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Stephanie Grace Agnew
Let's Talk About Sex: Sexual
Education and Adolescent
Sexual Behavior

ABSTRACT

The study was undertaken to look at adolescents' experiences in school sexual education programs, to examine how abstinence only and comprehensive sexual education programs impact adolescent sexual behavior, and to explore whether there is a correlation between adolescents' sexual behavior and their satisfaction with their sexual health education. This study also set out to examine where adolescents turn for more comprehensive sexual health information when they are not satisfied with what they are receiving in school.

This study surveyed 56 college freshmen about their middle school and high school sexual education experiences and their attitudes toward sexual health. Participants provided demographic information and answered questions about their values, beliefs, and attitudes; sexual education experience; sexual health knowledge acquisition; and personal sexual experience.

The major findings of this research showed that adolescent satisfaction with sexual education classes was directly related to how contraception was portrayed in those classes, that adolescents whose classes portrayed contraception as highly effective were much more likely to use condoms for the prevention of STIs, and that adolescents would like to get more sexual health information from their parents and other significant individuals in their lives than they currently receive.

LET'S TALK ABOUT SEX:
SEXUAL EDUCATION AND ADOLESCENT SEXUAL BEHAVIOR

A project based upon an independent investigation,
submitted in partial fulfillment of the requirements
for the degree of Master of Social Work.

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CHAPTER I

INTRODUCTION

The prevention of free inquiry is unavoidable so long as the purpose of education is to produce belief rather than thought, to compel the young to hold positive opinions on doubtful matters rather than to let them see the doubtfulness and be encouraged to independence of mind. Education ought to foster the wish for truth, not the conviction that some particular creed is the truth.

- Bertrand Russell (1916, p. 153-154)

The appropriate venue for teaching American adolescents about sex and sexual health is a heavily debated topic met with strong opinion on both sides. In the United States we are currently living in an age in which abstinence-only sexual education is the norm, and is the only form of sex education supported by the federal government. However, after ten years of federally funded abstinence-only education, there is little evidence to suggest that teaching the morals of abstinence until marriage, as opposed to teaching the realities of sexual health and contraception use is keeping American adolescents safe. Insisting upon the existence of only one correct choice as opposed to encouraging adolescents to think for themselves and make educated, informed decisions counters long accepted beliefs and understanding about adolescent developmental needs, and that is precisely what abstinence-only sexual education does.

While abstinence-only education supplies adolescents with very little information in the structured and supportive environments of their schools, they are still becoming

sexually active at the same rates as they were while being taught more comprehensive sexual education. Some research has been done about how sexual education programs affect adolescent perceptions of sex, but little has been done to show where adolescents go for supplemental sexual health information when they are not satisfied with what they receive in school. For this reason, this study set out to examine whether there is a correlation between adolescents' sexual behavior and their satisfaction with their sexual health education. This study was also designed to examine where else, if anywhere, adolescents go to obtain additional or more comprehensive information about sex and sexual health when they feel the information they receive in their schools is not adequate.

This study surveyed college freshmen who graduated from high school in 2006 about their sexual education experiences and their attitudes toward sexual health. While the primary focus of this study was to determine if adolescents are satisfied with the sexual health education they receive in high school and if they turn elsewhere for more comprehensive sexual health knowledge, their level of comfort in discussing issues of sex and sexual health with parents, siblings, peers, and other figures in their lives is also explored. Such information is vital to the field of social work because it will facilitate the creation of supportive community programs focusing on sexual health for adolescents and their families.

CHAPTER II

LITERATURE REVIEW

There is a long-standing debate over whether or not sexual education programs that go beyond the teaching of abstinence lead to increased levels of sexual behavior among adolescents. This is a debate that has long shaped sexual education policy in the United States, and that may be responsible for the increase in sexual health problems which we face today. In order to create the best possible programs for working with adolescents around issues of sex and sexual health it is important to determine the primary factors that influence adolescents' decisions about sexual behavior.

In order to better understand the factors which influence adolescent decision making around issues of sexual behavior, three areas of research will be examined. First this researcher will look at sexual education in the U.S. to gain a general understanding of the history of sex education in this country, the changing trends of sex education over time, and the type of information students are currently getting through existing sex education programs. Secondly, factors associated with risky adolescent sexual behavior will be examined, as well as factors associated with healthy adolescent sexual behavior. Finally the primary non-school based sources through which adolescents obtain knowledge and information on sexual health and behavior will be examined.

Sexual Education in the U.S.

It has been ten years since sexual education in the United States has been reduced to abstinence-only based teachings due to a provision to the 1996 Welfare Reform Act. While some school districts continue to teach a more inclusive form of sexual education, commonly known as comprehensive sexual education, there is no federal funding for these programs. Through comprehensive sexual education, students are given access to a variety of information about safe and healthy sexual behavior, including abstinence. Abstinence-only education, on the other hand, is exactly that – abstinence only. Such programs prohibit the teaching of the benefits of contraception use and teach students that the only acceptable choice is to abstain from sexual activity until after marriage.

While it is currently the norm, abstinence based sexual education has not historically been the standard format for sexual education programs in the United States. In the early 1900s there was a push by a group of liberal scientists and educational theorists to implement “integrated” sex education in high schools across the country. These individuals developed the American Social Hygiene Association (ASHA), which was the first group ever to campaign for sex education (Irvine, 2002; Levine, 2002; Luker, 2006; Moran, 2000). They were responding to the high levels of sexually transmitted infections (STIs) that were being detected in World War I soldiers and had the hopes of educating the nation’s high school population not only about STIs and their prevention, but also about systemic lifestyle ideals that would lead to healthier sexual behavior. The ASHA wanted to challenge the accepted view that men were by nature more sexual beings than women, and that women should be chaste. They believed that

such views lead to prostitution, which created a class of persecuted women who were in fact nothing less than a product of their own sexist society. The ASHA saw prostitution as a major contributor to the increasing rates of STIs, and believed that if they could teach the nation's youth about appropriate sexual relationships through an "integrated" sexual education program, they could affect some systemic change in what they saw as problem sexual behavior as opposed to simply educating individuals about the realities and dangers of STIs (Moran, 2000). In essence, the pioneers of sex education had a goal of imparting sexual values over sexual health knowledge, making them similar to today's abstinence only proponents. While they did not push the idea of abstinence until marriage, the ASHA's goal was not to spread intellectual enlightenment, but instead to create a nationwide improvement in sexual behavior (Moran, 2000).

The first sex education programs of the early 1900s were met with great opposition. Sex education was a controversial subject with much debate over what the exact area of focus and primary content matter should be. The general opinion amongst the American public was that sex was not something that should be discussed in public, let alone taught in schools (Irvine, 2002; Levine, 2002; Luker, 2006). As a result of this controversy, the implementation of the progressive vision ASHA had for widespread "integrated" sex education in the nation's high schools was less than successful. The programs faced social disapproval and a lack of funding, and the ASHA had to accept the reality that the nation was not ready to examine its conservative views of sex. According to Moran (2000), "emergency" sex education, consisting of scare tactic education about

STIs and the immorality of sexual relations outside of marriage, was the only form of sex education truly accepted in the early 1900s.

In the 1920s more general sexual education began to gain acceptance, and it eventually became commonplace in American high schools. While there was inevitably still some controversy over the teaching of sex in schools, it was on a small scale. However, in response to the sexual revolution of the 1960s, sex education programs began to acknowledge that sex and marriage were two different things and that one could, and often did, exist without the other. At that time, and not before, did the opposition to sex education become a widespread, national issue as opposed to the more local and personal battles that had existed since the early 1900s (Luker, 2006).

As the opposition to sex education grew and became more organized, some small changes at local levels were affected. The buzz had started and parents were engaging in debates with schools over who should be responsible for teaching their children about sex and the values that are inherently connected to it. Politicians at the state and national levels picked up on the divisive importance of the issue of sex education, with many states forming their own laws and policies (Luker, 2006). And finally, in 1996, exactly how to teach sex education became a national issue, and national policy was instated to dictate exactly what the U.S. government was and was not willing to endorse in the name of sexual education. The federal government had spoken and abstinence only sex education was their choice. While the federal government still allows for the teaching of more comprehensive sex education, they will not endorse or fund such programs. States

and school districts that choose to teach comprehensive sex education have to come up with the funding for such programs on their own.

Currently in the vast majority of America's fifty states, there are no laws requiring the teaching of any form of sex education. In fact, only 19 states and the District of Columbia require that public schools teach sex education. However, many of the 31 states that do not mandate the teaching of sexual education also have laws dictating what must be taught if sex education is taught in a public school. In total, 22 states require that abstinence be stressed when taught as part of sex education, and 10 other states require that it be covered. 14 states and the District of Columbia require that contraception is covered in sex education programs, but no state requires that contraception be stressed. In addition, 35 states and the District of Columbia require that some form of STD/HIV education be taught in public schools, but only 18 states require that such programs cover contraception, while 25 require that abstinence be stressed and 11 others require that abstinence be covered (Guttmacher Institute, 2007).

With 22 states in the U.S. insisting on abstinence only sexual education and 10 insisting that abstinence be covered but not necessarily stressed, one might interpret that as leaving the decision of whether to teach comprehensive sex education or abstinence-only sex education up to the schools in the remaining 18 states. For proponents of comprehensive sexual education, these statistics could contain a glimmer of hope. Since the National Education Foundation (the national teacher's union) is a member of The National Coalition to Support Sexuality Education, which supports comprehensive sex education in the United States (Advocated for Youth, 2001), it would follow reason that

public schools in 18 states still teach comprehensive sexual education. However, this is not the case. Abstinence-only programs are even more widespread than the numbers might suggest because schools in states that leave sexual education content up to the individual districts are also overwhelmingly choosing to follow abstinence-only curricula (Irvine, 2002).

Sexual education in the vast majority of America's schools has declined into abstinence only sex education due to the arguments of the conservative right. Schools that have the choice have stopped teaching controversial sex education topics not because they no longer believe they are important, but because it is simply easier. The ongoing uphill battle to teach about topics such as masturbation or nocturnal emissions has become too time consuming and costly. It is easier for districts, schools, and individual teachers to grant the conservative parties their wishes even when they are in the minority than it is to fight for comprehensive sex education (Irvine, 2002). It does not seem to matter that 38 states and the District of Columbia allow parents to remove their children from sex education classes or require parental consent for students to participate in sex or STD/HIV education (Guttmacher Institute, 2007).

The prevailing argument against comprehensive sexual education is that such teaching conveys an implicit message that teen sex is both expected and accepted (Martin, Rector & Pardue, 2004), and that teaching about contraception use will encourage students to become sexually active at a younger age and encourage youthful sexual experimentation (Wallace & Warner, 2002), but there is no evidence to validate this belief. In fact, Kirby (2001) found in an evaluation of more than 250 studies done on

adolescent sexual behavior, that comprehensive sex education programs that provide information about both abstinence and contraception can help delay the onset of sexual activity in teenagers, reduce their number of sexual partners and increase contraceptive use when adolescents do become sexually active. In short, the research suggests that such comprehensive programs enable individuals to make informed choices about health and safety when they decide they are ready to engage in sexual behavior, whenever that may be. This and other research led Surgeon General Dr. David Satcher of the U.S. Department of Health and Human Services to point out the benefits of comprehensive sexual education and to recommend it for all of the nation's public schools (Satcher, 2001). Despite the Surgeon General's recommendation, abstinence-only sexual education continues to become more common.

In a review of eight different abstinence-only programs that have each been independently evaluated, Thomas (2002) found that although the programs generally attained the desired impact on attitudes about what constitutes appropriate sexual conduct for teens, no such program has been proven to affect adolescent sexual behavior in any way. In other words, abstinence-only sexual education programs do not decrease sexual behavior amongst teens by increasing the number of those who choose abstinence. Instead, they simply increase the number of teens who believe that abstinence may be the best choice for their age group, but who decide to become sexually active regardless.

There is also some evidence that suggests students are dissatisfied with the abstinence-only education they are receiving (Somers & Surmann, 2004). Through a number of focus groups followed by more detailed individual interviews, Steele (1999)

found that the primary objections teens voice about school-based sex education programs are their heavy emphasis on disease (which makes them similar to the “emergency” sex education programs of the early 1900s), redundancy from one year to the next, avoidance of topics the teacher might find embarrassing or objectionable, and a tendency to speak about sexual relationships in scientific instead of humanistic terms.

Another inherent problem with abstinence only sex education programs is that they are attempting to impart a level of ‘moral’ behavior that significantly goes against the American social trend, and therefore the content feels unrealistic to many of the adolescents who are being targeted. Not only is abstaining from sex until marriage not common in the U.S., it is incredibly rare. Based on statistics from 2002, Finer (2007) found that 75% of twenty year olds had had premarital sex, while 97% of sexually active 44 year olds had done so. He also found that 48% of individuals who turned 15 between the years of 1954 and 1963 (before the sexual revolution of the 1960s) had had premarital sex by the time they were 20. These are figures which lead one to question the presumption that abstinence-only sex education programs will bring us back to a time when America had more holistic family values. Finer (2007) also found that individuals who were adolescents in the years between 1994 and 2003 had premarital sex by the age of 20 at a rate of 74%, which represents a 26% increase in premarital sex over four decades. These statistics suggest that implementing abstinence until marriage as a normative behavior for today’s adolescents is a goal that goes against decades of regular social behavior (Finer, 2007).

Other research also suggests that abstinence-only sexual education has a goal that is falling short of its mark. As reported by SIECUS (Sexuality Information and Education Council of the United States), results from the 2005 Youth Risk Behavioral Survey (YRBS) show that while the number of high school students who have ever had sexual intercourse declined from 54% to 47% between the years of 1991 and 2001, it remained at 47% for the four years between 2001 and 2005, a time period over which abstinence only sex education has increased in popularity and practice. The survey also shows that 63% of high school seniors report being sexually active. However, the most shocking information revealed in the 2005 YRBS is not that so many high school students are engaging in sexual intercourse, but that for the first time in 14 years the rate of condom use among adolescents (62.8%) has not increased. Such information begs the question of what sort of influence abstinence-only sex education programs are having on today's youth, particularly when many such programs openly discourage condom use (SIECUS, 2006).

For the reasons mentioned above, this researcher believes that the current abstinence-only sexual education programs in the vast majority of America's public schools are inadequate and ineffective in addressing and solving many of our countries sexual health issues. Not only does America have the highest rate of teenage pregnancy among all developed nations, more than twice that of Canada and most Western European countries, but the spread of sexually transmitted infections is also at epidemic levels among American teens. In fact, rates of curable STIs in the U.S. are the highest of any country in the developed world and are higher than those in some developing regions

(Guttmacher Institute, 2006). Also, American teens are contracting HIV faster than almost any other demographic group in the country, with half of all new cases occurring in people between the ages of 15 and 24 (Planned Parenthood, 2001). And this is not only a health related issue. According to the Guttmacher Institute (2006), an estimated \$13 billion is spent annually in the U.S. on medical costs directly associated with STIs.

Adolescent Sexual Behavior

The factual health information which adolescents have is not the only important factor in making healthy choices about sexual behavior. How teens choose to use that information is what really makes a difference in the long run. Research indicates that there are many more factors that affect adolescent sexual behavior than the type of sexual education they receive in school. In a large scale, quantitative study on adolescent lifestyle choices conducted in an urban high school, He, Kramer, Houser, Chomitz, and Hacker (2004) found that higher academic achievement is directly related to healthier lifestyle choices among adolescents, including a greater likelihood of abstinence and more regular contraceptive use. They also found that peer approval for risky behavior encourages such behavior in adolescents, while parental disapproval discourages unhealthy lifestyle behaviors.

Based on self-reported perceptions about quality of life, Gerhardt, Britto, and Mills (2003) found that risky sexual behavior among adolescent girls was directly connected to what the girls saw as their own low health related quality of life. This indicates that while many adolescents are aware of the implications of risky sexual

behaviors for their health and perceived quality of life, they still continue to engage in such behaviors. Similarly, adolescent girls who become pregnant are more likely than their peers to have subsequent pregnancies despite their personal knowledge of the risks associated with unprotected sexual intercourse (Morgan, Chapar, & Fisher, 1995). Such behavior begs the question of why adolescents continue to engage in high risk behaviors when they understand the risks involved.

Low self-esteem, poor body image, and depression have been found to be major factors that contribute to adolescents' participation in high risk behaviors, and by analyzing seven Youth Risk Behavior Surveys (YRBSs) of 9th–12th graders conducted from 1991 through 2003, Anderson, Sentelli, and Morrow (2006) found that these factors, which are associated with poorly protected sex among adolescents, have remained the same since the early 1990s. Ethier et al. (2006) also found that there is a direct correlation between low levels of emotional stability and high rates of risky sexual behavior among adolescents. While Morgan et al. (1995) found no significant differences between pregnant and non-pregnant teens on the measurement of self-esteem, they did find that teens who were or had ever been pregnant felt much more strongly that there was a powerful other in their locus of control. In light of this research it appears that regardless of the type of sexual education received in school, adolescents with poor self-image or feelings of low self efficacy will continue to participate in unsafe sex practices as long as their self-image does not change. For these adolescents, the differences between abstinence-only and comprehensive sexual education programs as they exist today are insignificant factors in preventing unsafe sexual practices.

For many adolescents and adults, condom use is more than simply a health issue, and their use or lack thereof has nothing to do with high or low self-esteem or lack of self efficacy. Instead it comes down to an issue of trust and intimacy. For many individuals, a general perception is that if there is no trust there is no relationship, and a request from either partner for the other to wear a condom can and often is interpreted as an accusation of infidelity and an inherent lack of trust. In her study of adult heterosexual women, Sobo (1998) found that relationships in which condoms are not used are typically described by the female partner as being more intimate, trustworthy, compassionate, and loving. In a similar study with adolescents, Moore and Rosenthal (1998) also found that such sentiments about intimacy and condom use are common among adolescent girls. This research combined with Tracy, Shaver, Albino, and Cooper's (2003) findings that many adolescent girls have sex in order not to lose their boyfriends, carry with them heavy implications for the importance of teaching adolescents about building healthy, mutually respectful relationships as well as educating them about the dangers of STIs.

In her study on intimate relationships and risky contraceptive use among adult women, Sobo (1998) also found that the longer a relationship has been established, the less likely it is for a couple to use condoms even if they are unsure of the sexual health status of their partner. With time, trust in a relationship and in a partner is built. Couples get to "know" each other, which leads them to believe that they are safe from the transmission of STIs because they would simply know if their partner had one. Moore and Rosenthal (1998) suggest that many adolescents are at a heightened risk for STIs for the same reason. Adolescents tend to fall into and out of love much more rapidly than

adults, and are inclined to place more faith in their relationships after shorter amounts of time than adults do, leading to the early termination of condom use in unstable, shorter term relationships.

However, since it takes at least two people to engage in unsafe sexual behavior, it is important to look at adolescent sexual relationships as an entity and consider how comprehensive sexual education might benefit adolescents in that context. Fortenberry (2003) conducted a study of 39 heterosexual dyads ranging from ages 13 to 25 in order to determine the effect each individual partner has on the dyad relationship and vice versa. Subjects in the study were given self-administered questionnaires and participated in structured interviews. Partners always completed the questionnaires and interviews separately. Fortenberry (2003) found that health risk behaviors among adolescent couples are strongest when both individuals in the couple participate in a variety of risk taking behaviors, and conversely, substantial similarities in health-protective behaviors are also found within adolescent relationship dyads. However, when one member of an adolescent relationship dyad has primarily health-protective behaviors and the other has mostly high risk-taking behaviors, the dyad as a whole still generally does not practice risky sexual behaviors such as not using condoms or contraceptives of any form. This suggests that the positive influence of the low risk-taking member of an adolescent sexual relationship dyad influences the safety of the relationship as a whole when it comes to making decisions about contraception use and safer sex (Fortenberry, 2003).

Gordon (1996) postulates that cognitive factors, social and psychological factors, and cultural and societal factors are the three major areas that affect adolescent decision

making in regards to sexual activity and contraceptive use. In a qualitative study of pregnant and parenting teens, as well as teens that had been identified as at high risk for early pregnancy, and through looking at a variety of cognitive developmental theories and interviewing staff, teachers, and directors of programs for pregnant teens, Gordon (1996) found that adolescents use different forms of decision making in different situations, and that they weigh out the benefits of a situation based on variables different from those used by adults. Therefore, Gordon (1996) concludes that sexual education programs which help adolescents learn and practice decision making are more developmentally appropriate than programs which insist upon the existence of only one acceptable decision.

Abstinence-only sex education proponents disagree. According to Focus on the Family, a Christian faith based organization dedicated to “nurturing and defending families worldwide,” “Children need directive education - education that points them to a specific outcome. If sexuality education is taught in a condom - plus - abstinence format, the message is mixed and nondirective. Students are left confused as to the best health choice” (Klepacki, 2007). This form of education which Focus on the Family is encouraging, however, does not take into consideration the different phases of child development. As explained by Erikson (1963), children have different capacities for thought and action at different stages of their development. While young children have a concrete thought process and do in fact need “directive education,” such concrete teaching no longer meets a child’s needs by the time they have reached adolescence. In the developmental stage which Erikson termed identity vs. role confusion, adolescents

experiment with a variety of different identities and values in order to determine which fit them best. Unlike younger children, adolescents question the reasoning behind and implications of knowledge provided to them by adults in order to determine whether or not it fits into their own identity model. Therefore, providing adolescents with such “directive education” goes against their developmental needs, and expecting them to accept it without question goes against Erikson’s (1963) generally accepted theories of development.

According to Jacobs and Wolf (1995) who reviewed existing studies of a variety of formal comprehensive sex education programs, it has been found that comprehensive sexual education programs which include information on positive relationships with partners lead to increased contraceptive use among participants. After reviewing countless research on adolescent romantic relationships and adolescent sexual behavior, Barber and Eccles (2003) also discuss the importance of relationship education as a component of sexual education classes to teach adolescents about issues of respect and open dialogue amongst romantic couples. They argue that aiding in the development of interpersonal skills is equally as important as providing adolescents with the factual information and knowledge they will need in order to keep themselves safe.

All of this previous research strengthens the idea that the most effective form of sex education would be a program that discusses and teaches about healthy relationships and interpersonal communication as well as contraception and sexual health. For most adolescents the answer is not as simple as “just say no to sex” or “always use a condom no matter what.” Instead, they need to be provided with the skills to make safe and

healthy decisions and feel that they have the self efficacy of making those decisions based on the individual facts and realities of their own lives.

Other Sources of Sexual Health Information

When comprehensive sexual education is taken out of the schools and adolescents must turn elsewhere for sexual health information, a significant problem arises – who will provide them with the adequate, accurate information they are seeking? According to abstinence only proponents, sex education is the right and responsibility of the parents or the church. They believe that public schools are not capable of imparting the values and morals they personally espouse and therefore wish to take on the responsibility of educating their children about sex (Focus on the Family, 2007). This researcher agrees that it is not the sole responsibility of schools to educate America’s youth about sex and sexual health, and that parents should actively participate in the process. In fact, Somers and Surmann (2004) found that adolescents want to receive their sex education from their parents first and foremost. Secondly they want to receive such education from their schools, and according to Somers and Surmann (2004), despite the existing perception, surprisingly few teens want to look to their peers for their sexual knowledge. However, when parents are uncomfortable about or lack the knowledge to discuss sex and sexual health with their children, and schools are prohibited from doing so, teens have no choice but to look to their peers or the mass media for the information they are seeking, and thus many teens become grossly and dangerously misinformed (Brown et al., 2005; Steele, 1999).

When they are comfortable with the role, parents can be a positive source for sexual health information, as can older siblings. Klein et al. (2005) found that adolescents viewed their parents as effective sex educators when parents were able to have open and comfortable communication about issues of sex and sexuality, when they encouraged their children to ask questions, and when they started communications about sex at an early age. In a quantitative, longitudinal, comparative study conducted over 42 months, Kowal and Blinn-Pike (2004) found that conversations with parents and older siblings about sex lead to adolescents who engaged in less risky sexual behavior, had more consistent condom purchase and use, and were more likely to discuss condom use with their sexual partners. They also found that older siblings tend to impart messages of safe sex practices on their younger siblings even when the older sibling has engaged in unsafe sex practices. According to Kowal and Blinn-Pike (2004), it therefore stands to reason that adolescents who have open and comfortable relationships with their parents and/or older siblings are more likely to receive positive sexual knowledge from their families than those who do not. However, for a parent to be able to communicate so openly with their child, they must possess a level of comfort around issues of sex and sexuality and some general knowledge of the sex related issues facing today's adolescents.

This researcher believes that helping families engage in such conversations and empowering parents to feel comfortable and confident in speaking with their children about issues of sex and sexual health is of utmost importance since the majority of America's youth are no longer receiving such information in school. In a longitudinal comparative study with pre, post, and follow-up surveys Klein et al. (2005) found that

programs geared at preparing parents to discuss issues of sex and sexual health with their children were overwhelming successful in increasing the parent's comfort levels for such discussions, and in increasing the likelihood and frequency of raising such topics with their children. Studies show that creating and maintaining this open and comfortable level of communication among parents and adolescents is of great importance. In a study on health care seeking behaviors among adolescents, Fortenberry (1997) found that parent-child connections were central to addressing issues of adolescent's sexual health. Fortenberry's (1997) research shows that many adolescents turn to family members for help with problems related to health, and STIs are no different. However, adolescents who feel uncomfortable discussing their sexual health and behavior with their parents are at high risk of not receiving treatment for STIs or of attempting self treatment through douching or the use of leftover antibiotics. Such self treatment is dangerous as it can lead to a reduction of symptoms, but does not cure the STI, causing potential long term hazards to the adolescent's own health and a high likelihood of transmission of the STI to their sexual partner. Fortenberry (1997) also found that less family support was directly correlated with prolonged wait time before an adolescent sought an examination of the STI by medical professionals, leading to more severe cases with long term health implications.

What other options are then available to adolescents who do not have an open relationship with their families where they can discuss issues of sex and sexual health, or to adolescents whose parents do not feel comfortable in their ability to educate their children on such matters? If such an adolescent is not receiving comprehensive sex

education in school, they have no other resources but to rely on their peers and the mass media for their information about sex and sexual health. The frightening reality is that the schoolyard has never been known for its abundance of reliable information, and today's popular media is not much better. Brown, Halpern, and L'Engle (2005) found that girls who mature at an earlier age than their peers are more likely to turn to the media (television, movies, music, and magazines) for information about sex and sexuality, and are more likely to interpret the media as presenting scenes condoning adolescent sexual activity and giving them "sexual permission." Such teens are also less likely to consistently use contraception.

There is however one last resource for teens who do not receive comprehensive sexual education in school, can not broach the topic with their parents, and do not view their peers or the mass media as reliable sources for sexual health information – the primary care physician. Adolescents who are confident and self possessed enough to actively search for accurate information about sex and sexual health always have the option of turning to their primary care physician or other health care providers for the information they seek. However, it appears that the adolescent has to be very clear in making their quest for sexual health knowledge known. In Ziv, Boulet, and Slap's study on adolescent's utilization of physicians offices (as cited in Mulvihill et al., 2005) it was found that less than 3% of physicians reported providing counseling or education on STDs or HIV to their adolescent patients. In other words, if the adolescent patient didn't ask for such information outright, the physician did not broach the topic.

Individuals who expect their primary care physician to impart some knowledge on sexual health issues are apparently also looking to an unreliable source. And for adolescents without health insurance, the prospects are even worse. According to Mulvihill et al. (2005), adolescents without health insurance are less likely to communicate their questions to their health care providers, most likely because they are unable to build a relationship with one particular provider.

In a time when the internet has become commonplace and the sharing and accessing of information that was previously difficult to obtain is only as far away as a connected computer, it is possible that many of America's adolescents have more access to accurate sexual health information than we may think. But, with any and all sexual content blocked from the school library and the public library's internet access, only those with private computers will have the access to such free-flowing information. More research will have to be done to determine the impact of the internet on the acquisition of sexual health information by adolescents.

Of all the places an adolescent might turn for sexual health education, the research shows that parents, when they are open and knowledgeable enough about the topic, are the best resource. Schools with comprehensive sex education programs and health care professionals will also provide adolescents with accurate information, but the likelihood of their actually receiving information from such sources is, as has been shown, incredibly slim. Finally, adolescents can and do turn to their peers and the mass media for sexuality and sexual health information, but the information they gain from those sources

has the potential of making them less safe than they were when they first began their quest for knowledge.

Summary

On the basis of this literature review, it appears that there is a frightening amount of misinformation and lack of knowledge around sexual health issues amongst American teens. This is not an issue that only affects adolescents however. It also affects their families, public and private health clinics, and taxpayers. It is unclear whether or not sexual education programs of any type sufficiently prepare our nation's adolescents for responsible decision making and futures which consist of safer sexual behavior, but a large body of evidence does seem to suggest that comprehensive sexual education does a better job of protecting our youth than abstinence-only education. However, as has been shown, accurate information does not always influence sexual behavior, and more information is needed to determine exactly how effective both comprehensive and abstinence-only education programs truly are.

Based on the research, this researcher believes that there is a direct correlation between adolescents' experiences in sexual education classes, whether they are negative or positive, and their levels of engagement in risky sexual behavior. This researcher also believes that the more comprehensive sexual education adolescents receive, and the more consistently the message of safer sex is conveyed to them through school programs; through conversations with parents and siblings; from health care workers; and through positive, reliable media sources; the more likely they will be to delay the onset of sexual

activity, to have fewer sexual partners, and to regularly use contraception when they do become sexually active. Finally, this researcher believes that when adolescents do not receive comprehensive sexual education in school and do not feel comfortable discussing issues of sex and sexual health with their parents or other more reliable sources, they are at a heightened risk of contracting an STI or experiencing an unplanned pregnancy. It is this researcher's opinion that as a nation, we have a responsibility to provide our youth with the information and education they need to make informed and educated choices about actions that will inevitably affect their lives for years to come.

CHAPTER III

METHODOLOGY

For the past ten years the vast majority of American schools have been teaching abstinence-only sexual education with what appears to be little impact on adolescent sexual behavior. This study is designed to look at where adolescents are turning for more comprehensive education about sex and sexual health when they are not satisfied with the information they get in school, and to examine how adolescents' experiences in sexual education classes impact their sexual behavior. This study also takes into consideration adolescents' comfort levels for discussing issues of sex and sexual health with different people in their lives with the intention of better understanding who adolescents turn to for sexual health knowledge.

Based on the literature review, it is this researcher's hypothesis that expected findings for this study are as follows: adolescents who receive abstinence only sexual education in school get the majority of their more comprehensive sexual health knowledge from their peers; adolescents do not feel that abstinence only sexual education programs adequately meet their needs for sexual health knowledge; and while adolescents may prefer to get their sexual health information from their parents, the majority of families do not feel comfortable openly discussing issues of sexuality or sexual health, and thus adolescents turn to other, possibly less reliable sources for their sexual health information.

One possible unexpected finding of this study could be that adolescents who went through abstinence only sexual education programs feel that the education they received was adequate, and as a result did not turn elsewhere for more comprehensive sexual health information. Another unexpected finding could be that the majority of adolescents in the study who were not satisfied with their sexual education classes in school did not get most of their 'supplemental' sexual health information from their peers, but in fact received it from their parents or other more reliable sources.

For this study I gathered information from first-year college students about their experiences with sexual education and sexual health knowledge attained in middle and high school. In order to gather information from a large number of participants, and therefore be more representative, this study employed a quantitative research design. A fixed method, descriptive research design was used for data collection in which participants filled out a written self-report form about their acquisition of knowledge on issues of sex and sexual health, their levels of comfort in discussing issues of sex and sexual health with various people in their lives, and their current sexual behavior.

A descriptive research design was warranted for this study because after ten years of national funding for abstinence only sexual education programs, there still remain basic questions about the impact of such programs on adolescents' sexual practices and knowledge of sexual health (Anastas, 1999, p. 138). It is this researcher's intention to develop an understanding of the acquisition of additional sexual health knowledge among adolescents who have gone through abstinence only sexual education programs and/or those who have been dissatisfied with the sexual health information taught in their

schools. With a clearer understanding of if and how adolescents obtain additional sexual health knowledge when they are dissatisfied with what is provided in school, this researcher hopes to develop a theoretical model that explains why sexual health knowledge is attained in such ways, and to assist in making such information more readily available where applicable.

Sample

I used a large non-probability sample for this study. The sample includes a total of 56 participants, consisting of 15 males (26.8%) and 41 females (73.2%). Participants were college freshman between the ages of 18 and 20 who graduated from high school in 2006. Of the 56 participants, 50% (n=28) were 18 years old, 48.2% (n=27) were 19 years old, and 1.8% (n=1) were 20 years old. Participants may have received comprehensive sexual education, abstinence-only sexual education, or no sexual education at all while in middle school or high school. I limited my study to college freshmen because they are more likely to recall their high school educational experiences in detail, and they have the potential of being closer to the experience of searching for more comprehensive or additional sexual health information in places where it may not have been readily available. I obtained participants for my sample by soliciting responses to my survey in college student centers and other high traffic areas. This recruitment process is a form of accidental sampling. I chose to use accidental sampling because of its feasibility (Anastas, 1999, p. 286).

To ensure a diverse sample population I initially planned to solicit responses from freshmen at eight different colleges, including students from both public and private as well as two year and four year schools. However, I was only granted permission to conduct my study at three local schools (the University of Massachusetts at Amherst, Mount Holyoke College, and Smith College). As a result of soliciting study participants from these particular schools, my study findings will be much less generalizable than I first hoped. In order to acquire any male study participants, I had to conduct about half (51.8%) of my research at UMass, where the student body overwhelmingly consists of individuals who attended middle and high school in Massachusetts. Conversely, in order to obtain study participants who represent more diverse geographic locations I had to solicit the other portion (48.2%) of study participants from Smith and Mount Holyoke Colleges. As a result, my study is heavily weighted with female participants (73.2%), the majority of whom (65.9%) attend all women's colleges, making them unrepresentative of the majority of their peers who choose to study at co-ed institutions.

While accidental samples are quite feasible, they are not random, and such a sample may influence my study findings in ways that are unknown. It is impossible to discern what caused some students to stop and choose to participate in the study, while others chose not to complete the written self-report form. Such "volunteer bias" can not be calculated, nor can its impact be determined (Anastas, 1999, p. 286). In the case of a study on the topic of sexual education, there is a possibility that the participants were individuals who are generally more willing and open to discussing issues of sex and sexual health than those who opted not to participate. However, due to the incentive of

being entered into a raffle to win a \$50 gift certificate from Barnes & Noble, the students I approached overwhelmingly agreed to participate in the study.

Data Collection

For my study I used accidental sampling to gather quantitative data on a written self-report form. I gathered information about adolescents' attitudes, opinions, beliefs and behaviors, and questionnaires typically address these areas of data collection (Anastas, 1999, p. 374). As I was interested in gathering specific data related to a particular phenomenon, I created my own instrument for data collection. I addressed issues of validity and reliability by having my peers and my research advisor review my data collection instrument before beginning data collection.

The self-report form I created to collect data contains five categories of questions, which are as follows: demographic information; values, beliefs and attitudes; sexual education experience; sexual health knowledge acquisition; and personal sexual experience. The formation of these categories was designed to facilitate the completion of the questionnaire and to give respondents a clear understanding of the meaning of each question (For the complete questionnaire, please see Appendix C).

Data collection occurred at the University of Massachusetts at Amherst, Smith College, and Mount Holyoke College on five separate days in March and April of 2007. I wrote a letter to each school (see Appendix B) and obtained permission to conduct research on their campuses, then hung fliers advertising my study (see Appendix F) in the campus centers of each college on the days I conducted my research at that particular

school. I positioned myself at tables in each of the three colleges' student centers and other high traffic areas on campus, and approached all passers by, asking them if they were first year students, and then requesting that they participate in my study by completing a brief survey. First year students who agreed to participate read and signed an informed consent letter (see Appendix D) and then completed the surveys at the table. As a result, participation in the study was not entirely anonymous as participants completed the questionnaires in a public place in plain view of their peers. However, all information provided by study participants was completely confidential. Because the surveys did not contain names or code numbers, there was no way of connecting participants with their responses once the surveys were completed and returned to this researcher. In accordance with law, all data collected for this research project will be kept in a locked location for a period of three years, after which point it will be destroyed.

Benefits and Risks

Study participants had the option of being entered in a drawing for a \$50 gift certificate to Barnes & Noble for completing the survey. Participants who were interested in the raffle filled out a raffle ticket with their name and email address. Raffle tickets were kept in a separate location from completed surveys, and once a winner was selected and contacted, all raffle tickets were destroyed. Other benefits to participation in this study include playing an active role in helping mental health professionals understand the impact of abstinence-only sexual education on adolescents. There were some minimal risks involved with the completion of this survey as a result of possible emotional

discomfort or stress due to the disclosure of personal information about sexual behavior and experience. Information about services available to participants at their college health centers was made available to all participants in case of need (see Appendix E).

Data Analysis

I used both descriptive and inferential statistics in analyzing my data. With descriptive statistics I was able to describe my study sample as a group. I also used inferential statistics to make estimates about the experiences of adolescents in the larger population based on the data I collected from my sample group (Anastas, 1999, p. 466).

A variety of statistical tests were used in order to determine the relational findings of this study. Most commonly, Pearson correlations and t-tests were used, and a Cramers V test and crosstabulations were also done. Both the Pearson correlations and the t-tests were considered significant at less than .05.

CHAPTER IV

FINDINGS

Demographic Information

This study was made up of 56 participants, 15 (26.8%) males and 41 (73.2%) females. Students from Smith and Mount Holyoke Colleges made up 48.2% (n=27) of the participants, and the other 51.8% (n=29) were from the University of Massachusetts at Amherst. Participants ranged from age 18 to 20, with the mean age being 18.52. The racial composition of the sample was as follows: 69.6% (n=39) of participants identified as White, 16.1% (n=9) as Asian/Asian American, 5.4% (n=3) as African American, 5.4% (n=3) as Latino/a, and 3.6% (n=2) identified as other or chose not to identify themselves racially. The religious makeup of the sample consisted of 44.6% (n=25) of respondents who reported being nonreligious/atheist/agnostic, 37.5% (n=21) who identified as Christian, 5.4% (n=3) as Jewish, 5.4% (n=3) as Muslim, 1.8% (n=1) as Buddhist, and 5.4% (n=3) who identified as other or chose not to identify themselves religiously. The majority of study participants (94.6%, n=53) identified as heterosexual, 3.6% (n=2) identified as gay/lesbian, and 1.8% (n=1) identified as bisexual. Study participants attended high school in all four regions of the United States as well as internationally, with the geographic breakdown as follows: 62.5% (n=35) of respondents attended high school in the North East, 16.1% (n=9) in the South, 10.7% (n=6) in the Midwest, 7.1% (n=4) in the West, and 3.6% (n=2) attended high school internationally.

Sexual Behavior

When reporting on their current levels of sexual activity, which for this study encompassed penile/vaginal, oral, and anal sex as well as mutual masturbation, 37.5% (n=21) of participants reported being moderately sexually active, 35.7% (n=20) reported never having been sexually active, 14.3% (n=8) reported being regularly sexually active, and 12.5% (n=7) reported being rarely sexual active.

As mentioned in the Methodology, I collected half of my data from students at Smith College and Mount Holyoke College in order to attain some geographic variety among study participants and the other half from the University of Massachusetts at Amherst in order to attain male participants. I hypothesized that while males and females from coed colleges have similar rates of sexual activity, students from all women's colleges have lower rates of sexual activity than their peers. This hypothesis was tested using a t-test, and a significant difference was found, with students from Smith and Mount Holyoke reporting a mean level of sexual activity of 1.93 and the UMass respondents reporting a mean of 2.66 on a four point scale with 1 representing "never have been sexually active," and 4 representing "am regularly sexually active" ($t(54)=2.578, p=.013$, two-tailed). To determine if differences exist by gender, a t-test was also utilized. No significant difference exists between male and female respondents, and no significant difference exists by gender among the UMass respondents when tested as a separate group. The mean level of sexual activity amongst all study participants was 2.30, which indicates an average level between "rarely sexually active" and "moderately sexually active" that is closer to the rare end of the spectrum.

Respondents' age at first sexual activity ranged from 12 years to 19 years, with the mean age at first sexual activity being 16.47 years. Of those participants who reported any level of sexual activity, 63.9% (n=23) reported that they used some form of contraception at the time of their first sexual activity, while 36.1% (n=13) of them used no form of contraception. Of those 23 students who did use contraception at the time of their first sexual activity, all 23 used a condom, and 4 of them (17.4%) also used some form of hormonal contraception.

When reporting on how regularly they currently use contraception during sexual intercourse, respondents indicated a mean use of 8.12 on a ten point scale ranging from "never" to "all the time." Respondents reported a mean of 8.91 on a ten point scale measuring how likely they are to use contraception for the purpose of birth control, and a mean of 9.45 on a ten point scale measuring how likely they are to use condoms for the purpose of preventing STIs.

When testing the hypothesis that individuals who had their first sexual activity at a later age are more likely to use contraception at the time of their first sexual activity, a t-test comparing respondents age 15 and younger with respondents age 16 and older was used. No significant difference in contraception use at first sexual activity was found between the two age groups.

Values, Beliefs and Attitudes

On a ten point scale respondents reported a mean of 4.56 on how important their religion is to them and a mean of 3.85 on how important they think it is for individuals to

abstain from sex until marriage. However, with 54.5% of study participants reporting some degree of religious affiliation, and with 70% of those participants identifying as Christian, I formed the hypothesis that within this study there would be a direct correlation between the importance of religion and how important one believes it is to abstain from sex until marriage. Using a Pearson correlation, a significant positive correlation was found between the importance of one's religion and how important that person feels it is to abstain from sex until marriage ($r=.500$, $p=.000$). This suggests that the more important an individual's religion is to them, the more important they believe abstinence until marriage is as well. Using a Pearson correlation between a scale measuring the importance of abstinence and one measuring sexual activity, a significant negative correlation was found ($r=-.433$, $p=.001$), indicating that the more important abstinence until marriage is rated, the less sexual activity respondents are reporting.

When questioned about their own intentions to abstain, 42.9% ($n=24$) of study participants reported ever intending to abstain from penile/vaginal sex until marriage, and 62.5% ($n=15$) of those respondents report that they are currently abstaining; 30.4% ($n=17$) reported ever intending to abstain from oral sex until marriage, and 64.7% ($n=11$) of those report that they are currently abstaining; 37.5% ($n=21$) reported ever intending to abstain from anal sex, and 76.2% ($n=16$) of those reported that they are currently abstaining; and 30.4% ($n=17$) reported ever intending to abstain from mutual masturbation, and 64.7% ($n=11$) of those report that they are currently abstaining. The majority of study participants do not currently intend to abstain from any form of sexual activity until marriage, with the breakdown as follows: 73.2% ($n=41$) do not currently

intend to abstain from penile/vaginal sex until marriage, 80.4% (n=45) do not intend to abstain from oral sex, 71.4% (n=40) do not intend to abstain from anal sex, and 80.4% (n=45) do not intend to abstain from mutual masturbation until marriage.

Study respondents reported a mean level of 5.50 on a ten point scale measuring how open their families are to discussing issues of sex, sexual health, and sexuality. However, when using a ten point scale ranging from “not comfortable” to “very comfortable” to rate how comfortable they felt discussing issues of sex, sexual health, and sexuality with different individuals while in middle school and high school, respondents reported, a mean comfort level of 4.90 with siblings, a mean comfort level of 4.73 with parents or guardians, and a mean comfort level of 3.54 with other family members. On this same scale, respondents reported a mean comfort level of 7.13 in discussing issues of sex, sexual health, and sexuality with peers, a mean comfort level of 5.95 with primary care physicians or other health care workers, a mean comfort level of 3.20 with teachers, and a mean comfort level of 2.79 with religious mentors.

Sexual Education and Knowledge Acquisition

All study participants reported receiving some form of sexual education in middle school or high school. Sex education was first received anywhere from the 4th to the 11th grade, with the median being the 7th grade. Contraception was mentioned in some way in 96.4% (n=54) of respondents’ sex education classes, while only 3.6% (n=2) of respondents reported that contraception was not mentioned at all. Of those who reported that contraception was mentioned, 57.4% (n=31) indicated that it was portrayed as highly

effective, 40.7% (n=22) indicated that it was portrayed as somewhat effective, and only 1.8% (n=1) indicated that contraception was portrayed as ineffective in their sex education classes. Forty-seven respondents (83.9%) reported that issues pertaining to positive relationships were discussed in their sex education classes, while the other 16.1% (n=9) reported that they were not. When rating how well they felt the information provided in their sex education classes met their needs at the time, respondents reported a mean satisfaction level of 6.93 on a ten point scale ranging from “did not meet needs” to “met all needs.”

A Pearson correlation testing the hypothesis that sex education classes that start in earlier grades are more likely to meet students’ needs found no significant correlation. However, when examining the hypothesis that sex education classes that mention contraception as more effective are more likely to meet students’ needs, a t-test showed that there was a significant difference between those who were taught that contraception is “somewhat effective” compared to those taught it is “highly effective” ($t(51)=-3.3371$, $p=.001$, two tailed). The group in which contraception was portrayed as “somewhat effective” rated their classes lower on a ten point scale ($m=5.77$) than those whose classes portrayed contraception as “highly effective” ($m=7.77$).

In testing the hypothesis that where participants got their sexual education information and where they would have preferred to get such information do not match up, I found that this hypothesis was in fact incorrect. Using the frequencies to determine what the top three sources of sex education information were and comparing that with the top three preferred sources of information based on how many study respondents gave

each category a 1-3 score, I found that the top three sources from which respondents got information and the top three sources from which they would have preferred to get their sexual education information were the same, but in a slightly different order.

Respondents got the majority of their sexual education information from school (n=42), peers (n=38), and parents (n=24), while they reported that they would have preferred to get such information from school (n=35), parents (n=30), and peers (n=24). See Table 1 for information on how respondents rated other sources of sexual education information.

Table 1
Top Actual and Preferred Sources for Sexual Education Information

	Actually Got Info			Preferred to Get Info		
	# rated 1	# rated in Top 3	mean	# rated 1	# rated in Top 3	mean
School Sex Ed. Program	21	42	2.2	22	35	2.07
Parent/Guardian	10	24	3.32	14	30	2.23
Siblings	4	13	4.36	6	15	3.68
Other Family Members	3	6	4.91	3	8	5.14
Peers	18	38	2.32	9	24	3.17
Health Care Workers	7	17	4.14	9	21	3.32
Family Planning Clinic	0	1	6.93	3	6	4.68
Pamphlet/Books/Internet	10	21	3.24	6	19	3.7
TV/Movies	3	16	3.76	0	7	5.36
Pornographic Material	2	6	6.48	0	2	7.87

In considering study respondents' comfort levels in discussing issues of sex, sexual health, and sexuality, I hypothesized that the more comfortable they felt about discussing issues of sex and sexual health with various sources, the more information they will have received from those various sources, and for those respondents, there would not be a large difference between where they got their sexual education information and where they would have preferred to get it. Pearson correlations showed

significant negative correlations between respondents' comfort levels in discussing issues of sex and where they got their sexual health information when it came to parents ($r=-.612$, $p=.000$, two-tailed), siblings ($r=-.398$, $p=.036$, two-tailed), and other family members ($r=-.577$, $p=.005$, two-tailed). This suggests that the more comfortable respondents were discussing issues of sex and sexuality with these various sources, the more likely they were to get sexual health information from them. The correlation is negative because the comfort scale runs from 1 representing "not comfortable" to 10 representing "very comfortable," while respondents rated their primary sources of sexual health information as 1 and subsequent sources with lower numbers. Therefore, for parents, siblings, and other family members, as the comfort levels approached 10, the amount of information received from that source approached 1. Pearson correlations also showed significant negative correlations between respondents' comfort levels of discussing issues of sex and where they would have preferred to get their sexual health information when it came to parents ($r=-.344$, $p=.043$, two-tailed), siblings ($r=-.517$, $p=.008$, two-tailed), other family members ($r=-.487$, $p=.025$, two-tailed), peers ($r=-.341$, $p=.045$, two-tailed), and health workers ($r=-.348$, $p=.032$, two-tailed). This suggests that the more comfortable respondents felt discussing issues of sex, sexual health, and sexuality with each of these sources, the more they preferred to get such information from each of these sources. These Pearson correlations showed no significant correlation between comfort levels in discussing sex with peers and whether or not peers were an actual source of sexual health information, comfort levels in discussing sex with health workers and whether or not health workers were an actual source of sexual health

information, or between comfort levels in discussing issues of sex and sexual health with teachers and whether or not school sexual education programs were an actual source or preferred source for sexual health information.

In looking at where study participants might have gone for sexual education information outside of school, family, and peers, the findings show that slightly more than half of study participants reported that their level of access to a sexual health/family planning clinic while in middle school and high school was either “unknown” (37.5%, n=21) or that they had no access (14.3%, n=8), while a little less than half of the respondents reported having either limited access (25.0%, n=14) or easy access (23.2%, n=13) to such a clinic while in middle school and high school.

When rating the reliability of their current sexual health knowledge on a ten point scale ranging from “not at all” to “very” reliable, study participants reported a mean knowledge reliability level of 8.54, with 49.1% (n=27) reporting that they received the majority, 38.2% (n=21) reporting that they received some, and 12.7% (n=7) reporting that they received very little of that knowledge in their middle school and high school sexual education classes. A Pearson correlation shows no significant correlation between how reliable respondents feel their current level of sexual health knowledge is and how much of that knowledge they received in high school.

Relationships Between Sexual Education and Adolescent Sexual Behavior

As mentioned above, study participants reported a mean satisfaction level of 6.93 on a ten point scale when rating how well they felt the information provided in their sex

education classes met their needs at the time. A t-test was used to test the hypothesis that how well sex education classes met respondents' needs would be directly related to the use of contraception at first sexual activity. No significant difference in the mean satisfaction scores was found between those who reported using contraception at first sexual activity and those who did not use contraception at first sexual activity. A Pearson correlation also showed no significant correlation between how well sex education classes met respondents' needs and the regularity with which they currently use contraception, how likely they are to use contraception for birth control, and how reliable they feel their current level of sexual health knowledge is. There was a positive correlation between how well sex education classes met respondents' needs and how likely they are to use condoms for the prevention of STIs ($r=.357$, $p=.007$, two tailed). This positive correlation suggests that the more their sex education classes met their needs, the more likely respondents are to use a condom for the prevention of STIs.

To test the hypothesis that regardless of how contraceptives are portrayed, sex education classes have very little effect on adolescent sexual behavior, and therefore, teaching about the benefits of contraception use does not increase sexual behavior among students, I had intended to examine the correlation between how contraception was portrayed in sexual education classes (ineffective, somewhat effective, or highly effective) and how particular sexual activities were affected by sexual education classes (activity was not affected, activity increased, activity decreased, chose to abstain, or chose to abstain despite previous sexual activity). This turned out to be a difficult

analysis because many of the categories had very few respondents in them, and a Cramers V test showed no significant findings.

The descriptive statistics about the effects of sexual education classes on specific sexual behaviors can be seen in Table 2. For the majority of study participants, sexual activity was not affected by their sexual education classes regardless of how contraception was portrayed. Of the respondents who answered each of these questions, 64.4% (n=29) reported that penile/vaginal sexual activity was not effected by their sexual education classes, 71.1% (n=32) reported that oral sexual activity was not affected by sexual education classes, 69.6% (n=32) reported that anal sex was not effected by sexual education classes, and 79.1% (n=34) reported that their level of mutual masturbation was not effected as a result of sexual education classes.

Table 2

Effect of Sexual Education Classes on Sexual Activity by how Contraception is Portrayed

Sexual Activity	How Contraception was Portrayed in Sex Ed.				total
	Not Mentioned	Ineffective	Somewhat Effective	Highly effective	
<u>Penile/Vaginal Sex</u>					
Not Affected	1	1	13	14	29
Increased	0	0	1	3	4
Decreased	0	0	1	1	2
Chose to Abstain	0	0	4	6	10
Chose to Abstain Despite Previous Activity	0	0	0	0	0
<u>Oral Sex</u>					
Not Affected	1	1	17	13	32
Increased	0	0	0	3	3
Decreased	0	0	1	1	2
Chose to Abstain	0	0	2	5	7
Chose to Abstain Despite Previous Activity	0	0	0	1	1
<u>Anal Sex</u>					
Not Affected	1	1	18	12	32
Increased	0	0	0	1	1
Decreased	0	0	0	1	1
Chose to Abstain	0	0	2	9	11
Chose to Abstain Despite Previous Activity	0	0	0	1	1
<u>Mutual Masturbation</u>					
Not Affected	1	1	18	14	34
Increased	0	0	0	2	2
Decreased	0	0	0	1	1
Chose to Abstain	0	0	2	4	6
Chose to Abstain Despite Previous Activity	0	0	0	0	0

CHAPTER V

DISCUSSION

The intention of this study was to look at adolescents' experiences in school sexual education programs and to examine how abstinence only and comprehensive sexual education programs impact adolescent sexual behavior. This study also set out to examine where adolescents turn for more comprehensive sexual health information when they are not satisfied with what they are receiving in school.

Sexual Behavior

Study participants reported a mean level of sexual activity of 2.30, which is only slightly higher than "rarely sexually active." This researcher believes, and the findings of this study suggest, that if all study participants had been recruited at coed colleges, the samples' mean rate of sexual activity would have been higher and as a result more indicative of that of the general first year college population. Therefore, due to the number of study participants from all women's colleges, these findings are not as generalizable as they might have been if the sample had been made up only of coed college students.

It is also important to note that only 3 of the 56 study participants identified as anything other than heterosexual. For this reason it is important to keep in mind that these findings are not necessarily representative of gay, lesbian, or bisexual adolescents and

their experiences with sexual education, both school based and from other sources. In order to better understand the experiences of homosexual and bisexual youth in sexual education programs and their acquisition of sexual health knowledge from other sources, more research would need to be done. Examining homosexual and bisexual adolescents' levels of comfort in discussing issues of sex, sexuality, and sexual health with various individuals, and determining where they are receiving the majority of their sexual health information is of particular importance due to the stigma against homosexual sexual activity and the homophobic nature of our society.

When looking at rates of contraception use, participants in this study reported condom use at first sexual activity at a rate very close to the national average. Participants also reported using some form of contraception about 81% of the time. This number is heartening, but it also indicates that adolescents are having unprotected, and therefore unsafe sex at least 19% of the time. Interestingly, participants reported that their likelihood of using contraception is much higher than their actual use. These findings illustrate the relationship between actual behavior and best intentions. It appears that while adolescents overwhelmingly intend to use condoms and other forms of contraception to protect against STIs and pregnancy, the reality of their actually doing so is significantly lower. While this high intention to practice safer sex instills some hope for the sexual health of America's adolescents, what will be truly important is helping those adolescents to be more successful with the carry-through of contraception use in the heat of the moment. Perhaps this discrepancy between the intention to use contraception

and actual use is due to the well documented adolescent feeling of invincibility or the belief that they will not actually be the one to contract an STI or to get pregnant.

To this researcher's surprise, this study showed no increase in contraception use among adolescents who delayed the onset of sexual activity. Contraception use at the time of first sexual activity was examined in participants ages 15 and younger and those ages 16 and older, and no significant difference was found between the two groups. Previous research suggests that adolescents who delay the onset of sexual activity are more likely to use contraception when they do decide to become sexually active. The inconsistency of this study's findings with the findings from past research could be a result of comparing adolescents ages 15 and younger to those 16 and older. It is very possible that the use of contraception at the time of first sexual activity drops off considerably at age 13 or 14. However, in this study, examining groups of participants who became sexually active at ages 14 and younger or 13 and younger was not feasible due to the limited number of respondents who fell into those age categories.

Values, Beliefs and Attitudes

While this researcher believes that sexual education is extremely important, it is by no means the only thing that impacts adolescent sexual behavior. For this reason, adolescents' values, beliefs, and attitudes towards sexuality and sexual behavior were also examined in this study, as well as their own comfort levels in discussing such issues with various individuals in their lives. This researchers' intentions of looking at these areas was to determine how other factors contribute to the education of adolescents

around issues of sexual health, as well as to gain insight into how these other factors also impact adolescent sexual behavior.

With a mean level of only 3.85 on a ten point scale of how important participants believe it is to abstain from sexual activity until marriage, and with only 26.8% of respondents currently intending to do so, it is evident that abstinence only teachings, at least with this sample, would primarily be falling on deaf ears. However, while the percentage of respondents who reported ever intending to abstain from sexual activity until marriage was a definite minority, this study has shown that the majority of those individuals still intend to abstain. For most of those individuals it appears that it is religion, as opposed to the type of sexual education they received, that drives their conviction.

In assessing study participants' level of comfort in discussing issues of sex, sexual health, and sexuality with various individuals in their lives, the results show that on a ten point scale respondents had a mean comfort level of 4.90 in discussing these issues with siblings, 4.73 with parents or guardians, and 3.54 with other family members. However, respondents also reported a mean level of 5.50 on a ten point scale measuring how open their families are to discussing issues of sex, sexual health, and sexuality. While there is no way of knowing for sure, this disparity in openness and comfort levels could be due to study respondents reporting on how open their families currently are, while also reporting on how comfortable they felt while in middle school and high school. With age and independence (participants were all students at colleges where the vast majority of first year students live on campus) perhaps participants have gained more comfort in

discussing issues of sex with their families. Regardless of what caused this discrepancy, it is important to note that most families are not very open to discussing issues of sex, and perhaps as a result, that most adolescents do not feel comfortable discussing such issues with their families. This raises the question of how reasonable is it to leave the responsibility of sexual education up to families when they appear to be uncomfortable, at least from the adolescents' perspective, about taking on the task.

Sexual Education and Knowledge Acquisition

The fact that all study participants reported receiving some form of sexual education while in middle school or high school is inspiring, but for a number of these participants, such education came only in the form of Biology or Theology classes, and for others, such education started as late as the 11th grade. Among this sample, the average age at the onset of sexual activity was 16.47 years, an age at which most adolescents are in the 10th grade. For this sample, and in this researcher's opinion, for the general American population, starting to teach sexual education in the 11th grade is too late to make a difference in the average adolescent's decision making about sexual behavior, for on average, they have already become sexually active by that time.

Even though no evidence was found in this study to suggest that sexual education that starts in earlier grades is more likely to meet students needs, this researcher believes that the average age of the onset of sexual activity clearly shows that there can be some dangers in not starting the teaching of sex education early enough. Also, with respondents

reporting sexual activity at ages as young as 12 years, it seems important to begin the teaching of sexual education early.

A 6.93 satisfaction level on a ten point scale measuring how well sexual education classes met respondents' needs at the time suggests that while sex education classes are not necessarily failing, there is still some room for improvement. This study seems to show that moving toward more discussion of the benefits of contraception use is one identified direction for positive growth. Students who received such information were significantly more satisfied with their sexual education classes than those who did not.

While there was only a minor difference in the order of where study participants got the majority of their information about issues of sexuality and sexual health, and where they report that they would have preferred to get such information, this data is still of great significance to this study. Not surprisingly, two of the top three preferred sources for sexual health information identified by participants were school sexual education programs and parents or guardians. This data is consistent with existing research and was an expected finding of this study. It is surprising and inconsistent with previous research however, that the list also included peers. This study does show that adolescents are getting more of their sexual health information from their peers than they would generally like, but despite this fact they still listed peers in the top three preferred sources for such information. Participants did report that they feel more comfortable discussing issues of sex and sexual health with their peers than anyone else, but this does not mean that they wanted to have to rely upon those peers for as much of their sexual health information as they actually did. Consistent with previous research, adolescents in this

study wanted to get more of their sexual health information from their parents and guardians than they actually got, which suggests that parents are not talking to their children about issues of sex and sexual health as much as they could be.

Measuring where adolescents would have preferred to receive their sexual health information in comparison to where they did receive such education is a difficult question because it is hard for participants to state that they would prefer something that they may not have experienced. For example, for an adolescent who has had no access to a sexual health/family planning clinic and therefore has no basis for understanding what kind of a resource it might have been, the likelihood that they would then say they would have preferred to get more of their information from that source is very slim. Conversely, if an adolescent got the majority of their sexual health information from their peers even if they did not want to, it would be equally as difficult for them to conceptualize getting that information from another source, which may be the cause for peers still appearing in the top three preferred sources of sexual health information.

It is important to note that adolescents in this study would have preferred more information from their parents and guardians, sexual health/family planning clinics, primary care physician or other health care workers, siblings, and other family members than they actually got, and that they would have liked to rely less heavily on peers, television and movies, school sexual education programs, pornographic material, and pamphlets/books/internet for their sexual health information, most of which are significantly less reliable than the sources they would have preferred more information from. These findings indicate that adolescents know what they need and have an idea of

where to find the most reliable information about issues of sexual health, but that they are not necessarily self-possessed enough to take the initiative to raise such issues and get such information from those sources on their own.

Study participants' comfort levels in discussing issues of sex with various people in their lives had a large impact on where they got their sexual health information and on where they would have preferred to get such information. This was particularly true when it came to their parents and guardians, siblings, and other family members. This suggests that the more comfortable adolescents feel in discussing issues of sex and sexual health with each of these sources, the more information they get from them, and the more they see them as a preferred source for such information. Similarly, adolescents in this study also preferred to get more information from their primary care physicians or other health care workers when they felt more comfortable discussing issues of sexual health with them, but this comfort level and desire for information had no bearing on whether or not health care workers were an actual source for sexual health information. This finding suggests, as is consistent with previous research, that primary care physicians and other health care workers are not raising the subject of sexual health with their adolescent patients.

The number of study participants who had no access to a sexual health/family planning clinic while in middle school or high school and those whose level of access was unknown (a combined total of 51.8% (n=29) of study respondents) has large implications for such clinics as well as for the medical profession in general. These findings suggest that clinics may need to make themselves more known in their

communities in order to become better resources for adolescents in those communities. This finding also indicates that the only place the majority of adolescents can go for accurate medical information about sexual health when they do not feel comfortable discussing such issues with their parents or are not getting the information they need in school, is to their own doctor's office, if they have one. While this study clearly shows that adolescents feel comfortable discussing such issues with their primary care physicians and other health care workers (at a mean comfort level of 5.95 and only surpassed by their comfort level of discussing such issues with their peers), it also indicates that the likelihood of adolescents actually receiving such information from health care workers is slim. This suggests that primary care physicians and others in the medical profession should take more initiative in raising such issues and providing such information to adolescents. After all, the data shows that such actions would be well received.

This study did not indicate that the information that adolescents received in their school sexual education classes was perceived as more, or less reliable than the information they received from other sources. This finding is somewhat concerning because it suggests that adolescents are unable to determine the reliability of their sources of information. With peers being the second most common source for sexual health information, it seems to reason that the information their peers provide is seen by adolescents as just as reliable as the information provided in school sexual education programs.

Relationships Between Sexual Education and Adolescent Sexual Behavior

A particularly interesting finding of this study was how little of an impact adolescents' levels of satisfaction with how well their sexual education classes met their needs has on their sexual behavior. How well their sexual education classes met their needs while in middle school and high school seems to have no impact on whether or not respondents used any form of contraception at the time of their first sexual activity, the regularity with which they currently use contraception, how likely they are to use contraception for birth control, or how reliable they feel their current level of sexual health knowledge is. This suggests that an adolescent who felt that their sexual education classes met almost all of their needs and an adolescent who felt that their classes met hardly any of their needs will still both use or not use contraception at the same rate. The only impact sexual education classes seem to have is on the intended use of contraception for the prevention of STIs. Adolescents who felt that their classes better met their needs are much more likely to use condoms for the prevention for STIs than their peers who did not feel that their classes met their needs. This finding is consistent with previous research done on the impacts of abstinence-only sexual education, which suggest that adolescents who have had abstinence-only education are much less likely to use contraception for the prevention of STIs when they become sexually active because they have generally been taught that condoms and other forms of contraception are unreliable.

The majority of study participants reported no change in their sexual activity as a result of sexual education classes. This implies that teaching adolescents about sex and sexual health does not encourage them to become sexually active. In fact, this study

shows that of the participants who received sexual education in which contraception was portrayed as highly effective, more chose to abstain from sexual activity as a result of their classes than chose to increase their sexual activity. In other words, teaching adolescents, at least those in this study, that contraception is highly effective does not encourage them to become sexually active at higher rates.

Implications of Findings

The findings of this study have a number of different implications for various fields. As mentioned above, the implications for the field of medicine are clear; primary care physicians and other health care workers should take a more proactive role in discussing issues of sex and sexual health with their adolescent clients. By initiating such discussions, health care workers would open the door for adolescent clients to ask questions and request information they may be too shy to ask for without being prompted.

The implications of these findings for school based sexual education programs also seem clear to this researcher. While the discussion of the benefits of contraception does not seem to encourage an increase in adolescent sexual activity, it does increase adolescents' intentions to use condoms for the prevention of STIs. At a time when adolescents are at alarmingly high risk for contracting STIs and HIV, this information is very significant, and could be instrumental in protecting adolescent health.

School based sexual education programs that are willing to partner with parents or guardians and other family members also seem like they would go a long way toward

increasing adolescent sexual health knowledge. Programs that can teach parents how to discuss issues of sex and sexual health with their adolescent children would not only enable parents to communicate their values around sex in a way that is comfortable to them, but would also fulfill adolescents' desires to receive more of their sexual health information from their parents.

Finally, the implications of this study for the field of social work are a bit less clear, but nonetheless important. All social workers working with adolescent populations, regardless of the capacity of that work, should be aware that their clients are often seeking, in ways that may not seem obvious, reliable information about issues of sex, sexuality, and sexual health. In order to ensure the safety of our adolescent clients, social workers need to be willing to either act as a resource when called upon by clients, or be able to point them in the direction of reliable, non-judgmental information about sex and sexual health. Parents of adolescents also often need guidance in how to discuss issues of sex and sexual health with their children, and perhaps they would be well served if we as social workers were willing to take on such a role.

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Appendix A

December 15, 2006

Stephanie Agnew
186 A. South Street
Northampton, MA 01060

Dear Stephanie,

Your second revisions have been reviewed and all is now in order. We are glad to give final approval to your project.

Please note the following requirements:

Consent Forms: All subjects should be given a copy of the consent form.

Maintaining Data: You must retain signed consent documents for at least three (3) years past completion of the research activity.

In addition, these requirements may also be applicable:

Amendments: If you wish to change any aspect of the study (such as design, procedures, consent forms or subject population), please submit these changes to the Committee.

Renewal: You are required to apply for renewal of approval every year for as long as the study is active.

Completion: You are required to notify the Chair of the Human Subjects Review Committee when your study is completed (data collection finished). This requirement is met by completion of the thesis project during the Third Summer.

Good luck with your very interesting study.

Sincerely,

Ann Hartman, D.S.W.

Chair, Human Subjects Review Committee

CC; Nel Wijnhoven, Research Advisor

Appendix B
Study Recruitment Permission Letter

Stephanie Agnew
186A South Street
Northampton, MA
01060

December 8, 2006

College Address

Dear _____:

I am pursuing my masters in Social Work at Smith College School for Social Work, and am currently in my second year of study. As a requirement for the MSW degree from Smith, I must complete a masters thesis project. For my research study I have chosen to examine how adolescents' experiences with sexual education affect their own sexual behavior.

I am writing to you because I would like to attain participants for my study among members of your student body. I would like to administer a short confidential survey to first year students in your campus center or other high traffic area on campus. If permission is granted, I plan to set up a table containing my survey, and unobtrusively ask first year students who pass by to take a few minutes to fill out a questionnaire.

There are no questions on the survey that would identify the students as members of the (name of college) community. Their responses to the survey will reflect their learning experiences in Middle and High School and their current beliefs and practices, and will not be connected to their (name of college) experience in any way. The students' responses to the questionnaire will be kept confidential, and their participation in the study will be anonymous.

I would like to begin administering my questionnaire as soon as possible, and look forward to your response regarding my request to do so on you campus. Please do not hesitate to contact me with any questions or comments. You can reach my through email at sagnew@smith.edu, or on my cell phone (413) 219-1367.

Sincerely,

Stephanie Agnew
Smith College School for Social Work, '07

Appendix C

Data Collection Instrument

I. Demographic information

1. Gender: Male Female Transgender
2. Age: _____ years
3. If you would like to identify yourself as a member of a racial or ethnic group, please do so below:
(Check all that apply)
 - Latino/a
 - White
 - Black or African American
 - American Indian or Alaska Native
 - Asian
 - Native Hawaiian Pacific Islander
 - Some Other Race or Combination (specify): _____
4. Religion:
 - Christian
 - Jewish
 - Muslim
 - Buddhist
 - Hindu
 - Nonreligious/Atheist/Agnostic
 - Other (specify): _____
5. Sexual Orientation:
 - Heterosexual
 - Gay/Lesbian
 - Bisexual
 - Transgender
 - Other (specify): _____
6. State(s) in which you attended Middle School and High School: _____
International students, Country in which you attended Middle School and High School: _____

II. Values, Beliefs and Attitudes

Please circle one

- | | | | | | | | | | | | |
|--|-----------------|---|---|---|---|---|---|---|---|---|------------------|
| | Not at all | | | | | | | | | | Very |
| 7. How important is your religion to you? | N/A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 8. How important do you think it is for individuals to abstain from sex until marriage? | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 9. How open is your family to discussing issues of sex, sexual health, and sexuality? | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 10. When in Middle School and High School, how comfortable did you feel discussing issues of sex, sexual health, and sexuality with: | Not Comfortable | | | | | | | | | | Very Comfortable |
| a. parent or guardian | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| b. siblings | N/A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| c. other family members | N/A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| d. peers | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| e. teachers | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| f. religious mentors | N/A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| g. primary care physician or other health care worker | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

III. Sexual Education Experience

11. Did you receive any form of sexual education in Middle School or High School? Yes No
 If yes, in what grade did you first receive sexual education? _____
 If no, Skip to question # 15.
12. Was contraception use (condoms, dental dams, the pill, etc.) mentioned in your sexual education class(es)? Yes No
 If yes, how were contraceptives portrayed? ineffective somewhat effective highly effective
13. Were issues pertaining to positive relationships, such as mutual respect and open communication discussed in your sexual education classes? Yes No
- | | | | | | | | | | | | |
|--|--------------------|---|---|---|---|---|---|---|---|---|---------------|
| 14. Do you feel that the information provided to you in your sexual education classes adequately met your needs at the time? | Did not meet needs | | | | | | | | | | Met all needs |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

IV. Sexual Health Knowledge Acquisition

15. When in Middle School and High School, **where did you get** most of your information about issues of sexuality and sexual health? Please rate as follows: 1 = most info, 2 = second most, etc. Leave blank those that do not apply.

- school sexual education program
- parent or guardian
- siblings
- other family members
- peers
- health care workers (doctors, nurses, etc.)
- sexual health/family planning clinic
- pamphlets/books/internet (not obtained in school)
- TV and movies
- pornographic material
- other (specify) _____

16. When in Middle School and High School, **where would you have most preferred to receive** your sexuality and sexual health information? Please rate as follows: 1 = most preferable, 2 = second most preferable, etc. Leave blank those that do not apply.

- school sexual education program
- parent or guardian
- siblings
- other family members
- peers
- health care workers (doctors, nurses, etc.)
- sexual health/family planning clinic
- pamphlets/books/internet (not obtained in school)
- TV and movies
- pornographic material
- other (specify) _____

17. When you were in Middle School and High School, did you have access to a sexual health/family planning clinic in your community? easy access limited access no access unknown

V. Personal Sexual Experience

If you are heterosexual, please answer questions #18 and #19. Otherwise, skip to question #20.

18. **Did you ever** intend to abstain from any of the following until marriage? (check all that apply)

- penile/vaginal intercourse
- oral sex
- anal sex
- mutual masturbation
- other (specify) _____

19. **Do you currently** intend to abstain from any of the following until marriage? (check all that apply)

- penile/vaginal intercourse
- oral sex
- anal sex
- mutual masturbation
- other (specify) _____

20. Are you sexually active? (For the purpose of this survey, "sexual activity" is meant to include penile/vaginal, oral, and anal sex as well as mutual masturbation.)

- Never have been sexually active (skip to question #24)
- Am rarely sexually active
- Am moderately sexually active
- Am regularly sexually active

21. What was your age at first sexual activity? _____ years

22. Did you use any form of contraception at first sexual activity? Yes No

If yes, what method(s) did you use? (Check all that apply)

- _____ condom
- _____ dental dam
- _____ hormonal (the pill, depo shot, the patch, etc.)
- _____ diaphragm
- _____ other (specify): _____

23. How regularly do you use contraception during intercourse?

Never
1 2 3 4 5 6 7 8 9 10
All the Time

Personal Sexual Experience Cont.

24. For heterosexual relationships, how likely are you (or will you be) to use contraceptives **for the purpose of birth control**? Not at all likely Very Likely
 N/A 1 2 3 4 5 6 7 8 9 10

25. How likely are you (or will you be) to use condoms **for the purpose of preventing Sexually Transmitted Infections (STIs) or HIV/AIDS**? 1 2 3 4 5 6 7 8 9 10

26. How reliable do you feel your current level of sexual health knowledge is? Not at all Very
 1 2 3 4 5 6 7 8 9 10

27. How much of your current sexual health knowledge did you acquire in Middle School or High School?

none very little some the majority all

28. If you received sexual education in Middle School or High School, how did it affect/change your level of sexual activity? (check all that apply)

	Penile/ Vaginal Sex	Oral Sex	Anal Sex	Mutual Masturbation	Other (specify):
The following sexual activity was not affected by sexual education classes					
The following sexual activity increased as a result of sexual education classes					
The following sexual activity decreased as a result of sexual education classes					
I chose to abstain from the following sexual activity as a result of sexual education classes					
I chose to abstain from the following sexual activity despite being previously sexually active as a result of sexual education classes					

Appendix D

Informed Consent Letter

My name is Stephanie Agnew and I am a second year masters student at Smith College. I am conducting a study on the acquisition of knowledge about sex and sexual health among adolescents, and how such knowledge impacts sexual behavior. Information will be gathered through confidential self-report surveys and will be used as my primary research data for my Masters of Social Work thesis at Smith College School for Social Work, and for possible presentation and publication.

You are being asked to participate in this research by completing a confidential survey about your own acquisition of sexual knowledge and your sexual behavior. You are being asked to participate because you are a college freshman who graduated from high school in 2006. You may have received comprehensive sexual education, abstinence-only sexual education, or no sexual education at all while in middle school or high school. If you are a freshman who graduated from high school more than one year ago, if you are not yet 18 years of age, or if you are over the age of 20, you are not eligible to participate in this study.

Completion of this survey should take no more than 15 minutes, and all responses are confidential. You may skip any questions you do not wish to answer, however full completion of the survey is encouraged to ensure research validity. If you begin the survey and choose not to finish it for any reason, your survey data will not be counted and your survey will be destroyed. Once you place your completed survey in the box provided it will no longer be identifiable as yours, and therefore participation can not be withdrawn after that point.

All of the information you provide on the survey is completely confidential. The surveys do not contain names or code numbers, so there will be no way of connecting you with your responses once your survey is completed. To further ensure confidentiality, your signed consent form will be kept separate from your completed survey. In accordance with law, all data collected for this research project will be kept in a locked location for a period of three years, after which point it will be destroyed.

With your permission, your name will be entered in a drawing to win a \$50.00 gift certificate from Barnes and Noble. Additionally, other benefits of participating in this study might include playing an active role in helping mental health professionals understand the impact of various forms of sexual education on adolescents. There are some minimal risks involved with the completion of this survey as a result of possible emotional discomfort or stress due to the disclosure of personal information about sexual behavior and experience. Information about services available to you at the college counseling center and health center will be provided for your convenience.

Your signature indicates that you have read and understand the above information and that you have had the opportunity to ask questions about the study, your participation, and your rights and that you agree to participate in the study.

Participant Signature _____ Date _____

Please include my name in a drawing for a \$50.00 gift certificate to Barnes and Noble.

Please keep a copy of this letter for your records.

Thank you for your participation, and feel free to contact me with any questions. You can reach me via email at sagnew@smith.edu

Sincerely,

Appendix E

Referral Resources

There are some minimal risks involved with the completion of this survey as a result of possible emotional discomfort or stress due to the disclosure of personal information about sexual behavior and experience. Below you can find referral resources to your college's counseling and health services. You are encouraged to contact them if any mental or physical health concerns surfaced as a result of your completion of this survey.

Mount Holyoke College

Counseling and Health Services
Pattie Groves Health Center
50 College Street
South Hadley, MA 01075
Counseling Services Phone: 413-538-2037
Health Services Phone: 413-538-2121
Office Hours: 8:30am -5:00pm., Monday – Friday

Smith College

Counseling Services
Call x2840 to inquire about appointments and services.
The appointment desk is open Monday through Friday, 9 a.m.- 4 p.m.,

Health Services
Elizabeth Mason Infirmary
69 Paradise Road
Northampton, Massachusetts 01063
On campus call 2800
Off campus (413) 585-2800

UMass Amherst

Mental Health Services
127 Hills North
University of Massachusetts
Amherst, MA 01003
(413) 545-2337 (8am-5pm weekdays)
(413) 577-5000 (after hrs, weekends)

Health Services
150 Infirmary Way
Amherst, MA 01003
(413) 577-5000
University Health Services is open 24 hours a day during the semester.

SEX ED

Did you get it?

Did you not?

WHAT DID YOU THINK?

SHARE YOUR VIEWS

TODAY!

FRESHMEN: Interested in filling out a survey about your past sexual education experience?

All information collected is **CONFIDENTIAL** and will be used for the completion of a Masters Thesis.

ALL PARTICIPANTS WILL BE ENTERED TO WIN A \$50 GIFT CERTIFICATE FROM BARNES AND NOBLE.

It takes about 15 minutes.