EXAMINING THE EFFECTS OF SEX EDUCATION ON YOUNG ADULTS' SEXUAL BEHAVIORS AND HEALTH

by

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DEDICATION

I dedicate this work to Debbie and Allan Cook, the most resilient people I know. Their unconditional love and unwavering support are the root of my success. Together, they impart the two most important qualities in life: empathy and compassion. Thank you for everything.

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ABSTRACT

This study examines the impact of sex education on sexual health and sexual behaviors in young adults. Using data from the Guttmacher Institute's *National Survey of Reproductive and Contraceptive Knowledge*, this research investigates whether education impacts their uses of contraception, visits to the doctor for sexual health, number of sexual partners in a year, and age of first intercourse. Sex education is a topic of sociological interest as it has long been believed that with adequate knowledge on sexuality, sexual health, and resources to contraceptives, teenagers are less likely to engage in risky behaviors. Because this study relates to a public health issue, where contraceptive methods and healthy relationships are emphasized, the findings can contribute to sex education research. Support for positive sexuality education has become favorable to many scholars in the field. The current discussions on sex education in the U.S. are polarized, which makes it important to research the effectiveness of these programs and understand the topics that are included in the curricula. Results show that those who have received a sex education course are not any more likely to have an earlier age of first intercourse nor have a higher number of sexual partners than those who have not received sex education. There is a statistical significance between these groups in that those who have received a sex education course are more likely to make a doctor visit for sexual health related reasons and are more likely to use contraception as compared to those who have not received a sex education course.

I. INTRODUCTION

Socialization is a major area of sociology. Sociologists have studied what they refer to as the hidden curriculum in education. The hidden curriculum includes assumptions, norms, and values that are not explicit but are influential in young people's lives. The hidden curriculum can manifest into gender and sexual socialization, as these types of socialization occur in sex education classes in schools (Connell and Elliott 2009; Fields 2008). As noted by feminist scholars Connell and Messerschmidt (2005), gender is based on sex but is not anatomical, as it is psychological, social, and learned. Gender and sexual socialization occurs throughout the life course, as agents of socialization - such as family, school, peers, religious institutions - reinforce what is expected of boys and girls. Ideals of femininity and masculinity are developed and reinforced through various facets of a young person's life, which ultimately differentiates groups of people, and socializes those to fulfill traditional gender roles (Kane 2006). Sex education in schools serves as an agent of gender and sexual socialization, and can reinforce dominant cultural beliefs about sex and gender.

This research examines the relationship between receiving a sex education course as a teenager and the sexual behaviors and health practices as a young adult. Specifically, I examine the impact a sex education course has on the age of first intercourse, the number of sexual partners in the past year, likeliness to visit the doctor for sexual health related reasons, and likeliness to use method of contraception. It is crucial to examine the factors that foster long-term health practices amongst young people because studies indicate that educational programs, topics that are covered in the classroom, and available resources, can contribute to promoting sexual wellness among adolescents.

Analyzing the type of education and information young people receive is needed to understand how these curricula impact them and to identify what topics promote healthy sexuality and encourage healthy behaviors. In addition, the effectiveness of the information and programs deserve to be analyzed. Data from the 2009 *National Survey of Reproductive and Contraceptive Knowledge* are utilized to explore whether receiving sex education as a teenager impacts life behaviors and preventative care as a young adult. I analyzed the effects of education on behaviors regarding health. Due to the scope of the survey, this research project focused on whether a sex education class was offered and the topics covered in this class.

Researchers have identified three main types of sex education in the U.S.: abstinence-only, abstinence-based, and comprehensive sex education (Fields 2008; Irvine 2002). A fourth type of sex education, often referred to as *sex positive* education, is rarely taught in the U.S. and is more common in European and Nordic countries (Ferguson et al. 2008; Schalet 2000). There are several studies that find some states emphasize abstinence-only education and omit the option for a comprehensive approach to sex education (Weiser and Miller 2010; Wilson et al. 2008). Abstinence-only and abstinence-based approaches focus on the importance of delaying sexual activity until marriage, however, abstinence-based education includes information about contraception. Abstinence-only and abstinence-based education curricula and materials have been examined by many scholars and criticized for its ineffectiveness at increasing healthy behaviors, examples of which can be seen in the states' high teenage pregnancy rates, STIs/HIV rates, and abortion rates (Kirby 2007; Wiley and Wilson 2009). In addition, abstinence-only curricula teach through a heteronormative perspective and excludes

experiences of LGBTQ individuals (Haggis and Mulholland 2014; Payne and Smith 2011). Thus, same-sex behaviors are stigmatized and LGBTQ issues are overlooked. Many scholars (Elliott 2012; Fields 2012) are advocating for implementing inclusive materials that offer many models of self-expression and relationships that move beyond this narrow approach as young people deserve to have medically and scientifically accurate information to make fully informed decisions about their selves, their bodies, and their relationships.

This thesis analyzes whether receiving sex education, and the inclusion of specific topics of sex education, influence behaviors relating to sexual health. The findings shed light on how sex education impacts young adults' lives. This study does not go in depth on teenage or unplanned pregnancy rates, STI/HIV rates, and their public health implications. Instead, it focuses on the relationship between young people's educational background and their current behaviors. This study does not analyze the other possibilities that can influence behaviors (e.g., gender, class, and political affiliation). Based on current literature and the findings of these chi-square analyses, I argue that comprehensive forms of sex education are needed to promote sexual health and wellness.

When information about relationships, bodies, and sex are not learned in school, adolescents will find different – and typically, inaccurate – sources to answer their questions (e.g. the internet, or peers). Informative, accurate, and positive sex education contributes to lower rates of unwanted teenage pregnancy, and lower rates of sexually transmitted infections (STIs), sexual assault, and abortion (Elliott 2012; Fields 2008; Pascoe 2011; Schalet 2011). Ultimately, it contributes to young adults' agency, health, and preventative care.

II. LITERATURE REVIEW AND THEORETICAL FRAMEWORKS

The primary emphases of this study are sexual behaviors and health. Because education is one of the key factors to impact these behaviors, this literature review explores the types of education available. I begin with an overview of the three main types of American sex education approaches, their effectiveness, and the discussions around these curricula. I then discuss studies about inclusive curricula, the effectiveness of these programs, and cross-cultural analyses of sex education approaches. Finally, I discuss the theoretical frameworks utilized in this thesis.

Sex Education Curricula and Discourses

There are three main approaches to sex education in the United States; abstinence-only, abstinence-based, and comprehensive sex education. Regarding sexuality education in the United States, the most common approaches are abstinence-only (ABO) education and abstinence-based (Abstinence-Plus). These approaches emphasize the negative consequences of sexual expression outside of marriage. Abstinence-Plus includes information about contraception but in the context of abstinence messages (Alford 2001). However, the conversations and information about contraception focus on failure rates, which can send a message that these preventative measures are not worth taking (Fields 2008). Although there is a slight difference between ABO and Abstinence-Plus, these programs are often indistinguishable and the actual curriculum varies dramatically around the U.S.

ABO education and Abstinence-Only-Until-Marriage (AOUM) programs teach that abstaining from sex is the only acceptable behavior and any sexual expression

outside of marriage will have harmful consequences. Wiley and Wilson's (2009) research demonstrate that many abstinence-based programs include information about contraception and provides a demonstration on how to correctly wear a condom. However, in many cases the information on condoms and other contraception only discuss failure rates, and often these failure rates are exaggerated (Wiley and Wilson 2009). Despite the inclusion of contraception in these programs, there is still an overall abstinent theme and tone. These curricula teach only one set of values as morally correct for all students and promotes specific religious values (Alford 2001). The messages are also presented from a heteronormative approach and does not include conversations of LGBTQ individuals (Elia and Eliason 2010a; Wiley and Wilson 2009).

In contrast, comprehensive sexuality education (CSE) includes information on condoms and other contraceptives. In the schools that utilize a comprehensive approach, topics cover the reliability of contraceptives, healthy behaviors, and lifestyles. (Fields 2008; Herrman et al. 2013; Lesko 2010). According to Alford (2001), CSE provides medically accurate and scientifically backed information about sexuality, including orientation and identity, preventative behaviors for STIs, HIV, and unplanned pregnancy. This curriculum is praised for its approach to offer students the opportunity to learn about a myriad of topics about gender and sexuality, while granting them the ability to explore and define their individual values (Alford 2001). The Sexuality Information and Education Council of the United States (2009) identifies CSE as including a broad set of sexuality topics, such as human development, relationships, decision making, abstinence, contraception, and disease prevention; students are given the skills to make responsible decisions about their sexuality.

Most public schools in the U.S. have initiated AOUM curriculum. In their analysis of curricula in Texas, Wiley and Wilson (2009) found that these programs have gendered and sexual biases. For example, the information represents males as having a naturally high libido and may tend to use love to get sex; females are presented as having low libido and may tend to use sex to get love (Wiley and Wilson 2009). These messages create a sexual double standard and differentiates between male and females desires and pleasures. In the content analysis of the curricula, Wiley and Wilson (2009) claim abstinence-only curricula withhold vital information that is needed for students to protect themselves and others to stay healthy. They found many programs with scientifically inaccurate claims, including exaggerated statistics about failure rates of various contraception and discouraged condom usage, which can create a perception that there are no actual solutions from protection of STIs, HIV/AIDS, and other sexually related consequences.

Schalet and colleagues (2014) argue that AOUM programs are created with social conservative moral and religious beliefs in the background of the curricula. Common themes found in abstinence-only materials and programs are shame and fear-based strategies to scare young people from becoming sexually active or explorative (Kirby 2007). Abstinence-only education gives a heteronormative understanding of sexuality and gender, which dichotomizes complex concepts into two simplistic groups (McNeil 2013). Numerous studies find that abstinence-only approaches to sexuality are not effective in reducing risky behaviors, teenage pregnancy, or STIs. Zanis (2005) found that teenagers who complete these programs continue to be at risk of pregnancy and STIs. Due to the limitations of ABO and AOUM, there are missed opportunities to teach young people

about sexuality in a positive light, where it is normal to have sexual desires and to pursue relationships (Wilson et al. 2008).

Other scholars have found that these programs and curricula create and perpetuate race, class, gender, and sexuality inequalities (Connell and Elliott 2009; Elliott 2014; Fields 2008). Materials highlight the lives of white, straight, middle-class individuals who are in committed relationships and all other models and individuals are stigmatized, marginalized, or misrepresented. Jessica Fields' (2008) comparison of three schools in North Carolina discovered that the education models themselves were often embedded in sexist, racist, classist and homophobic assumptions. The underlying discourse is that some groups of students are "good" or "pure" while others are "bad" and "impure" (Fields 2008). These programs create normal and deviant categories where the abnormal behaviors are casted into the problematic category. The content of abstinence-only education sets up a framework that stigmatizes those who do not subscribe to heterosexual identities, traditional gender roles or expressions. The messages create an underlying homophobic discourse, which labels people who are not heterosexual or gender non-binary as deviant.

Sociologists who study sex education are proponents to approaches that will destigmatize people and the behaviors that fall outside gendered and sexualized norms, as long as relationships are informed by consent (Elliott 2012; Fields 2008; Schalet 2011). Most of these scholars discuss what they refer to as positive sex education or positive views to sexuality. A positive view of sexuality acknowledges that people are sexual beings and that sexual desire is a normal part of people's lives. With adequate knowledge, sex can be pleasurable and fulfilling, and of course, consensual. A place to

begin understanding what information students are receiving in sex education is to analyze the materials and books provided by schools. In a content analysis of abstinence-only and comprehensive sex education curricula, Lamb and colleagues (2013) found that discourses around pleasure and desire were often linked to danger or risk. Pleasure was depicted positively only when it was in the context of marital sex and long-term relationships. Conversations of desire and pleasure are rarely described as healthy or even acceptable feelings. Even when the information is included it is limited.

The underlying message, or what sociologists refer to as the hidden curriculum, is that only adults who are in heterosexual unions experience healthy sexuality (Fields 2008). In all approaches, especially in abstinence-only, the information about sexuality and relationships are presented from an *adultist* point of view, where a young person's feelings and desires are minimized or discredited. In this context, young people are positioned as reckless, easily pressured, or unwise to consequences rather than as regular people who seek relationships and the pleasure within them (Lamb et al. 2013). Moreover, in a program evaluation of abstinence-only education, Gresle-Favier (2010) found that these programs reinforce these *adultist* messages by displaying teenage sexuality as inherently irresponsible, destructive, and in need of adult regulation. These messages undermine or discredit their experiences of desire or pleasure.

Until recently, comprehensive sex education did not receive any forms of federal funding. Currently, three main sources fund the abstinence-only programs and educational materials: The Adolescent Family Life Act (AFLA), Title V of the Social Security Act (Title V), and Community Based Abstinence Education (CBAE) (Elliott 2012). These sources fund hundreds of programs annually and are currently targeted at

12-29-year-olds (Weiser and Miller 2010). Weiser and Miller (2010) note that former President Obama shifted most funding for abstinence-only education into comprehensive education. His policy funded programs that emphasized the importance of abstinence while also providing medically, scientifically accurate and age-appropriate information to students. Under former President George W. Bush, the federal government spent over one billion dollars on abstinence-only education. In the 2010 healthcare reform bill, only $250 million had been allocated to fund abstinence-only education over five years; the bill also assigned an additional $75 million for the funding of comprehensive education programs and another $25 million to fund new and innovative sex education programs (Weiser and Miller 2010).

Implementing Inclusive Curricula

Inclusive approaches to sexuality education foster positive sexual behaviors and health practices among students. They are correlated with lower rates of teenage pregnancy, birth, abortion, and STIs (Schalet et al. 2014). Sexual health involves more than sexual behavior. The United Nations Population Fund (2014) identifies inclusive sex education as an international practice, which teaches about the complexities of sexuality that includes the cognitive, emotional, social, interactive, and physical aspects. The World Health Organization (2002) explains that sexual health is fostered from a positive, respectful approach to sexuality and relationships, where individuals are allowed the possibility of having pleasurable and safe experiences that are free of coercion, discrimination, and violence; for this to be achieved, the sexual rights of all people must be respected, protected, and fulfilled. Research has found that sex education can empower young adults to build stronger and more meaningful relationships by increasing

their confidence and strengthening their self-efficacy skills. This approach encompasses the idea that positive sexual health requires many levels of support and knowledge, which is why this education should be started in early childhood (WHO 2002). There is consensus in the literature that education is a crucial factor in promoting health and wellbeing as it provides understandings and skillsets to enable students to make informed, responsible decisions (Kirby 2007; Schalet et al. 2014). Kirby (2007) found the most effective programs teach students how to reduce their sexual risks, address social pressures, reinforce individual values, and teach adolescents confidence in their skills to engage in responsible sex.

Many scholars such as Schalet (2011) and Elia and Eliason (2010a) advocate for more inclusive curricula that take an integrated approach toward adolescent sexuality. In inclusive sex education curricula, all students are educated on the dynamics of gender and sexuality. Sex-positive education dismantles the gender and sexuality dichotomy while it acknowledges that sexual desires, fantasies, and behaviors exist on a spectrum. The sex-gender dichotomy places sexuality and gender behaviors into two narrow categories, which limits the understandings of these complex social constructs. Dismantling these concepts allow room for the fluidity of self-expression by teaching gender and sexuality as ever evolving identities that can change over the life course. Having these conversations in the classroom can promote sexual agency and subjectivity within young people and ultimately empower them to take control of their bodies while respecting others (Fields 2012). With this approach, young people's desires are recognized as part of human nature and their feelings are validated; they are given control over their bodies and their decisions.

Existing literature explores how and why vital conversations about healthy sexuality are not being discussed at most American schools or in most American families, in contrast to some other countries (Elliott 2012; Fields 2008). Essentially, many people are growing up lacking knowledge about the various aspects of sexual health, sexuality, and gender. To have a society that is open and accepting of various lifestyles, there must be a focus on the education and socialization people experience. According to Herrman et al. (2013), curricula and programs need to have input from the community, where health professionals, parents, educators, and students assist in implementing decisions on timing, consent, and other specific details of the program. School districts also need to utilize current scientific research, instead of focusing on sexual behaviors as moral or immoral. These strategies can ensure students receive the most accurate information that is decided by a community that also includes a range of diverse thoughts, behaviors, and lifestyles.

Researchers and educators advocate for inclusivity in sex education curricula to divert from narrow approaches to gender and sexuality (Haggis and Mulholland 2014; Pingel et al. 2013; Preston 2013). A narrow approach to gender and sexuality means there is limited information and no conversations of these dynamic concepts. An example of a narrow approach to sexuality, can be seen in the widely held assumption that teenage sexuality is inherently a dangerous and risky subject (Fields 2012). Social inequalities are created and maintained in school and impact young people's access to information and resources (Fields 2008; Pascoe 2011). Thus, sex educators and policy makers need to aim for developing a curriculum that is open and accepting of all people. It is imperative to offer young people the many models of expressing sexuality and gender identity to

reduce stigmas and to normalize different behaviors. An inclusive model can promote the acceptance of sexual minorities among young people, increase their knowledge, and encourage sexual agency (Pingel et al. 2013). Inclusive curricula include age-appropriate information where gender and sexuality are not presented as a binary but more of a fluid concept that can change. Scholars argue that young people should be exposed to diverse narratives and experiences to challenge taken-for-granted assumptions and stereotypes; they need to know that gender and sexuality are not easily labeled concepts and not always consistent (Elia and Eliason 2010b). This progressive approach can alleviate some of the pressures that are placed on young people to act and think a certain way. In addition, this approach contributes to lower rates of unwanted pregnancy, lower rates of STIs, and lower rates of sexual assault (Schalet 2011).

Sex-positive and inclusive models of sex education are practiced in many European and Nordic countries, where there are exceptionally low teenage pregnancy and STI rates (Schalet 2010). The Netherlands implements a sex-positive curriculum in schools. In a study that compared adolescent sexuality in the U.S. and the Netherlands, Schalet (2000) found that the culture in the Netherlands views sex as part of everyday life as they approach teen relationships and intimacy; ultimately, they are more successful in promoting coherent sex education messages. In contrast to abstinence-based approaches, a sex positive academic culture encourages students to critically think about theirs and others sexual health, including fantasies and desires. It provides scientific information on safe and unsafe sex, various types of contraceptives and how to use them, where to access them, and how to discuss contraceptive use with a partner (Ferguson et al. 2008). This curriculum includes material on personal responsibility, full consent, healthy

relationships, LGBTQ inclusion, and pleasure. Sexuality is a topic that is normalized at school and in the household, which fosters open conversations between adults and young people. Thus, young people are encouraged to ask questions without feeling shame or embarrassment. In the countries that incorporate sex-positive curricula, sex is typically treated as a public health concern and a community issue, where there is complete access to condoms, contraceptives, wellness exams, and STI testing (Schalet 2000; 2010). Schalet argues that Americans could benefit from adopting a positive approach to sex education because it treats sex as a health concern and normalizes the conversations around the topic.

Theoretical Frameworks

The issues surrounding sex education curricula and policy in the United States can best be understood through critical feminist and queer theories (Connell and Messerschmidt 2005; Pascoe 2011). Critical feminist theory analyzes the power inequalities between men and women and how gender disparities are maintained through a patriarchal context. There is cultural value placed on hegemonic masculinity and emphasized femininity, where individuals are held accountable to gender expectations. Hegemonic masculinity is a form of masculinity that legitimizes male privilege, and race, class, and sexual orientation-based privileges (Kane 2006). Connell and Messerschmidt (2005) identify hegemonic masculinity behaviors as being dominant, in control, strong, and emotionally limited, while emphasized femininity stresses the behaviors of women to be compliant, nice, weak, and emotional. These gender and sexuality dichotomies encourage hypersexualized beliefs about men's sexuality while simultaneously oppresses women's sexual desire (Tolman 2009).

Through a critical feminist lens, abstinence-only curriculum promotes a heteronormative model that assumes all people are heterosexual and cisgender, which creates a false construct of normal sexuality that is embedded in gender and sexuality biases. Young people who do not subscribe to traditional gender expressions or sexual identities are excluded. Additionally, people who embody uncertainty, confusion, negativity, ambivalence, or mistakes tend to be excluded from current forms of sex education in the U.S.; these approaches work to regulate the sexuality of young people (Lesko 2010). In the context of a patriarchal society, cultural ideals and expectations of masculinity and femininity influence school curricula and materials, which can be a tool used for socializing the new generations into a stratified system. The hegemonic masculinity values only exist in opposition of emphasized femininity and are reinforced by the everyday gendered interactions between women and men (Connell and Messerschmidt 2005). These social systems maintain inequalities and society's hierarchal structure. Critical feminist theory can explain what the messages in the curricula mean, the function of inclusion of this information, and how these messages influence behavior.

Social stratification is another appropriate way to understand how sex education curricula and programs perpetuate inequalities (Fields 2008). Social stratification refers to a system where all people are ranked into society's hierarchal categories, where some groups have greater status, power, and wealth than other groups (Parsons 1940). From a micro level, sex education curricula reinforce these inequalities and standards of gender and sexuality norms. Different agents of socialization such as parents, educators, religious institutions, the education and health care systems, the media, and peers shape our cultural ideas and beliefs (Connell and Elliott 2009).

Queer theory explains how sexuality is a primary mechanism through which inequality is created and power inequalities are maintained through a patriarchal system (Connell and Elliott 2009). According to queer theorists, there is a sexual double standard that implies men and women have different needs and desires, which ultimately constructs gendered beliefs about men and women's sexuality. Queer theory focuses on the performance of gender and sexuality. Valocchi (2005) states that these categories create inequalities as they exert power over people, especially those who do not fit the normative models. Young people are often socialized through schools, peers, and parents, into oppressive understandings about identify and orientation; these ideologies permeate other aspects of their lives and solidifies the systems of race, class, gender, and sexual privilege (Valocchi 2005).

Further, gender scripts and stereotypes are cultural tools for policing gendered behavior (McGuffey and Rich 1999). Sex education materials and programs create and perpetuate these gender scripts and stereotypes. Cultural gendered scripts are reinforced by everyday life interactions and the education of men and women (Connell and Messerschmidt 2005). Queer theory deconstructs the heteronormative scripts of everyday life, as well as challenges oppressive social structures (McCann 2016). For example, in a study of interactions between young children on the playground, McGuffey and Rich (1999) developed the gender transgression zone concept that explains how children monitor each other and how they patrol each other through different ways of social control. They found that most of the boys support hegemonic masculinity because it gives power over the other sex, and it also gives them an opportunity to acquire power over

members of their own sex. Critical feminist theory and queer theory can help deconstruct these socialization phenomena.

Gap in the Literature

Sex education is a robust area of study in sociology. However, we know relatively little about the relationships between sex education and the topics covered, with specific sexual behaviors and health practices. This thesis addresses this gap in the literature by analyzing data from the Guttmacher Institute. The findings of this research provide insight on how receiving sex education as teenagers influences behaviors and health practices as young adults. The group with a background in sex education are also compared to those who had never received a course.

Overall, feminist and queer theories and their respective literature demonstrate that specific types of sex education, such as abstinence-focused education, create many social inequalities with the provided heteronormative scripts. The hidden curriculum excludes many people and leaves them misinformed, which ultimately limits their access to education. There are many elements of these theories that are particularly relevant to my analysis of the impact sex education has on young person's life. To test the relationship between sex education and behaviors and health, the present study will include bivariate analyses with variables operationalized to represent sexual behaviors and sexual health practices. In order to understand why these concepts impact a person's sexual behavior and health, these tests are guided by the critical feminist and queer theories and literature outlined in this section.

III. DATA AND METHODOLOGY

Does receiving a sex education course impact the age one engages in their first intercourse, the number of sexual partners one has in a year, or the likeliness of contraceptive use or seeing a doctor for sexual health? Do the topics covered in the class impact contraceptive use, number of sexual partners, age of first intercourse, or seeing a doctor? To answer these research questions, I conducted a quantitative study of the differences in sexual behaviors and health experiences of young adults who have received a sex education course as a teenager versus those who have not received a sex education course. In addition, the study analyzes the various topics that were covered in the sex education course and their relationships to sexual behaviors and health. With these questions guiding the research, and the consideration of the gap in the literature, the following hypotheses were developed.

Hypotheses

H1: Receiving sex education impacts young adults' age of first intercourse.

H2: The topics covered in sex education impact young adults' age of first intercourse.

H3: Receiving sex education impacts young adults' number of partners.

H4: The topics covered in sex education impact young adults' number of partners.

H5: Receiving sex education impacts young adults' visits to the doctor.

H6: The topics covered in sex education impact young adults' visits to the doctor.

H7: Receiving sex education impacts young adults' contraception use.

H8: The topics covered in sex education impact young adults' contraception use.

Data

The present study utilizes data from The National Survey of Reproductive and Contraceptive Knowledge, which was funded by The National Campaign to Prevent Teen and Unplanned Pregnancy and conducted by the Guttmacher Institute in 2009. The survey is based on a probability sample and conducted by telephone and yielded 1,800 respondents. Of this sample, the thesis focused on those who had received sex education after the age of twelve, which resulted in a new sample size of 1,641 respondents. The sample for this study is nationally representative of unmarried 18-29-year-olds (Kaye et al. 2009). Over 100,000 telephone numbers were dialed to produce the 1,800 interviews, which results in a response rate of approximately 20% (Kaye et al. 2009). Of the 80% that were contacted to participate in the study and did not, their knowledge and experiences were not captured. In addition, same-sex relationships were not measured as they were outside the scope of the survey. The survey asks several questions about sex education, sexual behaviors, and sexual health. It asks respondents for information on knowledge of and uses with different types of birth control and contraceptive methods, where they receive information pertaining to sexual health, and sexual relationships and pregnancy experiences (see Kaye et al. 2009). The survey questions I am utilizing focused on areas such as when they last had sex education and what was covered, their understanding about fertility and pregnancy, and their knowledge of contraception.

Independent Variables

The first independent variable in this analysis is dichotomous and measures the respondents' education as it looks at whether they had received a sex education course

after the age of twelve. The other five independent variables in this analysis measure the topics that were covered in the sex education course.

Sex education. The first independent variable in this study is *sex education*, which indicates whether a respondent has received a sex education class after the age of 12. This variable was measured with the question, "Have you ever had a class on sex education course?", is labeled as *SexEd*, and measured dichotomously with a Yes/No response.

Focus of sex education. The independent variables, *focus of sex education*, indicate the topics that were covered in the sex education course. These five variables were asked with the question, "Which of the following topics were covered in the sex education classes you attended?" and had a Yes/No response. The five follow-up questions include: (a) The importance of using birth control if you have sex (Q5a); (b) A demonstration on how to use a condom (Q5b); (c) How to say 'no' to sex (Q5c); (d) The importance of waiting until marriage to have sex (Q5d); and (e) The availability of different types of birth control methods (Q5e). This category is labeled *SexEd Topics Covered* and all are dichotomously measured.

Dependent Variables

The dependent variables in this analysis measure different aspects relating to sexual behavior and health, including number of sexual partners, age of first encounter, contraception use, and doctor visit for sexual health.

Age of first intercourse. This dependent variable is Question 36, and is phrased as, "How old were you the first time you ever had sex?", and is labeled as *AgeofFirstSex*. This is a continuous variable.

Number of sexual partners in the last year. This dependent variable is Question 37, and is asked as, "In the past 12 months, with how many (if female: men) (if male: women) have you had sex?", and is labeled *PartnersLastYr*. This is a continuous variable.

Ever used any method to prevent pregnancy. This dependent variable is Question 60a, is worded as, "Have you ever used any method to prevent pregnancy? By use, I mean that either you, yourself, have used the method of that a partner of yours used the method when having sex with you?", and is labeled as *Contraceptive*. This is a dichotomous measurement with a Yes/No response.

Visited the doctor for sex health services. This dependent variable is Question 52, and is asked as, "(if female, say:) Have you ever made a visit to a doctor or clinic for women's health care? (if male, say:) Have you ever made a visit to a doctor or clinic where you received sexual health care services?", and is labeled as *DrVisit*. This variable is measured dichotomously with a Yes/No response.

Analytical Strategy

I used SPSS (version 22) to analyze the data. The independent variables are sex education and the topics covered in the sex education course. The dependent variables pertain to visits the doctor for sexual health, uses contraception, the number of sexual partners in a year, and age of first intercourse. To determine whether there was a relationship between sex education and sexual behaviors and health, I performed several chi-square analyses and T-tests. These tests utilized the new sample size of 1,641, which is a result of narrowing the focus of those who received sex education after the age of twelve and before twenty. Sexual behavior is conceptualized by measuring age of first

encounter and the number of partners one has within a year; T-tests are utilized for these analyses. Sexual health is measured using doctor visits and contraceptive use. Chi-squares are utilized for these analyses. All dependent variables are tested with the *sex education* and *focus of sex education* variables.

Most of sex education programs target middle schools and high schools and the intended audience is between 12 to 19 years old (Weiser and Miller 2010; Wiley and Wilson 2009). Of those who received a sex education course, I focused on those who were between the ages of 12 to 19 years old. I used the variable *age when last had sex ed*, which measured the age an individual was when they last received a sex education course, and this is the variable that I recoded to focus on this age group. As a result, the sample size is 1,641. The rationale behind this choice is that sex education given before middle school is generally limited to discussions about anatomy, puberty, and hygiene. Students in middle school and high school are exposed to much more dynamic topics and conversations relating to sexual health and relationships. To ensure that I was only analyzing sexual health-related education, I excluded those who were younger than 12 when they received sex education.

The present study will add to sex education literature by providing insights on the factors that promote healthy sexuality and behaviors. Sex education, and the topics covered in these courses, are linked with higher rates in preventative care. Receiving this type of education as a teenager, generally has a positive impact on a young adult's sexual health practices.

IV. RESULTS AND ANALYSIS

The results are divided in the following way: The first part discusses the univariate analysis of each variable and provides frequency tables. The second part presents the analyses that were ran to measure sex education, and the topics covered, on sexual behaviors. The third part provides the analyses that were ran to measure sex education, and the topics covered, on sexual health. After univariate analyses were complete, T-tests and chi-square analyses were used to analyze the relationships between the variables. Overall, the data indicate that sex education and the topics covered are contributing factors to respondents' sexual behaviors and sexual health. Hypotheses 5, 6, 7, and 8 were supported, which demonstrate the significant impact sex education, and the topics included, has on sexual health practices. A key finding shows those who have a formal background in sex education are significantly more likely to use contraception and seek out sexual health services as compared to those who never received a sex education course. The results show that there is a correlation between education and preventative care. Another finding reveals that the average age of first intercourse and average number of sexual partners are no different between young adults who had received and had not received sex education. The outcome of sex education having no impact on these variables shows that receiving this type of education does not encourage likeliness for one to become sexually active nor does it influence the number of sexual partners an individual has.

Univariate Analyses

Table 1 represents the univariate analysis of the independent variables, *SexEd* and *SexEd Topics Covered.* Of those who responded "yes" and received a sex education

course, those who were under the age of 12 and over the age of 20 when they received a sex education course were excluded in the analysis. The rationale for the exclusion is to focus on the age groups that receive sex education content within middle to high school. The variable that measures whether a respondent had received a sex education course was recoded into a dichotomous variable with a Yes/No response. Frequencies for each variable show most respondents had received sex education (76.3%) between the ages of 12 to 19 years old. The normal distribution of the age one last received sex education is the ages 15 (19.6%), 16 (24%), and 17 (17.4%). Of the topics that were covered in the sex education course, the importance of birth control was included in many of the cases (61.1%), a condom demonstration was given in less than half the cases (42.2%), learning to say no to sex was discussed in the majority of the cases (63.5%), the importance of waiting was emphasized nearly half the time (49.6%), and the discussion of various birth control methods were included in a majority of the cases (57.8%). Table 1 identifies the frequencies of these independent variables.

Table 1. Univariate Analyses- Independent Variables

Variable	%	N
Sex Education		
• Yes	• 76.3%	• 1244
• No	• 23.7%	• 386
Topics Covered in Sex Education:		
a. Importance of Birth Control		
• Yes	• 61.1%	• 980
• No	• 38.9%	• 625
b. Condom Demonstration	•	•
• Yes	• 42.2%	• 686
• No	• 57.8%	• 939
c. How to Say No	•	•
• Yes	• 63.5%	• 1029
• No	• 36.5%	• 591
d. Importance of Waiting		
• Yes	• 49.6%	• 802
• No	• 50.4%	• 814
e. Various Methods		
• Yes	• 57.8%	• 935
• No	• 42.2%	• 683

Table 2 represents the univariate analysis of the dependent variables, which are *Contraceptive*, *AgeofFirstSex*, *PartnersLastYr*, and *DrVisit*. Most respondents had used a method to prevent pregnancy (79.2%), however, this does not measure the frequency one uses contraception nor how effectively they are using it. The most frequent average ages of first intercourse are between 16 years (19.5%) and 17 years (16.3%) and 18 years old (15.4%). The most common responses for number of partners in last year include 0 (10%), 1 (54.7%), and 2 (15.7%). Table 2 identifies the frequencies of these dependent variables.

Table 2. Univariate Analyses- Dependent Variables

Variable	%	N
Ever Used Contraception		
• Yes	• 79.2%	• 1291
• No	• 20.8%	• 340
Age at First Intercourse		
• 7-10	• .5%	• 5
• 11	• 1.1%	• 14
• 12	• 2.5%	• 33
• 13	• 6.2%	• 82
• 14	• 10.4%	• 137
• 15	• 14%	• 184
• 16	• 19.5%	• 256
• 17	• 16.3%	• 215
• 18	• 15.4%	• 202
• 19	• 6.0%	• 79
• 20	• 3.0%	• 40
• 21	• 2.6%	• 34
• 22-27	• .26%	• 34
Number Partners Last Year		
• 0	• 10.0%	• 132
• 1	• 54.7%	• 722
• 2	• 15.7%	• 208
• 3	• 6.1%	• 80
• 4	• 4.8%	• 63
• 5	• 2.4%	• 32
• 6	• 2.1%	• 28
Gone to Doctor for Health Services		
• Yes	• 57.4%	• 941
• No	• 42.5%	• 698

Analysis of Education and Sexual Behaviors

The following section displays the tests that were ran to measure the relationship between education and sexual behaviors. Table 3 represents the T-test analysis of *SexEd* on *AgeofFirstSex*. I compared the variable *SexEd*, which asks if they have received sex education, and I recoded it to become a dichotomous variable. I then ran a T-test with *AgeofFirstSex,* which measures age of first intercourse as an interval. The test results show that the average age of first intercourse amongst those who had received a sex education course was 16.35 years old. The average age of first intercourse amongst those

who had not received a sex education course was 16.51 years old. There was no statistically significant relationship between these two variables; this T-test was not significant.

This finding demonstrates that receiving a sex education course on its own is not enough to influence a person's age of first intercourse. These results debunk the argument that giving young people sex education courses will encourage them to become more sexually active than their peers who did not receive a sex education course. The United Nations Population Fund (2014) research demonstrate that comprehensive sex education has a positive effect on increased condom use or reduced unplanned pregnancies.

Table 3. T-test- Sex Education and Age at First Intercourse

Sex Education	Mean Age First Sex	Standard Deviation
Yes	16.346	2.408
No	16.509	2.512
sig(2-tailed) =0.325	df= 1305	

Table 4 represents the T-test results of *SexEd Topics Covered* and AgeofFirstSex. To conceptualize the topics included in sex education, I use the following variables: *importance of birth control*, *condom demonstration*, *say no*, *importance of waiting*, *various methods*, which were dichotomously measured. I then compared these variables to *AgeofFirstSex* by running a T-test. Of these tests that measure *SexEd Topics Covered* to its relationship with AgeofFirstSex, the only significant link (p= 0.001 at 1304 df) is between the condom demonstration and average age of first intercourse. Those with a background on this topic were a few months younger at their first sex than compared to those without this background. The group that received the condom demonstration in their sex education course had an average age of 16.07 at their first intercourse. The

group that did not receive the condom demonstration had an average age of 16.63 at their age of first intercourse. The mean difference between these groups is .152. On average, the group that received this information were a few months older at age of first intercourse than the group that did not receive this demonstration. It is important to note, however, the average age of first intercourse amongst both groups is 16 years old, even though there is a statistically significant link between these two variables.

These findings correspond with existing literature that finds that the average years young people have first intercourse is between ages of 15 and 17 (Schalet 2011). Overall, the first two hypotheses are not supported.

Table 4. T-test- Sex Education Topics Covered and Age at First Intercourse

Topics Covered	Mean Age First Sex	Standard Deviation
Birth Control Importance	16.37	2.44
Not Covered	16.40	2.39
sig(2-tailed) =0.854	df=1287	
Condom Demonstration	16.07	2.410
Not Covered	16.63	2.389
sig(2-tailed) = 0.000*	df=1304	
How to Say No	16.35	2.408
Not Covered	16.40	2.485
sig(2-tailed) = 0.764	df=1295	
Importance of Waiting	16.31	2.375
Not Covered	16.47	2.497
sig(2-tailed) = 0.261	df=1293	
Various Methods	16.36	2.454
Not Covered	16.40	2.371
sig(2-tailed) = 0.784	df=1295	

*Significant at 0.05 level

Tables 5 displays the T-test results of *SexEd* on *PartnersLastYr*. A T-test is used to compare the variables *SexEd* to *PartnersLastYr*, which measures how many partners

one has had in the past year. This table illustrates that of those with a background in sex education, they had an average of 1.94 partners in the previous year. As compared to those with no background in sex education, the average number of partners this group had was 2.19 people. There is no statistically significant relationship between receiving a sex education course and the number of sexual partners one has had in a year.

These results align with existing research that debunk the common myths that say sex education encourages students to have sex earlier and more frequently. In concurrence, cross-national research from the United Nations Population Fund (2016) shows that quality sex education does not lead young people to have sex earlier than the national average, and in fact, can lead to delayed sexual activity and more responsible behavior.

Table 5. T-test- Sex Education and Partners Last Year

Sex Education	Mean Partners	Standard Deviation
Yes	1.94	2.503
No	2.19	3.845
sig(2-tailed) = 0.179	df=1311	

Table 6 displays the T-test results of *SexEd Topics Covered* and *PartnersLastYr*. Of these tests that compared the *SexEd Topics Covered* to the number of partners, there was a statistically significant link (p= 0.046, at 1299 df) between the importance of waiting and the number of sexual partners in the past year. Those who received information about the importance of delaying sexual activity until marriage had less sexual partners in a year. Those who received information on the importance of waiting until marriage for sexual activity had an average of 1.84 sexual partners in the previous year. As compared to the individuals who did not receive this information on abstaining

from sex, had an average of 2.16 sexual partners in the previous year. The mean difference between these two groups is 0.315. The findings illustrate there is no correlation between receiving education and number of partners. Overall, the third and fourth hypotheses were not supported.

Table 6. T-test- Sex Education Topics Covered and Partners Last Year

Topics Covered	Mean Partners	Standard Deviation
Birth Control Importance	1.9437	2.6456
Not Covered	2.0609	3.1686
sig(2-tailed) = 0.476	df=1291	
Condom Demonstration	2.073	2.7178
Not Covered	1.932	2.9474
sig(2-tailed) = 0.372	df=1307	
How to Say No	1.8939	2.4593
Not Covered	2.2022	3.4796
sig(2-tailed) = 0.064	df=1301	
Importance of Waiting	1.8438	2.3087
Not Covered	2.1590	3.3301
sig(2-tailed) = 0.046*	df=1299	
Various Methods	1.8888	2.4281
Not Covered	2.1380	3.3604
sig(2-tailed) = 0.120	df=1300	

*Significant at 0.05 level

Analysis of Education and Sexual Health

The following section displays the tests that were used in SPSS to measure the relationship between education and sexual health practices. I analyzed whether a sex education course impacted sexual health, and this is conceptualized by the variables *DrVisit* and *Contraceptive*. Table 7 represents this chi-square analysis. The results demonstrate that of those with a background in sex education, 45.1% had gone to the doctor for sexual health services as compared to 12.5% of those with no background in

sex education. There is a statistically significant link between these two variables, which shows that those with a background in sex education were more likely to visit the doctor for their sexual health as compared to those without this background. This chi-square analysis was significant (χ^2= 4.936 at 1 df, p= 0.026). The analysis shows that there is a direct, positive relationship between receiving education and health practices. However, the survey does not include the reasons for the doctor visit, so the intention is unknown. With the materials covered and the conversations in the classroom, it is possible that there was an emphasis of self-responsibility or self-care. The information provided in the course had a long-lasting impact on those who received the course, as they were more likely to go to the doctor for sexual health related reasons. This group is probably more aware of the importance of health exams and STI screenings. It is likely that these people are actively protecting themselves, and their partners, by staying informed on their health status.

Table 7. Chi-Square- Sex Education and Doctor Visits

Doctor Visit	Sex Education	No Sex Education
Yes	735 (45.1%)	203 (12.5%)
No	508 (31.2%)	182 (11.2%)
N= 1628	P value= 0.026*	χ^2= 4.936

*Significant at 0.05 level; df= 1

Table 8 analyzes the relationships between the *SexEd Topics Covered* and *DrVisit* for sexual health services. Of the five tests, four are statistically significant at the 95% confidence level. The results show the topics with a significant relationship to doctor visits include: discussions with the importance of birth control (χ^2= 4.694 at 1 df, p= 0.030), how to properly wear a condom (χ^2= 15.564 at 1 df, p= 0.000), how to say no to sex (χ^2= 4.259 at 1 df, p= 0.039), and various methods of contraception (χ^2= 10.484 at 1

df, p= 0.001). Of those who had received a sex education course with the topics covered (importance of birth control, how to say no, and the various birth control methods) were more likely to make a doctor visit than those who had not received sex education. Conversations that emphasize the importance of waiting until marriage for sex had no impact on likeliness to visit the doctor. One of the most compelling findings can be seen in the condom demonstration measure having a negative link to doctor visits, which could have extraneous factors that influenced this variable.

The results of these analyses demonstrate that the specific topics covered in a sex education course – all but the focus on the importance of waiting – were linked to a person's likeliness to see a doctor for sexual health services. The significant relationship between these variables shows the importance of the conversations and information that is provided to young people in their sex education course. It is likely that the topics covered emphasized the importance of self-responsibility and that healthy sexuality begins with an individual taking care of their self. The topic that focuses on the importance of waiting was not linked to an individual's experience at the doctor. There is probably limited information that is provided with this topic, which does not encourage self-efficacy nor cover the importance of sexual health practices. Overall, the fifth and sixth hypotheses were supported.

Table 8. Chi-Square- Sex Education Topics Covered and Doctor Visits

Doctor Visit	Topics Covered	Not Covered
	Birth Control	
Yes	584 (36.4%)	338 (21.1%)
No	395 (24.6%)	286 (17.8%)
N= 1603	P value= 0.030*	χ^2= 4.694
	Condom Demonstration	
Yes	433 (26.7%)	501 (30.9%)
No	252 (15.5%)	437 (26.9%)
N=1623	P value= 0.00*	χ^2= 15.564
	How to Say No	
Yes	610 (37.7%)	319 (19.7%)
No	418 (25.8%)	271 (16.7%)
N=1618	P value= 0.039*	χ^2= 4.259
	Importance of Waiting	
Yes	475 (29.4%)	450 (27.9%)
No	326 (20.2%)	363 (22.5%)
N=1614	P value= 0.109	χ^2= 2.574
	Various Methods	
Yes	571 (35.3%)	361 (22.3%)
No	364 (22.5%)	320 (19.8%)
N=1616	P value= 0.001*	χ^2= 10.484

*Significant at 0.05 level; df= 1

Table 9 represents the chi-square analysis of *SexEd* and *Contraceptive*. Of those who received a sex education course, 62.8% reported to have used a contraceptive method to prevent pregnancy. Of those who had never received a sex education course, 16.3% reported to have used a contraceptive method to prevent pregnancy. This chi-square analysis was significant (χ^2= 34.137 at 1 df, p= 0.000) There is a statistically significant relationship between these two variables, which demonstrates that receiving a sex education course as teenagers is linked to sexual health practices as young adults to prevent STIs or an unintended pregnancy. The results of this analysis demonstrate that sex education has a correlation to an individual's contraception use, even after several years from initially receiving the information. Sex education has long standing effects on young adults when it comes to their use of birth control. The information provided in

these courses equipped teenagers with an understanding of contraceptives, the success and failure rates, and how to properly use them. The knowledge gained as teenagers influenced sexual health practices as young adults.

Table 9. Chi-Square- Sex Education and Contraception

Used Contraception	Sex Education	No Sex Education
Yes	1018 (62.8%)	264 (16.3%)
No	217 (13.4%)	121 (7.5%)
N= 1620	P value= 0.000*	χ^2= 34.137

*Significant at 0.05 level; df= 1

Table 10 analyzes the relationships between the *SexEd Topics Covered* and C*ontraceptive*. The analysis indicates that every topic covered in the sex education course has a statistically significant impact on the use of contraception. If they learned about the importance of birth control, more than half (50.3%) used contraception as opposed to those who did not learn about this topic (28.9%); this chi-square analysis was significant (χ^2= 15.979 at 1 df, p= 0.000). With those that learned information on how to say no to sex positively impacted contraceptive use, with over half (52.5%) reporting they had ever used a method to prevent pregnancy and about a quarter had (26.7%); this chi-square analysis was significant (χ^2= 20.667 at 1 df, p= 0.000). Those that received a course with a focus on the importance of waiting had used contraception (40.9%) versus those who had not received this topic (38.2%); this chi-square analysis was significant (χ^2= 11.688 at 1 df, p= 0.001). Those that received information on the various methods of contraception, (48.5%) had used contraception as compared to those who had not received this education (30.6%) and had used contraception; this chi-square analysis was significant (χ^2= 30.140 at 1 df, p= 0.000).

Every topic covered in a sex education course a teenager received had a significant impact on their sexual health practices as a young adult. It should be noted that the sex education topic that includes a condom demonstration had a significant, yet negative, impact on contraceptive use. Those who have received a sex education course that included the condom demonstration had used contraception less often (36.5%) than those who did not receive this information (42.7%); this chi-square analysis was significant (χ^2= 34.607 at 1 df, p= 0.000). The other results demonstrate that early education can contribute to contraception use in young adults, as it can increase the likeliness a person uses a method to prevent unplanned pregnancies and STIs. The analyses implicate the role education has on an individual and how these lessons have an impact on young adults. Overall, the seventh and eighth hypotheses were supported.

Table 10. Chi-Square- Sex Education Topics Covered and Contraception

Used Contraception	Topics Covered	Not Covered
	Birth Control	
Yes	803 (50.3%)	461 (28.9%)
No	171 (10.7%)	161 (10.1%)
N= 1596	P value= 0.000*	χ^2= 15.979
	Condom Demonstration	
Yes	590 (36.5%)	690 (42.7%)
No	95 (5.9%)	241 (14.9%)
N=1616	P value= 0.000*	χ^2= 34.607
	How to Say No	
Yes	845 (52.5%)	430 (26.7%)
No	177 (11%)	158 (9.8%)
N=1610	P value= 0.000*	χ^2= 20.667
	Importance of Waiting	
Yes	657 (40.9%)	614 (38.2%)
No	138 (8.6%)	197 (12.3%)
N=1606	P value= 0.001*	χ^2= 11.688
	Various Methods	
Yes	780 (48.5%)	493 (30.6%)
No	150 (9.3%)	186 (11.6%)
N=1609	P value= 0.000*	χ^2= 30.140

*Significant at 0.05 level; df= 1

V. DISCUSSION AND CONCLUSION

The purpose of this research was to examine whether sex education impacts sexual behaviors and health in young adults. I hypothesized that receiving sex education as a teenager would influence sexual behaviors and health as a young adult. I also hypothesized that the varying topics covered in the sex education course impacted the sexual behaviors and health in those who had received a sex education course as a teenager. The results suggest that those who have received a sex education course had similar responses to their counterparts when it came to their age of first intercourse and the number of partners they had. In addition, the topics covered in sex education have a positive, significant impact on contraception use and doctor visits. In terms of the use of contraceptives, more individuals reported having used contraception after receiving a sex education course. The analyses also show that the likeliness to visit a doctor for sexual health related services was dependent on education, where more individuals reported making a doctor visit after receiving a sex education course.

This research contributes to the sociology of sexuality studies by addressing the sex education experience, what types of topics were covered in the curricula, and some of the resulting sexual behaviors and health practices of young adults. Analyzing how education impacts young adults allowed me to determine the factors that result in healthier behaviors and analyze the effectiveness of the content that was provided to respondents at a younger age.

The results of this study indicate that there are significant differences in some aspect of behaviors and health between those who had received a sex education course and those who had never received a course. Those who had received a sex education

course were significantly more likely to visit the doctor for sexual health reasons than those who had not received a sex education. A limitation to this secondary analysis is that I cannot determine why there is a direct relationship between these variables. However, in accordance to existing literature, Kirby (2007) found that sex education directly influences sexual health; the results of these analyses align with these findings as it shows the course and the topics covered encourage higher rates of contraceptive use and likeliness to visit the doctor.

Because this study utilizes secondary data, questions and answers are set. There are a few methodological critiques to be made of the survey. All questions only measured relationships and sexual behaviors from a heteronormative approach. There is a note made in their survey that states variables pertaining to sexual relationships and dating are measured from a heterosexual standpoint. These measures exclude same-sex individuals and relationships; hence, the findings cannot be applied to the behaviors of LGBTQ individuals. Another limitation of the survey is that the measure for sex education asks respondents whether they have ever taken a sex education course, without asking about the length of the course, whether it was a requirement or voluntary, who taught the course, experience in the course, or what other information respondents learned from the course. Qualitative research can rectify some of these issues by uncovering the individual experiences within the classroom and allowing detailed, nuanced, contextualized narratives about sex education. Future research should also distinguish between the types of sex education courses, such as abstinence-only and comprehensive, and the timeframe of the course to allow for analysis on the effectiveness of each program or approach. A follow-up question about the doctor visit could have asked what type of service the

respondent was needing from their doctor visit. This additional information would be helpful in providing more detail of the respondents' experience. Future surveys should include sexual identity and orientation as part of the questions.

There are many strategies that could be adopted to better the quality of sex education programs and curricula, and strengthen the availability of resources to young adults. Sexuality education should not be limited to a course that lasts only a few weeks, but should be integrated throughout a student's academic career like the Netherlands and other countries (Schalet 2011). Learning about sexuality and gender can be something one does throughout their life course. Understanding the complexities of gender and sexuality cannot be learned in a few weeks. Future research on sex education used in the United States could be improved by taking cross cultural views to the programs used in other countries, such as the research provided by Schalet (2010) in her examination of the policies and legislation used by many in the Netherlands. Students in these countries were regularly provided with accurate, straightforward information about sex and possible outcomes from sexual behavior and most had access to free contraception and healthcare.

Future research can expand on this topic by taking an intersectional approach to analyzing the variables that shape attitudes and behaviors relating to sexual knowledge and health, such as gender, age, political affiliation, socioeconomic status, and race/ethnicity. An intersectional approach would be more inclusive and could expand on the various aspects that influence understanding of sexuality, reproduction, and sexual health as a culture. Cross national analyses of sexuality education and public opinion could also greatly add to the American discourse on teen sexuality. The findings of cross national studies can deconstruct the innerworkings of society and can provide insights to

cultural discourses of sex education. Expanding on these various aspects would contribute to existing literature of teenage and adolescent sexuality and help shape our understanding of sexuality and gender as a culture.

The results highlight the importance of the knowledge gained in sex education and its impact on a person's behavior and health practices later in life. Those who had received a sex education course are likely to be more cognizant of the importance of maintaining their sexual health. As their actions influence their partners, those that are aware of their sexual health contribute to a healthy culture that supports responsibility. Qualitative research methods would be beneficial in this area because it would allow the participants of the survey to identify the reasons they visited the doctor, whether it is for an STI/HIV screening, an annual wellness exam, abortion services, or the intention of obtaining contraception. Distinguishing these intentions for a doctor visit is important to analyze because it can help tease out what topics were covered in the sex education class that encouraged students to be responsible for their sexual health.

There is still much research that needs to be done on the strategies that are most effective with reducing STIs/HIV, abortion rates, and teenage pregnancy rates, while fostering healthy sexuality. There is consensus among those in the field of sex education that current abstinence-only, and even some comprehensive curriculum, are ineffective approaches to sex education. To ensure healthy and fulfilling lifestyles, people deserve curricula that provide insights to the complexities of gender and sexuality, while also receiving adequate information on how to protect themselves and others. Even though comprehensive curricula include information on contraception, many programs have been criticized for not being inclusive to the LGBTQ community, and for promoting a

heteronormative agenda; this approach to educating systematically denies young people from educational resources and support that would essentially promote their sexual wellbeing (Fields 2012). Public schools should be encouraged to implement an inclusive approach, where all models of gendered, sexual behaviors and expression are normalized. A positive sexuality approach to education has become widely favorable amongst academics as the most effective strategy for educating young people and reducing rates of STIs/HIV, abortions rates and unplanned pregnancies. With this inclusive approach, all knowledge about anatomy, sexuality, and gender are laid out for adolescents and teenagers to process and critically think about their health and behaviors. Healthy sexuality is integral to supporting emotional wellbeing and self-fulfillment. Open education and discussions provide young people with the resources to make fully informed life decisions.

Future research can explore the areas that influence preventative care practices. Education influences preventative care by promoting the ways one can protect themselves and others. This type of education encourages the maintenance of sexual health and wellbeing because it provides materials on the reasons for STI screenings, the proper uses of contraceptives, and other information that contributes to their health. It could also mean that the sex education course itself was not the only contributing factor that promoted healthy behaviors, but it could mean that the students who enrolled in these courses may be already predisposed to higher levels of self-efficacy or go into the course being already cognizant of protecting themselves. In the results of the analyses for age of first intercourse and number of partners, the reason there is no significant relationship could simply be that there are other variables that influences these factors. Examples of

these other variables could be status, or pressure that is rooted on peer acceptance, the expectation of peers to be in a relationship, or the need to feel loved or accepted. Age of first intercourse could be influenced by gender socialization and norms. Gendered messages and scripts provide models of manhood and womanhood by emphasizing femininities and hegemonic masculinity. The analyses show that education serves as a tool for preventative care in young adults. The results emphasize early education as a predictor of long-term self-efficacy on behaviors and health. Qualitative research can be used to examine the experiences of teachers, students, and the conversations in the classrooms. This approach would allow us to consider the factors that influenced an individual, what messages or information they retained, and how this education impacted their life.

Critical feminist theory and queer theory are relevant ways to analyze sex education material and uncover the meanings behind the messages. With these approaches, they both help to explain why the gendered and sexist content exists. Both theories analyze the context in which the information is derived. These approaches also suggest ways to further improve the quality and inclusiveness of sex education.

REFERENCES

Alford, Sue. 2001. "Sex Education Programs Definitions and Point by Point Comparison." *Advocates for Youth*. http://www.advocatesforyouth.org/publications/publications-a-z/655-sex-education-programs-definitions-and-point-by-point-comparison

Connell, R.W. and James Messerschmidt. 2005. "Hegemonic Masculinity: Rethinking the Concept." *Gender & Society* 19(6): 829-859.

Connell, Catherine and Sinikka Elliott. 2009. "Beyond the Birds and Bees: Learning Inequality through Sexuality Education." *American Journal of Sexuality Education* 4(2): 83-102.

Elia, John P., and Mickey J. Eliason. 2010a. "Dangerous Omissions: Abstinence-Only-Until-Marriage School-Based Sexuality Education and the Betrayal of LGBTQ Youth." *American Journal of Sexuality Education* 5: 17-35.

Elia, John P., and Mickey J. Eliason. 2010b. "Discourses of Exclusion: Sexuality Education's Silencing of Sexual Others." *Journal of LGBT Youth* 7(1): 29-48.

Elliott, Sinikka. 2012. *Not My Kid: What Parents Believe About the Sex Lives of their Teenagers.* New York: New York University Press.

Elliott, Sinikka. 2014. "*Who's to Blame?*: Constructing the Responsible Sexual Agent in Neoliberal Sex Education." *Sexuality Research and Social Policy* 11(3): 211-224.

Ferguson, Rebecca, Ine Vanwesenbeeck, and Trudie Knijn. 2008. "A Matter of Facts… and More: An Exploratory Analysis of the Content of Sexuality Education in the Netherlands." *Sex Education* 8(1): 93-106.

Fields, Jessica. 2008. *Risky Lessons: Sex Education and Social Inequality.* New Brunswick, NJ: Rutgers University Press.

Fields, Jessica. 2012. "Sexuality Education in the United States: Shared Cultural Ideals across a Political Divide." *Sociology Compass* 6(1):1–14.

Gresle-Favier, Claire. 2010. "The Legacy of Abstinence-only Discourses and the Place of Pleasure in US Discourses on Teenage Sexuality." *Sex Education* 10(4): 413-422.

Haggis, Jane and Monique Mulholland. 2014. "Rethinking Difference and Sex Education: from Cultural Inclusivity to Normative Diversity." *Sex Education* 14(1): 57-66.

Herrman, Judith, Paul Solano, Lauren Stotz, and Mary Joan McDuffie. 2013. "Comprehensive Sexuality Education: A Historical and Comparative Analysis of Public Opinion." *American Journal of Sexuality Education* 8(1): 140-159.

Irvine, Janice. 2002. *Talk About Sex: The Battles Over Sex Education in the United States*. Berkeley, CA: University of California Press.

Kane, Emily. 2006. "*No Way My Boys Are Going to be like That!*: Parents' Responses to Children's Gender Nonconformity." *Gender & Society* 20(2): 149-176.

Kaye, Kelleen, Katherine Suellentrop, and Corinna Sloup. 2009. "The Fog Zone: How Misperceptions, Magical Thinking, and Ambivalence Put Young Adults at Risk for Unplanned Pregnancy." *Washington, DC: The National Campaign to Prevent Teen and Unplanned Pregnancy*.

Kirby, Douglas. 2007. "Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases." *Washington, DC: The National Campaign to Prevent Teen and Unplanned Pregnancy*.

Lamb, Sharon, Kara Lustig, and Kelly Graling. 2013. "The Use and Misuse of Pleasure in Sex Education Curricula." *Sex Education* 13(3): 305-318.

Lesko, Nancy. 2010. "Feeling Abstinent? Feeling Comprehensive? Touching the effects of Sexuality Curricula." *Sex Education* 10(3): 281-297.

McCann, Hannah. 2016. "Epistemology of the Subject: Queer Theory's Challenge to Feminist Sociology." *Women's Studies Quarterly* 44(3/4): 224-243.

McGuffey, Shawn and Lindsay Rich. 1999. "Playing in the Gender Transgression Zone: Race, Class, and Hegemonic Masculinity in Middle Childhood." *Gender & Society* 13(5): 608-627.

McNeil, Tanya. 2013. "Sex Education and the Promotion of Heteronormativity." *Sexualities* 16(7): 826-846.

Pascoe, C.J. 2011. "Resource and Risk: Youth Sexuality and New Media Use." *Sexuality Research and Social Policy* 8(1): 5-17.

Parsons, Talcott. 1940. "An Analytical Approach to the Theory of Social Stratification." *American Journal of Sociology* 45(6): 841-862.

Payne, Elizabethe and Melissa Smith. 2011. "The Reduction of Stigma in Schools: A New Professional Development Model for Empowering Educators to Support LGBTQ Students." *Journal of LGBT Youth* 8(1): 174-200.

Pingel, Emily Sweetnam, Laura Thomas, Chelsea Harmell, and Jose A. Bauermeister. 2013. "Creating Comprehensive, Youth Centered, Culturally Appropriate Sex Education: What Do Young, Gay, Bisexual and Questioning Men Want?" *Sexuality Research and Social Policy* 10(1): 293-301.

Preston, Marilyn. 2013. "*Very Very Risky*: Sexuality Education Teachers' Definition of Sexuality and Teaching and Learning Responsibilities." *American Journal of Sexuality Education* 8(1): 18-35.

Schalet, Amy. 2000. "Raging Hormones, Regulated Love: Adolescent Sexuality and the Constitution of the Modern Individual in the United States and the Netherlands" *Body & Society* 6(1): 75-105.

Schalet, Amy. 2010. “Sex, Love, and Autonomy in the Teenage Sleepover.” *Contexts* 9(3): 16-21.

Schalet, Amy. 2011. *Not Under My Roof: Parents, Teens, and the Culture of Sex*. Chicago; London: University of Chicago Press.

Schalet, Amy, John Santelli, Stephen Russell, Carolyn Halpern, Sarah Miller, Sarah Pickering, Shoshana Goldberg, Jennifer Hoenig. 2014. “Invited Commentary: Broadening the Evidence for Adolescent Sexual and Reproductive Health and Education in the United States.” *Journal of Youth and Adolescence* 43(10): 1595-1610.

Sexuality Information and Education Council of the United States. 2009. “What the Research Says: Comprehensive Sex Education.” *SIECUS.* http://www.siecus.org/index.cfm?fuseaction=Page.ViewPage&PageID=1193

Tolman, Deborah. 2009. *Dilemmas of Desire: Teenage Girls Talk about Sexuality*. Cambridge, MA: Harvard University Press.

United Nations Population Fund. 2014. “Comprehensive Sexuality Education.” *UNFPA.* http://www.unfpa.org/comprehensive-sexuality-education

United Nations Population Fund. 2016. “Sexuality Education: What is it?” *UNFPA.* http://www.ippfen.org/sites/ippfen/files/2016-12/Policy%20Brief%20n%271%20on%20Sexuality%20Education.pdf

United Nations Population Fund. 2016. “UNFPA Annual Report 2013.” *UNFPA.* http://www.unfpa.org/publications/unfpa-annual-report-2013

Valocchi, Stephen. 2005. “Not Yet Queer Enough: The Lessons of Queer Theory for the Sociology of Gender and Sexuality.” *Gender & Society* 19(6): 750-770.

Weiser, Dana and Monica Miller. 2010. “Barack Obama vs Bristol Palin: Why the President’s Sex Education Policy Wins.” *Contemporary Justice Review* 13(4): 411-424.

Wiley, David and Kelly Wilson. 2009. “Just Say Don’t Know: Sexuality Education in Texas Public Schools.” *Texas Freedom Network Education Fund* 1-61.

Wilson, Kelly, B.E. Pruitt, and P. Goodson. 2008. “The Impact of Middle School Principals on Adoption of Abstinence-Only-Until-Marriage Programs in their Schools’ Curriculum.” *American Journal of Health Education* 39(5): 258-271.

World Health Organization. 2002. “Defining Sexual Health.” *WHO.* http://www.who.int/reproductivehealth/topics/sexual_health/sh_definitions/en/

Zanis, David. 2005. “Use of a Sexual Abstinence-only Curriculum with Sexually Active Youths.” *Children & Schools* 27(1): 59-63.