "gender diversity, gender expectations, nonconformity, and oppression", but studies also suggest that this age may be the best time to introduce these topics before heteronormative messages and binary frameworks become more deeply ingrained in children's understanding and their thinking becomes less flexible about these topics (Goldfarb & Lieberman, 2021, p. 7). According to Dutro (2001), comprehensive sexual health education (CSE) in schools can be spaces for children to engage with and challenge sociteitally-assumed gender roles and sterotypes.

CSE programs also demonstrate the ability to increase knowledge about Intimate Partner Violence (IPV) and Domestic Violence (DV), change attitudes about these issues, improve skills in students to help those in situations of IPV and DV, and most importantly, reduce the incidence of both DV and IVP (Goldfarb & Lieberman, 2021). CSE programs are found to be most effective at not only addressing, but also changing behaviors related to IPV and DV, when

[4] Meaning engaging in self-harming behaviors without the intention of ending one's life.

centering social justice and committing to challenging dangerous gender roles and norms associated with this kind of violence. Many CSE programs utilize role-playing, peer education, and conflict management skills to address myths surrounding victim blaming in situations of IPV and DV, counter sexist norms often underlying these acts of violence, and increase awareness and knowledge about issues related to IPV and DV (Goldfarb & Lieberman, 2021). Outcomes of the most effective CSE programs include reductions in the occurence of IPV and DV perpetration, victimization, emotional violence, and verbal aggression and harassment, enduring up to 4 years post-intervention (Goldfarb & Lieberman, 2021). One program for eight graders called *Safe Dates*, demonstrated 25% less psychological abuse, 60% less sexual violence, and 60% less physical violence in school for the intervention group compared with those in the control group. Most significant, these results persisted 4 years after the program was initiated (Goldfarb & Lieberman, 2021, p. 9). In addition to violence reduction, CSE programs that incorporate bystander intervention information demonstrated increased effective bystander behaviors, self-efficacy, skills, and intentions from students receiving the curricula (Goldfarb & Lieberman, 2021). Students also showed an increased ability to discuss difficult topics including sexuality and sexual harm, and demonstrated better, more effective communication skills in general (Goldfarb & Lieberman, 2021).

Additionally, there is strong evidence that CSE programs encompassing child sex abuse prevention are effective in increasing knowledge about safe and unsafe behaviors. These programs are found to be most powerful and demonstrate the greatest behavioral changes when the information is presented to young students, starting as early as elementary school (Goldfarb & Lieberman, 2021). This finding is supported by evidence that this material, along with many of the other topics covered in CSE programs, becomes most effectively ingrained in students

with repeated exposure, multiple opportunities to practice the skills taught, and leads to the development of more nuanced understandings of the topics as students grow in age and maturity (Goldfarb & Lieberman, 2021). For instance, programs that cover sex abuse prevention over multiple sessions and multiple years within a school, teach students about the complexities of sex abuse, going beyond the traditional "stranger danger" model that often mispresents the fact that most abuse is perpetrated by people known to the child. The complex reality of situations of abuse can be discussed and more thoroughly understood in CSE programs that begin early and reinforce messages over years through a variety of methods including role-play, self-protection practice, and parental involvement (Goldfarb & Lieberman, 2021). A substantial review of childhood sex abuse curricula in the United States and Canada found that the most common outcomes of comprehensive programs were an increase in knowledge of resources children had at their disposal to report abuse to, greater communication between parents/guardians and children about sex abuse, and most importantly, a growth of disclosure from children who had experienced abuse (Goldfarb & Lieberman, 2021). Other studies illustrate how CSE programs are not only effective at providing support to students who are currently or have previously experienced abuse, but also can act as protection against sexual abuse and violence in the future. Researchers in New York found that college students in their study who received education about sexual refusal skills, or how to say no to sex, before the age of 18 were 8% less likely to experience penetrative sexual assault (PSA) in college overall and found that the risk was reduced further to 10% for women (Santelli et al., 2018). It is important to note that this reduction in risk for PSA was only associated with consent education, Santrlli et al (2018) found no association between a decrease in PSA with sex education that covered only contraception, and STIs, or HIV/AIDS prevention.

Across grade levels, results from CSE programs in schools also demonstrate important outcomes for the social-emotional development and learning of students. Some of these behaviors are “increased empathy, respect for others, improved communication, managing feelings, positive self-image (including body image), increased sense of self-control and safety, and establishing and maintaining positive relationships” (Goldfarb & Lieberman, 2021, p. 10). These outcomes are essential components of the growth and development of young people, but are often not prioritized as necessary in health education programs. Yet, studies show that supporting both the physical and mental health of students increases a student’s grades and overall motivation to learn, while simultaneously decreasing absenteeism and temporary or permanent drop out (*Comprehensive Sex Education and Academic Success,* 2010). It is in the interest of schools to teach and emphasize CSE programs to keep their students healthy, safe, and in school.

It is not only the content of CSE programs that supports the positive psychological and behavioral outcomes, but the structure and frameworks of the programs that can make a difference in their overall effectiveness. Specifically, students receiving rights-based curricula demonstrate “significantly greater knowledge about sexual health and sexual health services, more positive attitudes about sexual relationship rights, greater communication about sex and relationships with parents, and greater self-efficacy to manage risky situations at immediate post-test” (Constantine et al., 2015, p. 1). Rights-based programs integrate theories of human rights, gender equality, and sexual freedoms to promote the acquisition of sexual health information and behaviors (Constantine et al., 2015). A meta-analysis reviewing 22 sexuality and HIV curricula across various age groups found the models that addressed power and gender structures in relationships were 80% effective in reducing STI and pregnancy rates, compared to the 12%

efficacy from the programs that did not adopt this theoretical approach (Goldfarb & Lieberman, 2021). Other studies supported these results, illustrating that a social justice framework for CSE enables students to challenge the structures of power, privilege, and systemic discrimination that intersect with the sexual health, freedoms, and rights of marginalized communities (Goldfarb & Lieberman, 2021). By adopting a rights-based and social justice framework for CSE programs, not only shows increased awareness of oppressive systems of sexuality and reproductive justice, but can also arm students with multiple marginalized intersecting identities within the classrooms with information and tools to fight for their health, wellbeing, and freedom.

There exists a significant proportion of high school and college students who are choosing to engage in sexual behaviors with varying degrees of protection and who are experiencing various types of negative outcomes. A logical next step to not only protect, but also liberate young people is to ensure equal access to intersectional, trauma-informed, pleasure-based, and culturally-sensitive comprehensive sexual health education in every grade level K through 12. National surveys show that an overwhelming majority of Americans support sex education programs that focus on teen pregnancy and STI prevention (Planned Parenthood, 2018). But what would the numbers reflect if Americans were asked if queer-inclusive sex education was a priority? Or sex education that centers racial justice? Would the results reflect a society that even recognizes the needs of its disabled students?

Despite the results from a number of studies that demonstrate the efficacy of comprehensive sexual health education, there is no agreement on the importance of certain outcomes of effective comprehensive sexual health education programs, which include combating homophobia and normalizing queer student experiences, changing behavior and attitudes surrounding Intimate Partner Violence (IPV) and Domestic Violence (DV), formalizing

bystander interventions practices and communication skills, preventing child sexual abuse, promoting social-emotional learning and school attendance, and protecting against future sexual assault. Some of these outcomes may be less frequently reported because they can be harder to quantify numerically and because nationally, many are not agreed upon as a priority within educational institutions. Yet, when programs are inclusive of student identities and needs within the classroom and cover comprehensive material not just bare bones topics about sexuality, the sexual health, wellbeing, safety, and freedom of students becomes a central component of their education.

The Current Study

The current research was aimed to address a gap in our understanding about how sexual health education programs impact sexual behavior years after students have experienced such programs. While some research has shown behavior changes during and shortly after programs occur, my goal was to understand how, if at all, the introduction of sexual health education in high school impacted sexual behaviors both during high school and subsequently in college. This study investigated the efficacy and the longevity of sexual health education programs on sexual behavior. One goal of this research was to provide a more nuanced understanding of what sexual behavior actually entailed, teasing apart behaviors that exist in multiple dimensions. Another goal was to provide a space for students to reflect on their own experiences in ways they perhaps had never been given the chance to do.

This study focused on three primary questions through both qualitative and quantitative analysis of a survey distributed to an undergraduate population of students. It sought to determine the relationship between high school sexual health education programming and

subsequent sexual behaviors in high school and college, by asking these primary research questions:

1. How does the comprehensiveness of an individual's sex education program in high school influence their sexual behaviors in high school in terms of frequency, agency, pleasure, and safety?
2. How does the comprehensiveness of an individual's sex education program in high school influence their sexual behaviors in college in terms of frequency, agency, pleasure, and safety?
3. Among those who took sexual health education in high school, what is the relationship between curricular characteristics of different programs and reported experiences?

Method

Participants

We surveyed a total of 181 participants, and after removing insufficiently completed surveys (below 90% completed), the study had a total of 135 participants. All of the participants were from the junior or senior class at Trinity College, with an average age of 21 years old. The majority of the participants were seniors, White, cisgender women, heterosexual, and self-reported their socioeconomic status to be mid- to upper-range out of a 9 point scale. These demographic findings are consistent with the student body at Trinity College. See Table 1 for a more specific breakdowns of the participant demographic characteristics.

Table 1

Characteristics of Surveyed Students (n=135)

Student Characteristics	Frequencies
Class Year	
Junior/3rd year	41.5%
Senior/4th year	57.8%
Senior +/ 5th year or more	0.7%
Race	
South/Southeast or East Asian/Asian American	10.4%
Black/African/African American	9.6%
Hispanic, Latino/a/x/e, or Spanish origin	6.7%
White	65.2%
Bi-/Multiracial	5.2%
Gender	
Cisgender female/woman	66.7%
Cisgender male/man	26.7%
Non-binary	6.7%
Sexuality	
Queer*	31.1%
Heterosexual	68.1%
*Self-Reported Socioeconomic Status***	
1-3	14%
4-6	40%
7-9	34.7%

*The term "queer" encompasses the following identities: allosexual, aromatic, asexual, bicurious, bisexual, demisexual, fluid, gay, lesbian, pansexual, questioning, and sapiosexual.
**Participants were asked to rate their perceived socioeconomic status on a scale from 1-9.

Data Collection Strategies

This study had a mixed recruitment process. Participants were recruited via emails sent to a randomized selection of upperclassmen (juniors and seniors) and through a deliberate means of sharing the survey link through various forms of social media. The survey was approved by the Institution Review Board at Trinity College. After a thorough consent script (see Appendix A for

the full script), the study asked the participants to complete an online survey via any electronic device available to them, taking no more than 20 minutes. There was a financial incentive of two $50 Amazon gift cards that could be won if participants entered their emails into a separate and anonymous raffle upon completion of the study. No individually identifiable information was collected in this study and all responses remained anonymous. See Appendix B for the full survey.

Measures

There were five measures in this study: three related to the sex education program students received in high school and two related to students' sexual practices in high school and in college. To assess sex education programs in high school, I measured the embeddedness of the programs (3 levels: no sex ed, embedded sex ed, stand-alone sex ed), the duration of the program (4 levels: 1-4 years), and the content of the sex education curriculum that was presented in the program (2 levels: abstinence plus and comprehensive sex ed/CSE). See Table 2 for these measures and levels.

Table 2

Operationalized Measures

Measure	Levels
Embeddedness of sex ed	No sex ed Embedded sex ed (i.e., in a biology or PE course) Stand-alone sex ed
Duration of sex ed	1 year 2 years 3 years 4 years
Content of sex ed	Abstinence plus sex ed Comprehensive sex ed (CSE)

Sexual behavior (practices)	Solitary sexual practices Non-penetrative partnered sexual practices Penetrative partnered sexual practices
Sexual behavior (analysis)	Frequency Agency Pleasure Safety (self) Safety (partner)

An embedded sex ed program was defined as one that is taught within another course such as biology, health class, or physical education versus a stand-alone sex ed course. In the survey, the students were presented with 21 different content areas that are commonly addressed in abstinence-plus and comprehensive sex education programs and were asked to rate on a five-point Likert scale (1: Not covered to 5: Strongly emphasized) about how comprehensively the topics were covered in their program, if at all. See Appendix B for the full 21 item list. Factor analysis led to the creation of two scales: abstinence-plus content and comprehensive sex education content. See Table 3 below for these groupings. Reliability for each scale was high (see Table 3). Participants were asked to rate the comprehensiveness of the coverage of each content area on a five-point Likert scale (from 1: Not covered to 5: Strongly emphasized).

We created two sum scales to assign numerical values for each type of sex ed program available. In other words, each participant had the opportunity to score a maximum of 5 points for each content area included for the sex programs, meaning that the total score achievable for the abstinence-plus program was 45 as there were 9 content areas and a total score of 40 points for the comprehensive sex education program as there were 8 content areas. We next averaged the total points for each program to ascertain the average score for each program (see Table 4 for these results).

Table 3

Content Areas Included in Types of Sex Ed Programs

Type of Sex Ed Program	Content Areas Included
Abstinence Plus (Cronbach's Alpha=.962)	• Abstinence • Consent • Contraception • Mental and emotional health • Negative consequences of sex • Online safety • Peer pressure • Relationships • STIs and HIV/AIDs
Comprehensive Sex Education (Cronbach's Alpha=.832)	• Abortion • Anatomy • Disability and sex • Intimate partner violence • Pleasure • Queer sex • Sexual abuse • Sexual assault and violence

To assess sexual behaviors, I divided practices into 3 major categories: solitary, non-penetrative partnered, and penetrative partnered sexual practices. Solitary sexual practices were defined as: behaviors that included masturbation, pornography, and other erotica use. Non-penetrative partnered practices were defined as: behaviors that included kissing, cuddling, touching of body parts, or other intimate physical contact not including penetration or oral sex. Penetrative partnered practices were defined as: behaviors that included oral sex, digital penetration of vulva or of anus, vaginal penetration with penis or sex toy, or anal penetration with penis or sex toy. Participants were also asked to rate their levels of frequency of engagement in these behaviors in high school and in college, as well as their levels of agency or

control, pleasure, and safety of both themselves and their partner(s) during these activities on a five-point Likert scale. At the end of each section of questions, spaces were left for open-ended responses in order to gather more in-depth responses and reflections from participants.

Results

Data Analysis Strategies

Quantitative data were analyzed using SPSS for Mac (IBM, 2019). The dependent variables in this study were continuous. Depending on the level of the independent variable, we conducted a variety of statistical tests including t-tests, one-way ANOVA, and Pearsons correlation. Qualitative data were compiled from participants' open-ended survey responses and subsequently coded to identify thematic patterns. Demographic characteristics, such as gender identity, sexual orientation, racial identity, and perceived socioeconomic status, were cataloged alongside the responses to track any demographic patterns that emerged in the qualitative data.

General Trends

Descriptive statistics of the high school sexual health education curricular features examined in this study are presented in Table 4. Overall, the majority of participants received sex ed embedded within another course, received the course for one year, and received abstinence plus content rather than comprehensive sex education content in the program. More students in this sample did not receive sex education than took sex ed as a stand-alone course. It was very uncommon for students to receive a sex ed program for three years; one and two years was the most frequent duration of program.

Table 4

Descriptive Statistics of High School Sex Ed Curricular Features

High School Sex Ed Curricular Features	
Embeddedness of sex ed curriculum	*Percentage*
No sex ed	16.3%
Embedded within another course	71.9%
Stand-alone sex ed course	11.9%
Duration of sex ed in high school	*Percentage*
1 year	51.1%
2 years	23.7%
3 years	3.0%
4 years	5.9%
Curriculum Content	*Mean (s.d.)*
Abstinence Plus Content (out of 45)	13.3 (6.5)
Comprehensive Sex Ed Content (out of 40)	6.7 (4.7)

Average sexual practices (frequency, agency, pleasure, safety of self, and safety of partner) in high school and college are reflected in Table 5. The mean values and standard deviations reflect an average out of a five-point Likert scale. After running a series of t tests for our independent variables, we found that the frequency of sexual practices ($t=-5.47$, $p<0.01$), pleasure ($t=-2.85$, $p<0.01$), and safety of self ($t=-4.30$, $p<0.01$) differed significantly from high school to college. Participants report of agency sexual practices ($t= -1.35$, $p=0.5$) and safety of partners ($t=0$, $p=0.5$) were not found to be significantly different between high school and college.

Table 5

Descriptive Statistics of High School and College Sexual Practices

	High School Mean (s.d.) n=135	College Mean (s.d.) n=135
Frequency of sexual practices*	1.5 (1.1)	2.2 (1.0)
Agency of sexual practices	3.5 (0.7)	3.6 (0.5)
Pleasure of sexual practices*	2.7 (1.0)	3.0 (0.7)
Safety (self) of sexual practices*	3.1 (0.9)	3.5 (0.6)
Safety (partner) of sexual practices	3.0 (1.1)	3.0 (1.0)

*t-test is significant at the 0.01 level (2-tailed).

Frequency of Sexual Practices and Abstinence Plus Content

The relationship between sex ed curricular characteristics and the five sexual practices we chose to focus on in this study (i.e., frequency, agency, pleasure, safety of self, and safety of partner) during high school are shown in Table 6. We conducted a series of chi-square tests, ANOVAs, and Pearsons correlations, depending on the types of the independent and dependent variables. The correlation that was found to be statically significant was related to abstinence-plus content and the frequency of sexual practices in high school; abstinence-plus content was positively correlated with frequency of sexual practices ($r=0.286$, $p=0.002$) meaning that the more abstinence-plus content students received in high school, the higher the frequency they were engaging in sexual practices in high school. For this correlation, we aggregated the frequency of all sexual practices (i.e., solo sexual practices, partnered non-penetrative, and partnered penetrative) to create an average value of frequency of sexual practices in high school.

Table 6

Sex Ed Curricular Characteristics and Sexual Practices in High School

Independent Variable	Dependent Variable	Test Type	Test Stat	p-value	n
Sex Ed Embeddedness	Frequency	ANOVA	.045	.956	-
Sex Ed Duration		Correlation	-.022	.799	135
Abs Plus Content		Correlation	.286**	.002	112
CSE Content		Correlation	.180	.058	135
Sex Ed Embeddedness	Agency	ANOVA	.115	.891	-
Sex Ed Duration		Correlation	.021	.820	119
Abs Plus Content		Correlation	.001	.996	98
CSE Content		Correlation	-.102	.318	119
Sex Ed Embeddedness	Pleasure	ANOVA	.028	.972	-
Sex Ed Duration		Correlation	-.030	.746	119
Abs Plus Content		Correlation	.158	.121	98
CSE Content		Correlation	.060	.559	119
Sex Ed Embeddedness	Safety (Self)	ANOVA	1.242	.293	-
Sex Ed Duration		Correlation	-.118	.203	119
Abs Plus Content		Correlation	-.042	.680	98
CSE Content		Correlation	-.140	.168	119
Sex Ed Embeddedness	Safety (Partner)	ANOVA	.595	.555	-
Sex Ed Duration		Correlation	.054	.655	70
Abs Plus Content		Correlation	.185	.153	61
CSE Content		Correlation	.086	.510	70

** Correlation is significant at the 0.01 level (2-tailed).

Student Characteristics: Socioeconomic Status and Sex Education Access

The relationship among certain student demographic information and curricular characteristics of sex ed programs and test statistics for different variables are presented in Table 7. The student demographics studied were race, gender, sexuality, and self-reported socioeconomic status (SES). We conducted a series of chi-square tests, ANOVA tests, and Pearsons correlations, depending on the types of the independent and dependent variables. The correlations that were found to be statically significant were related to SES and the sex ed curricular characteristics. Specifically, SES was found to be positively correlated with the number of grade levels in which sex ed is covered (r=0.18, p=0.05), positively correlated with

abstinence plus content (r=0.26, p=0.01), and positively correlated with comprehensive content (r=0.21, p=0.04). As self-reported SES increased, so did the likelihood that students had access to more comprehensive sex education, both in terms of duration of the program and content covered.

Table 7

Student Demographics and Sex Ed Curricular Characteristics

Independent Var	Dependent Var	Test Type	Test Stat	p-value	n
Race	Sex Ed Embeddedness	Chi square	2.09	0.72	135
	Sex Ed Duration	ANOVA	1.57	0.46	135
	Abs Plus Content	ANOVA	1.63	0.20	112
	CSE Content	ANOVA	1.36	0.26	112
Gender	Sex Ed Embeddedness	Chi square	0.41	0.98	135
	Sex Ed Duration	ANOVA	0.91	0.63	135
	Abs Plus Content	ANOVA	5.09	0.08	112
	CSE Content	ANOVA	1.42	0.49	112
Sexuality	Sex Ed Embeddedness	Chi square	-0.13	0.15	135
	Sex Ed Duration	ANOVA	1.69	0.20	135
	Abs Plus Content	ANOVA	0.31	0.58	112
	CSE Content	ANOVA	0.34	0.56	112
SES	Sex Ed Embeddedness	Chi square	2.27	0.68	135
	Sex Ed Duration	Pearsons Correlation	0.18*	0.05	135
	Abs Plus Content	Pearsons Correlation	0.26**	0.01	112
	CSE Content	Pearsons Correlation	0.21*	0.04	112

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Discussion

The purpose of this study was to answer three primary research questions. The first question was how does the comprehensiveness of an individual's sex education program in high school influence their sexual behaviors in high school in terms of frequency, agency, pleasure,

and safety? We found the answer to this question to be that abstinence-plus content was positively correlated with the frequency of their sexual practices in high school. In other words, the more abstinence-plus curriculum a student was exposed to in high school, the more likely they were to engage in more sexual practices in high school.

The second question was how does the comprehensiveness of an individual's sex education in high school influence their sexual behaviors in college in terms of frequency, agency, pleasure, and safety? Although we did not find any significant results addressing this question, it was still an investigation worth purusing, and if replicated on a larger scale, could perhaps yield some signficant trends.

The final question was among those who recieved sex education, what is the relationship between curricular characteristics and reported experiences? This question generated a result that illustrated a relationship between an individual's socioeconomic status and their access to more comprehensive sexual health education programs, specifically the duration and the content of the program. Meaning that the higher a student's self-reported socioeconomic status, the more likely they were to recive a more comprehensive sex education program in high school.

Frequency of Sexual Practices and Abstinence Plus Content

Our finding that the frequency of sexual practices increased as abstinence plus content increased can be explained by several factors. First, an emphasis on abstinence in sexual health education curricula can lead to negative or unintentional consequences because of misinformation or lack of information. And second, a student's choice to engage in sexual behaviors and the frequency with which they partake in those behaviors may have little to do with the sex education program, especially if the duration and content is minimal. This finding is unfortunately unsurprising given these two factors.

Abstinence is strongly emphasized in school health education curriculums across the country today. Federal funding for these programs has continued to increase and requirements for the Title X program, as well as HIV/AIDS programs, focus primarily on abstinence, while leaving out critical information for students, such as types of contraception, information about the contraction and spread of STIs, and messages about the development of sexuality. Data from the School Health Policies and Programs Study found that "92% of middle and junior high schools and 96% of high schools taught abstinence as the best way to avoid pregnancy, HIV, and STIs," while only "21% of middle schools and 55% of high schools taught how to correctly use a condom" (Santelli et al., 2006, p. 85). This means that most students who are receiving sexual health education in school are provided with misleading and inaccurate information about their bodies and for their sexual decision making. A Congressional committee report showed major errors and misrepresentations of sexual health information in abstinence-only curricula that has been used frequently across the country, finding that "eleven of the thirteen curricula contained false, misleading, or distorted information about reproductive health, including inaccurate information about contraceptive effectiveness and risks of abortion" (Santelli et al., 2006, p. 85). Not only can these curricula be harmful and misleading, but also an emphasis on abstinence in sex education can led to negative health impacts on the students who receive the information.

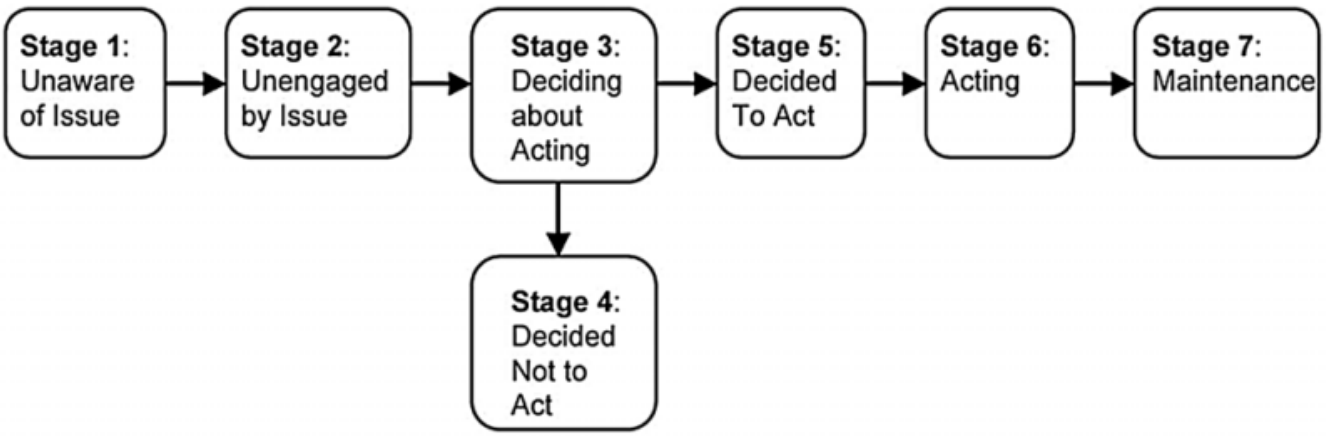
For example, Stranger-Hall & Hall (2011) found a highly positive correlation between how strongly abstinence was emphasized in state laws and policies and levels of teenage pregnancy rates. The findings of these researchers also challenge a common argument made by abstinence advocates, that educating students about contraception is associated with increased sexual activity or STIs in teenage populations (Stranger-Hall & Hall, 2011). Furthermore, another study found a positive correlation between abstinence-only sex education and rates of

sexually transmitted infections, meaning the more of this curricula students received, the more likely they were to contract an STI (Bodnar & Tornello, 2019). There is also strong evidence that sex education programs, regardless of their emphasis on abstinence have little to no impact on sexual behaviors or decision making for the students receiving the programs (Schmidt, 2014).

The decision to engage in sexual behaviors can be an extraordinarily complex process with a multitude of factors intertwining to impact the process of choice in sexual situations. As sexual behavior, including more casual practices, becomes more normative in today's culture, societal influences must be considered when examining students' sexual behaviors. The availibility of information about sex and erotica are now commonplace in media and pop-culture, which was not true for previous generations, and these influences can be considered to be detrimental to the sexual development of young people. One possible result of the inundation of sexually explicit media has been that now two of the most common factors influencing increased risky sexual practices are depressive symptoms and negative body image (Anatale & Kelly, 2015). Specifically, these risky sexual practices were found to be earlier initiation of sexual activity, inconsistent condom usage, and an increase in partners among women in particular (Anatale & Kelly, 2015). Different theories can be used to explain the reasons behind why individuals engage in sexual practices from differing philisophical backgrounds. For instance, proximate level explanations, which posit that it is the sociocultural context that drives how adults engage and practice sexual desires and behaviors, differs significantly from the ultimate level explanations, which contends that evolutionary biology is the primary reason, even for casual and uncommitted sex (Garcia, Reiber, Massey, & Merriwether, 2012). These theories would likely assert that a person's level of sexual health education in high school has little to do with sexual decision making, unless of course, that program was to significantly alter the

sociocultural context a person was living within. The Precaution-Adoption-Process Model is a tool used by educators to understand how and why people make decisions (Anatale & Kelly, 2015). It illustrates how complex the process of simply making one decision can be, breaking the process into stages, which also could explain how little an educational intervention could impact this progression, if not taught well or if not taught consistently over time. Using the topic of contraception as an example, educators must be sensitive to the fact that in order to integrate knowledge about contraceptives into students sexual practices, they must consider each stage of this model. They first must make students aware of the issue, not just about unintended pregnancy, but also how contraceptives can help prevent the spread of STIs and HIV/AIDS. It is not enough to simply be aware of the issue, but for programs to be most effective, educators must engage students with the topic and get them invested in the topic at hand. This will then make it more likely that individuals will take this information into account when acting in sexual situations and making decisions about safety and engagement. It is best if the information is practical and relevant to students and realistic situations. For example, it is unlikely that individuals will stop sexual activity to obtain contraceptives if they are not available or in close proximity, so instead of suggesting this as the only option, educators may recommend that students keep relevant forms of contraception on their person if they think sexual activity is likely to occur. It might also be pertinent to inform students where free contraceptives can be obtained at local clinics in the area if deemed appropriate. It is then essential to not only provide this information once, but reiterate the steps so that maintenance of safe behaviors continues for the students in the program. This model can be a useful tool for not just the educators and facilitators of sexual health education programs, but also the students to understand how complex decision making is, particularly in sexual situations.

Figure 2. The Precaution-Adoption-Process Model



Socioeconomic Status and Access to Education

The finding that as students' socioeconomic status increased, so did their access to more comprehensive sexual health education programs, both in terms of duration and content, is no surprise given the current research. A person's socioeconomic status (SES) incorporates a number of factors beyond just income or wealth, to "encompass educational attainment, financial security, and subjective perceptions of social status and social class" (*Education & Socioeconomic Status,* n.d. p. 1). It is well documented within educational literature and research that the higher a person's SES, the more likely they are to gain access to better educational opportunities, as these scholastic endeavors are a critical aspect of what creates one's SES itself. Across institutions of not just education, money provides access and access provides opportunities, yet these disparities in wealth and income are seen dramatically in classrooms across the country. It has also been reliably demonstrated that various levels of SES consistently yield outcomes from physical to psychological health, and unfortunately for those with low-SES, these findings predict undesirable outcomes across an array of areas (*Education &*

Socioeconomic Status, n.d.). Specific to education, it has been found that children from low-SES backgrounds can "develop academic skills slower than children from high SES groups" (Morgan, Farkas, Hillemeier, & Maczuga, 2009, p. 408), a phenomenon that has been cited to be influenced more by conditions of institutions of education than family environments (Aikens & Barbarin, 2008). Essentially, family intervention is not always a mitigating factor for the discrepancies in learning rates for children from lower-SES backgrounds because of the vast inequities in schooling conditions. In terms of the quality of schools, it is well known that lower-resourced schools are less likely to have well-qualified teachers (Clotfelter, Ladd, & Vigdor, 2006), which impacts student success based on research showing that the years of experience a teacher has and the quality of their training directly relates to student achievement levels in schools (Gimbert, Bol, & Wallace, 2007). Research also indicates a relationship between a low-SES during childhood and poor cognitive development, language, memory, and socioemotional processing, sometimes leading adults to face negative health consequences later in life because of the typically under-resourced communities they are living in (Aikens & Barbarin, 2008). Similarly, one study which randomly assigned students to classrooms of different calibers found that the students who were assigned to the higher quality classroom in grades K-3 "earned more, were more likely to attend college, saved more for retirement, and lived in better neighborhoods" (Chetty et al., 2011, p. 1599).

Socioeconomic status and access to education was relevant to this study because we found a significant positive correlation between a student's SES and the duration of their sex ed program ($r=0.18$, $p=0.05$), the abstinence-plus content they received ($r=0.26$, $p=0.01$), and the comprehensive content they received in high school ($r=0.21$, $p=0.04$). In other words, the higher a student's SES, the more likely they received a more comprehensive sexual health education

program. Again, money begets access which begets opportunities, particularly in education. These findings were also reiterated in some of the free responses in the survey, although they were not directly related to access to more comprehensive sex education program, but rather demonstrated how wealth can increase sexual freedoms in other, more indirect, ways. One participant mentioned that their parents would gift them money for birthdays "in the form of prepaid charge card(s) and they never bothered to ask what I ordered with it...so I was able to acquire all of the things one might need for safe solitary sexual practices such as proper lubricant". The same respondent also commented that about feelings of safety when their parents put a lock on their bedroom door, which allowed for privacy during high school. This participant said that they always "opt[ed] for single dorm rooms [as] those places are very safe." A single room in college provided them with an equivalent space to their individual room in high school. In a similar vein, another participant who rated their SES as 2/9 on the survey mentioned having their own room in college for the first time "helped me become more in turn with myself and explore more" in regard to solitary sexual practices. Access to money allowed for one participant to obtain more sexual latitude in the form of prepaid charge cards and their own private bedroom space in high school. Both participants talked of the greater freedom a single dorm in college allowed, especially for solitary sexual practices, but one had access to these spaces before entering college while the other did not. The qualitative responses of students in the survey demonstrate here SES may indirectly relate to sexual practices and sexual freedoms as money affords access to purchasable items like lubrication and to privacy and space.

The two primary findings of this study are that more abstinence-plus sex education content was positively correlated with higher frequencies of sexual practices in high school and that the socioeconomic status (SES) of an individual impacts the access to the sex education

program and. When contextualized, these results are unsurprising as sexual health education programs do not always perform their intended effect because decision making is a complex process that involves many factors beyond its curricula and as SES is likely to afford access to better educational opportunities.

Limitations

This study was primarily limited in terms of its design because it aimed to examine student perceptions of sexual health education programs they received in high school and asked college students to recall distinguishing features of their sexual practices and behaviors in high school and college in a survey format. The survey asked students to recall nuanced details of their sex education programs, particularly the content included within the program, which leaves a wide margin of misremembering specific content. Second, the sample size of the study was also relatively small for a survey (n=135) and would ideally need to be replicated on a larger scale to confirm and expand on our findings from this study. Another limitation was the survey format itself. Ideally given more time and resources, the survey would have been paired with in-depth qualitative interviews with participants to ascertain more detailed information about their sexual experiences. Participant interviews might shed light on other possible sources of sex education, which would have broaden the scope of the study. A final limitation of the study was how we operationalized safety in the survey. If replicated, this concept should be divided into one question about contraception use and other pregnancy, STI, HIV/AIDs prevention and reduction practices with another question about consent, physical, and psychological safety as a stand-alone concept.

Future Directions

Although much was learned from this study in terms of the motivating questions for conducting this research, new questions and directions emerged from this research. A major finding from this study is that sexual health education programs may not be a primary nor direct influence of sexual behavior change for high school or college students, depending on the type of the program. That is critical information to develop new questions about the differences between effective and ineffective programs, and the effectiveness over time. An example extension question might be what makes an effective sexual health education program? Or how has the efficacy of sexual health education programs been assessed globally? However, before we can determine the answer to these types of questions, we must come to a common understanding of what makes a sex education program effective or ineffective. Is it solely a reduction in teen pregnancy rates or an increase in contraception use? I would suggest that in order to design, create, and implement the most effective sex education program these cannot be the only outcomes that take priority. Much more research needs to be done about how and where we learn sexual attitudes and behaviors so that sexual health education programs, both inside and outside schools can most successfully address, challenge, and expand upon these concepts and increase sexual freedom for all its participants.

Other areas of investigation might explore if and how sex can exist without shame or how shame impacts sexual experiences. This concept of shame reoccurred in many of the particiapnts follow-up comments and would be an important area for further exploration. Additionally, examining the connection between masturbatory or solitary sexual practices and partnered sexual practices would be interesting as it could lead to new insights about how people interact sexually with themselves versus with partners.

Conclusions

This study sought to answer three primary research questions: How does the comprehensiveness of an individual's sex education program in high school influence their sexual behaviors in high school in terms of frequency, agency, pleasure, and safety? How does the comprehensiveness of an individual's sex education in high school influence their sexual behaviors in college in terms of frequency, agency, pleasure, and safety? And among those who took sexual health education, what is the relationship between curricular characteristics and the identity of the students? The answer to the first question was found to be that the more abstinence-plus sex education content provided, meaning the less comprehensive the program was, the higher the frequency of sexual practices in high school. We did not find a significant answer to the second question, and the answer to the third question showed a positive correlation between socioeconomic status and the comprehensiveness of the curricular characteristics, particularly duration and content. These results shed light on previously shadowed issues and can hopefully be used to inform sexual health education policy, design, and implementation in the future.

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Appendix A:

Survey Consent Script

High School and College Sexual Behaviors Survey

Thank you for choosing to participate in this senior psychology thesis about your sexual behaviors in high school and college.

The survey will not ask any individually-identifiable information and your responses will remain completely anonymous.

Answers will contribute to an analysis of how, if at all, sexual behaviors change over time and will be compiled into recommendations for Trinity College to determine areas where additional support and investment could be helpful for students.

While I hope you will complete the full survey, there are no questions you are required to answer, and due to the sensitive nature of the questions regarding sexual behaviors in high school and college, participants may experience some distress while taking the survey. Feel free to stop at any time if you are in discomfort or pain and know that there are a number of local resources at your disposal, including but not limited to:

- Trinity College Counseling Center (860- 297-2415)
- Trinity College Title IX Coordinator (860-297-2688)
- Statewide Sexual Violence Hotline (888-999-5545)
- Statewide Sexual Violence Spanish Hotline (888-568-8332)

The survey will take approximately 20 minutes to complete. Please leave enough time to finish the survey.

If you complete this survey and include your contact information at the end, you will be entered into a drawing for two $50 Amazon gift cards as a token of appreciation for your time.

If you have any questions, comments, or concerns, please email eleanorfaraguna@gmail.com or contact the Trinity College IRB administration at irb@trincoll.edu.

By clicking "I consent" below, you confirm that you agree with the terms above and are at least 18 years of age and a full-time undergraduate student at Trinity College, Hartford, CT, USA.

Appendix B:

High School and College Sexual Behaviors Survey

Do you consent to participate in this study?

- ○ Yes, I consent (1)
- ○ No, I do not consent (2)

End of Block: Informed consent

Start of Block: Demographics

What is your year in school?

- ○ Freshman/1st year (1)
- ○ Sophomore/2nd year (2)
- ○ Junior/3rd year (3)
- ○ Senior/4th year (4)
- ○ Senior +/5th year or more (6)
- ○ Graduate student or student in a professional school (5)

What is your age in years?

- ○ 18 (4)
- ○ 19 (5)
- ○ 20 (6)
- ○ 21 (7)
- ○ 22 (8)
- ○ 23 (9)
- ○ 24 (10)
- ○ Other, please indicate: (11) _____

Page Break

Which of these best describes your current gender identity? Hover over answer choices for a description of the terms. *Select all that apply.*

- ☐ Agender (20)
- ☐ Bigender (21)
- ☐ Cisgender male/man (22)
- ☐ Cisgender female/woman (23)
- ☐ Gender Nonconforming (24)
- ☐ Genderfluid (35)
- ☐ Genderqueer (25)
- ☐ Intersex/Intergender (26)
- ☐ Pangender (27)
- ☐ Transgender male/man (28)
- ☐ Transgender female/woman (29)
- ☐ Transgender (30)
- ☐ Two-Spirit (31)
- ☐ Something else fits better: (32) _____
- ☐ I am not sure of my gender identity (33)
- ☐ I prefer not to answer (34)

Page Break

Which of these best describes your current sexual orientation? Hover over answer choices for a description of the terms. *Select all that apply*

- ☐ Allosexual (47)
- ☐ Androsexual (48)
- ☐ Asexual (49)
- ☐ Aromantic (50)
- ☐ Autosexual (51)
- ☐ Bicurious (52)
- ☐ Bisexual (53)
- ☐ Cupiosexual (54)
- ☐ Demisexual (55)
- ☐ Fluid (56)
- ☐ Gay (57)
- ☐ Graysexual (58)
- ☐ Gynesexual (68)
- ☐ Heterosexual (59)
- ☐ Lesbian (61)
- ☐ Omnisexual (62)
- ☐ Pansexual (63)

- [ ] Pomosexual (64)
- [ ] Queer (69)
- [ ] Questioning (70)
- [ ] Sapiosexual (71)
- [ ] Skoliosexual (72)
- [ ] Something else fits better: (65) _____

- [ ] I am not sure of my sexual orientation (66)
- [ ] I prefer not to answer (67)

Page Break

Which of these best describes your racial and ethnic identity? For the purposes of this study, racial and ethnic identity could refer to identities you feel yourself or that you feel are applied to you by others. *Select all that apply*

- ☐ American Indian/Alaskan Native (1)
- ☐ Asian American (11)
- ☐ South Asian (14)
- ☐ East or Southeast Asian (15)
- ☐ Black (3)
- ☐ African American (12)
- ☐ African (16)
- ☐ Caucasian or White (4)
- ☐ Middle Eastern or North African (5)
- ☐ Native Hawaiian or Other Pacific Islander (6)
- ☐ Hispanic, Latino/a/x, or Spanish origin- enter specific ethnic background here if desired: (18) _____
- ☐ Something else fits better: (7) _____
- ☐ Bi- or Multiracial (10)
- ☐ I am not sure of my racial identity (8)
- ☐ I prefer not to answer (9)

Page Break

Think of this block tower as representing where people stand in the United States.

At the **top** of the blocks are the people who are the most well off - those who have the most money, the most education, and the most respected jobs. At the **bottom** are the people who are the least well off - who have the least money, least education, and the least respected jobs or no job. The higher up you are on this tower, the closer you are to the people at the top; the lower you are, the closer you are to the people at the bottom. **Where would you place yourself on this tower?**
Stack the blocks to the height where you think you stand at this time in your life, relative to other people in the United States.

1 (1)
2 (2)
3 (3)
4 (4)
5 (5)
6 (6)
7 (7)
8 (8)
9 (9)

Which of these best describes your current religious identity? *Select all that apply*.

- ☐ Protestant (1)
- ☐ Roman Catholic (2)
- ☐ Mormon (3)
- ☐ Greek Orthodox (4)
- ☐ Russian Orthodox (5)
- ☐ Jewish (6)
- ☐ Muslim (7)
- ☐ Buddhist (8)
- ☐ Hindu (9)
- ☐ Atheist (10)
- ☐ Agnostic (11)
- ☐ Nothing in particular (12)
- ☐ Something else fits better: (13) _____

- ☐ I am not sure my religious identity (14)
- ☐ I prefer not to answer (15)

How influential is your religious identity on your behaviors and/or decision making?

- ○ Very influential (1)
- ○ Influential (2)
- ○ Somewhat influential (3)
- ○ Not influential (4)

End of Block: Demographics

Start of Block: HS demographics

In what state did you attend high school?

▼ Alabama (1) ... Wyoming (50)

What type of high school did you attend?

- ○ Public (1)
- ○ Private (2)
- ○ Religious (3)
- ○ Charter (4)

What was the approximate graduating class size of your high school?

- ○ 0-50 (1)
- ○ 51-200 (2)
- ○ 201-500 (3)
- ○ More than 500 (4)

End of Block: HS demographics

Start of Block: Sex ed level

Did you receive sex education in high school?

- ○ Yes, I did. (1)
- ○ No, I did not receive any sex education because it was not provided in my high school. (2)
- ○ No, I did not receive any sex education because I did not participate. (3)
- ○ I am not sure. (4)

Page Break

How would you describe the overall comprehensiveness of the sex education curriculum at your high school?

- ○ Not comprehensive at all (1)
- ○ Less than comprehensive (2)
- ○ Somewhat comprehensive (3)
- ○ Comprehensive (4)
- ○ Very comprehensive (5)

In what grade(s) did you receive sex education in high school? *Select all that apply.*

- ☐ 9th (1)
- ☐ 10th (2)
- ☐ 11th (3)
- ☐ 12th (4)

In what types of courses did you receive sex education content? *Select all that apply.*

- ☐ Embedded within health education course (1)
- ☐ Embedded within biology course (2)
- ☐ Embedded within physical education course (3)
- ☐ As a specific stand-alone sex education course (4)
- ☐ Other, please specify: (5) _____

Page Break

To what extent were these topics covered in your school's sex education program:

	Not covered (1)	Briefly mentioned (2)	Covered, not stressed (3)	Emphasized (4)	Strongly emphasized (5)
Abortion (1)	○	○	○	○	○
Abstinence (2)	○	○	○	○	○
Anatomy (3)	○	○	○	○	○
Consent (4)	○	○	○	○	○
Contraception (5)	○	○	○	○	○
Disability and sex (6)	○	○	○	○	○
Gender identity and expression (7)	○	○	○	○	○
Intimate partner violence (8)	○	○	○	○	○
Love (9)	○	○	○	○	○
Mental and emotional health (10)	○	○	○	○	○
Negative consequences of sex (11)	○	○	○	○	○
Online safety (12)	○	○	○	○	○
Peer pressure (13)	○	○	○	○	○
Pleasure (14)	○	○	○	○	○

Queer sex (15)	○	○	○	○	○
Relationships (16)	○	○	○	○	○
Reproduction (17)	○	○	○	○	○
Reproductive inequities (18)	○	○	○	○	○
Sexual abuse (19)	○	○	○	○	○
Sexual assault and violence (20)	○	○	○	○	○
STIs, HIV and AIDS (21)	○	○	○	○	○

End of Block: Sex ed level

Start of Block: HS solitary practices

This next section will ask about sexual behaviors in high school and college and it is important to practice gentle self-care when confronting potentially painful topics. Remember, **you can stop the survey at any time.**

The most important thing is to take care of your needs at the moment if you are able to. If the content of the questions cause any distress, please know there are many resources available to you, including, but not limited to:

Trinity College Counseling Center (860- 297-2415
Trinity College Title IX Coordinator (860-297-2688)
Statewide Sexual Violence Hotline (888-999-5545)
Statewide Sexual Violence Spanish Hotline (888-568-8332)

Page Break

The following questions apply to any solitary sexual practices (e.g., masturbation, pornography/other erotic use) you engaged in during high school.

How often did you engage in **solitary sexual practices** throughout **high school**?

- ○ Very frequently (1)
- ○ Frequently (2)
- ○ Somewhat frequently (3)
- ○ Not frequently (4)
- ○ Never (5)

I was in control of my **solitary sexual practices** in **high school.**

- ○ Always (1)
- ○ Almost always (2)
- ○ Some of the time (3)
- ○ Almost never (4)
- ○ Never (5)

I experienced pleasure during my **solitary sexual practices** in **high school.**

- Always (1)
- Almost always (2)
- Some of the time (3)
- Almost never (4)
- Never (5)

I practiced safety in my **solitary sexual practices** (e.g., internet safety when accessing pornography, cleaning and disinfecting sex toys) in **high school.**

- Always (1)
- Almost always (2)
- Some of the time (3)
- Almost never (4)
- Never (5)

If you feel comfortable, please describe in more detail your feelings of being in control, feelings of pleasure, and feelings of safety in your **solitary sexual practices** in **high school.**

_____

End of Block: HS solitary practices

Start of Block: HS non-penetrative practices

The following questions apply to any **non-penetrative partnered sexual practices** including kissing, cuddling, touching of body parts, or other intimate physical contact **not including penetration or oral sex** you engaged in **during high school.**

How often did you engage in these **non-penetrative partnered sexual practiced** throughout **high school**?

- ○ Very frequently (1)
- ○ Frequently (2)
- ○ Somewhat frequently (3)
- ○ Not frequently (4)
- ○ Never (5)

I was in control of these non-penetrative **partnered sexual practices** in **high school.**

- ○ Always (1)
- ○ Almost always (2)
- ○ Some of the time (3)
- ○ Almost never (4)
- ○ Never (5)

I experienced pleasure during these non-penetrative **partnered sexual practices** in **high school.**

- Always (1)
- Almost always (2)
- Some of the time (3)
- Almost never (4)
- Never (5)

I practiced safety during these non-penetrative **partnered sexual practices** (e.g., communication, positive consent practices, inclusivity of any physical, mental, and/or emotional disabilities) in **high school.**

- Always (1)
- Almost always (2)
- Some of the time (3)
- Almost never (4)
- Never (5)

If you feel comfortable, please describe in more detail your feelings of being in control, feelings of pleasure, and feelings of safety in these non-penetrative **partnered sexual practices** in **high school.**

_____

End of Block: HS non-penetrative practices

Start of Block: HS penetrative practices

The following questions apply to any **penetrative sexual practices** including oral sex, digital penetration of vulva or of anus, vaginal penetration with penis or sex toy, or anal penetration with penis or sex toy you engaged in **during high school.**

How often did you engage in **penetrative sexual practice**s throughout **high school.**

- ○ Very frequently (1)
- ○ Frequently (2)
- ○ Somewhat frequently (3)
- ○ Not frequently (4)
- ○ Never (5)

I was in control of my **penetrative sexual practices** in **high school**.

- ○ Always (1)
- ○ Almost always (2)
- ○ Some of the time (3)
- ○ Almost never (4)
- ○ Never (5)

I experienced pleasure during **penetrative sexual practices** in **high school**.

- Always (1)
- Almost always (2)
- Some of the time (3)
- Almost never (4)
- Never (5)

I practiced safety during my **penetrative sexual practices** (e.g., use of birth control, use of contraceptives, use of safe lubricants, regular STI and/or pregnancy testing if application, communication, positive consent practices, inclusivity of any physical, mental, and/or emotional disabilities) **in high school**.

- Always (1)
- Almost always (2)
- Some of the time (3)
- Almost never (4)
- Never (5)

My partner(s) practiced safety during my **penetrative sexual practices** (e.g., use of birth control, use of contraceptives, use of safe lubricants, regular STI and/or pregnancy testing if application, communication, positive consent practices, inclusivity of any physical, mental, and/or emotional disabilities) **in high school.**

- ○ Always (1)
- ○ Almost always (2)
- ○ Some of the time (3)
- ○ Almost never (4)
- ○ Never (5)

If you feel comfortable, please describe in more detail your feelings of being in control, feelings of pleasure, and feelings of safety in **penetrative sexual practices** in **high school.**

_____

End of Block: HS penetrative practices

Start of Block: College solitary practices

The following questions apply to any **solitary sexual practices** (e.g., masturbation, pornography/other erotic use) you engaged in **during college.**

How often have you engaged in **solitary sexual practices** throughout **college**?

- ○ Very frequently (1)
- ○ Frequently (2)
- ○ Somewhat frequently (3)
- ○ Not frequently (4)
- ○ Never (5)

I have been in control of my **solitary sexual practices** in **college**.

- Always (1)
- Almost always (2)
- Some of time (3)
- Almost never (4)
- Never (5)

I have experienced pleasure during my **solitary sexual practices** in **college**.

- Always (1)
- Almost always (2)
- Some of time (3)
- Almost never (4)
- Never (5)

I have practiced safety in my **solitary sexual behaviors** (e.g., internet safety when accessing pornography, cleaning/disinfecting sex toys) in **college**.

- Always (1)
- Almost always (2)
- Some of time (3)
- Almost never (4)
- Never (5)

If you feel comfortable, please describe in more detail your feelings of being in control, feelings of pleasure, and feelings of safety in your **solitary sexual practices** in **college**.

_____

End of Block: College solitary practices

Start of Block: College non-penetrative practices

The following questions apply to any **non-penetrative partnered sexual practices** including kissing, cuddling, touching of body parts, or other intimate physical contact **not including penetration or oral sex** you engaged in **during college.**

C_NPP frequency How often have you engaged in these **non-penetrative partnered sexual practices** throughout **college**?

- Very frequently (1)
- Frequently (2)
- Somewhat frequently (3)
- Not frequently (4)
- Never (5)

I have been in control of these **non-penetrative partnered sexual practices** in **college**.

- Always (1)
- Almost always (2)
- Some of the time (3)
- Almost never (4)
- Never (5)

I have experienced pleasure during these **non-penetrative partnered sexual practices** in **college**.

- ○ Always (1)
- ○ Almost always (2)
- ○ Some of the time (3)
- ○ Almost never (4)
- ○ Never (5)

I have practiced safety in these **non-penetrative partnered sexual practices** (e.g., communication, positive consent practices, inclusivity of any physical, mental and/or emotional disabilities) in **college**.

- ○ Always (1)
- ○ Almost always (2)
- ○ Some of the time (3)
- ○ Almost never (4)
- ○ Never (5)

If you feel comfortable, please describe in more detail your feelings of being in control, feelings of pleasure, and feelings of safety in these **non-penetrative partnered sexual practices** in **college**.

_____

End of Block: College non-penetrative practices

Start of Block: College penetrative practices

The following questions apply to any **penetrative sexual practices** including oral sex, digital penetration of vulva or of anus, vaginal penetration with penis or sex toy, or anal penetration with penis or sex toy you engaged in **during college.**

How often have you engaged in **penetrative sexual practices** throughout **college**?

- ○ Very frequently (1)
- ○ Frequently (2)
- ○ Somewhat frequently (3)
- ○ Not frequently (4)
- ○ Never (5)

I have been in control of my **penetrative sexual practices** in **college**.

- ○ Always (1)
- ○ Almost always (2)
- ○ Some of the time (3)
- ○ Almost never (4)
- ○ Never (5)

I have experienced pleasure during of my **penetrative sexual practices** in **college**.

- Always (1)
- Almost always (2)
- Some of the time (3)
- Almost never (4)
- Never (5)

I have practiced safety in **penetrative sexual practices** (e.g., use of birth control, use of contraceptives, use of safe lubricants, regular STI and/or pregnancy testing if applicable, communication, positive consent practices, inclusivity of any physical, mental, and/or emotional disabilities) in **college**.

- Always (1)
- Almost always (2)
- Some of the time (3)
- Almost never (4)
- Never (5)

My partner(s) have practiced safety in **penetrative sexual practices** (e.g., use of birth control, use of contraceptives, use of safe lubricants, regular STI and/or pregnancy testing if applicable, communication, positive consent practices, inclusivity of any physical, mental, and/or emotional disabilities) in **college**.

- ○ Always (1)
- ○ Almost always (2)
- ○ Some of the time (3)
- ○ Almost never (4)
- ○ Never (5)

If you feel comfortable, please describe in more detail your feelings of being in control, feelings of pleasure, and feelings of safety in these penetrative sexual practices during college.

_____

End of Block: College penetrative practices

Start of Block: Reflection

Thank you for your participation in the survey!
If there is anything else you would like to reflect on after completing the survey, please do so in the space below.