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**THE RELATIONSHIP BETWEEN TEENS' COMMUNICATION WITH THEIR
PARENTS, FAITH AND RELIGIOUS PRACTICES, PARENTAL INVOLVEMENT
AND THEIR SEXUAL BEHAVIORS AND ATTITUDES**

BY

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**Submitted in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education
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ABSTRACT

THE RELATIONSHIP BETWEEN TEENS' COMMUNICATION WITH THEIR PARENTS, FAITH AND RELIGIOUS PRACTICES, PARENTAL INVOLVEMENT AND THEIR SEXUAL BEHAVIORS AND ATTITUDES

Background: Friction between abstinence and comprehensive programs highlights the strengths and challenges of each approach. By studying teens' personal experiences (teen-parent communication, faith and religious practices, and parental involvement) as they relate to exposure to an abstinence program and resulting sexual behaviors and attitudes, important changes can be made to better educate, prepare, and protect teens.

Purpose: Through effective application of the research findings, through policy and practice improvements, teens, parents, community and educational leaders, health educators, health professionals, and policy makers can promote healthy sexual behaviors and attitudes to benefit teens themselves, their families, their communities, and society.

Setting: Middle schools in The Bronx, New York; 6 treatment and 6 control schools.

Population: 1000+ students in grades 6 - 8; most participants were 11 or 12 years old.

Intervention: The abstinence program, FLAP, was implemented by certified teachers.

Research Design: The quantitative study used data from baseline and follow-up surveys.

Data Analysis: Descriptive statistics, ANOVAs, Univariate ANOVAs, and Chi-square tests were used. SPSS 19.0, statistical analysis software, was used to complete analyses.

Findings: (a) Frequent parent-teen communication about peer pressure and high comfort level with sensitive topics (b) Regular prayer and use of faith in making decisions, and (c) Positive parental involvement in teens' lives combined with abstinence program participation correlates with teens' positive, healthy sexual behaviors and attitudes.

Conclusion: Teens' personal factors are integral to abstinence program success.

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DEDICATION

This work is dedicated to my parents, Alexander and Betty Lee Oros. Throughout my life they have been my steadfast supporters, sounding boards, and most loving friends. My father's intellect, savvy, and high expectations for me were the catapult for my life-long love of learning, adventure, and challenges. My mother's kindness, humor, and acute observations of the human spirit served as my north star by which I always found my way.

They are my most enduring and significant inspiration; the greatest blessing in my life is the gift of my two wonderful parents.

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CHAPTER I

INTRODUCTION

Background of the Study

Two topics which pique interest and concern for many are teens and sex. When it comes to the sensitive issue of teen sexuality, Americans have always been concerned and rather fearful. Teen sexuality evokes memories of one's own sexual initiation, physiological changes, parental expectations, and religious mores during a vulnerable stage of life, adolescence.

There are numerous important reasons to encourage teens to delay sex. Among the motivating factors for teen abstinence are sexually transmitted diseases, pregnancy, emotional ramifications, cultural norms, loss of educational, financial, and professional opportunities, religious beliefs, and parental expectations. The overwhelming majority of adults as well as teens believe in encouraging teen abstinence (Kirby, 2002a).

However, the balance between teaching abstinence and comprehensive sexual education is the more frequently debated topic within the issue of teen sexuality. In today's classrooms, the balance is in favor of abstinence programs which may include some elements from comprehensive programs such as limited information about STDs, birth control, and pregnancy.

Though much research contributes to the debate between the effectiveness of abstinence and comprehensive programs, the role teens' personal lives and experiences play in their sexual behaviors and attitudes is of paramount importance as well. "Among the most prominent correlates of adolescent problem behavior in general and sexual activity in particular are the structure and functioning of the child's family," according to

Aseltine, Doucet, and Schilling (2010) in an *Adolescent & Family Health* article (p. 155). Since teen sexuality can have repercussions upon individual teens, their families, their communities, and society, abstinence and comprehensive programs must effectively teach and protect teens.

This study focuses upon teens' communication with parents, their own faith and religious practices, and their parents' involvement in their lives as they relate to teens' sexual behaviors and attitudes. With insight into these relationships, teens' needs can be better met. Though abstinence and comprehensive programs are important aspects of this study, they are not assessed by this study. This study seeks to assess the relationship between aspects of teens' personal lives and their sexual behaviors and attitudes. Problems caused by negative, irresponsible, or destructive teen sexual behaviors and attitudes can be diminished through improved understanding of these relationships.

Since most study participants are between 11 and 14 years old, of Hispanic or Latino origin, from working-class families, and have never had sexual intercourse, these delimitations must be considered. Also, self-reported behaviors and attitudes are measured, not behavioral outcomes such as pregnancy or STD rates.

Statement of the Problem

How do teens' personal experiences such as communication with parents, their own faith and religious practices, and parental involvement impact their sexual behaviors and attitudes? Studying the relationship between personal factors and teens' sexual behaviors and attitudes should provide insight into teens' worlds. Do teens with active, positive parental communication have more responsible sexual behaviors and attitudes than other teens? Would teens who actively practice their faiths have more responsible

sexual behaviors and attitudes than their less religious peers? Does parental involvement impact teens' sexual behaviors and attitudes? These and other questions were explored through this study.

The need for responsible teen sexual behaviors and attitudes is critical. First, teens' health is affected by their knowledge and behaviors. Second, society has an interest in promoting desired future behaviors by molding teens' behaviors now and later as adults; sexual behavior is among the most important future adult behaviors. Third, with the growing volume of information and confusion created by competing information, the positive interaction of effective sex education programs and related personal factors combat harmful and misleading information, leading teens toward healthier sexual behaviors and attitudes.

Due to STDs, HIV/AIDS, and teen pregnancy, teen sexuality is a public health issue. According to a study by Menschke, Bartholomae, and Zentall in 2002, when comparing sexually active teens to those in other age groups, teens are more likely to have multiple partners and practice unprotected sex. For example, teens between 15 and 19 years old account for one-third of gonorrhea cases - the highest percentage of any age group (Menschke et al., 2002). A life-threatening fact is the remarkable increase in AIDS cases from 1986 to 1997. In just 11 years, the number of American teens between 13 and 19 years of age with AIDS rose from 53 cases to 3,130 cases; some researchers fear the statistic is a conservative estimate and fails to accurately reflect the harsh reality (Menschke et al., 2002). Compared to other industrialized nations, the United States has teen pregnancy rates that are quite high. The teenage pregnancy rate in the US is the second highest among 46 industrialized countries; only Russia has a higher rate (Bennett

& Assefi, 2003). For example, in Canada, there are 43 teen pregnancies for every 1,000 teens; in the US there are 93 teen pregnancies for every 1,000 teens (Poobalan et al., 2009). Teen pregnancies result in tremendous personal, financial, educational, and professional losses for the teens themselves, their families, and society.

Parents' communication with teens, teens' own faith and religious practices, and parental involvement can help to combat these challenges. Some studies indicate when parents communicate clear messages to their teens to avoid pregnancy and STDs, those teens are less likely to be engaged in negative sexual behaviors (Eisenberg, Sieving, Bearinger, Swain & Resnick, 2006). Using data from the National Longitudinal Survey of Youth, researchers found an encouraging relationship between cohesive, religious families and teens' sexual behaviors (Manlove, Logan, Moore & Ikramullah, 2008). In Manlove's study, "Pathways from Family Religiosity to Adolescent Sexual Activity and Contraceptive Use," actively religious parents were found to believe they were more aware of and involved in their teens' lives than non-religious parents; active parental involvement was associated with less teen sexual activity. Regarding parental involvement, some studies have demonstrated that teens with parents who monitor their activities had a later sexual initiation, fewer sexual partners, and more consistently used contraceptives than teens with less involved parents (Manlove et al., 2008). The relationship between these personal factors, parents' communication with teens, faith and religious practices, and parental involvement, may provide insight into how to encourage teens toward healthier and more positive sexual behaviors and attitudes.

Purpose of the Study

The purpose of this study is to assess the impact of three variables upon teens' sexual behaviors and attitudes: teens' communication with parents, faith and religious practices, and involvement of parents in their lives. Through the application of the research findings, teens, parents, community and educational leaders, health educators, health professionals, and policy makers can affect teens' sexual attitudes and behaviors for the benefit of teens themselves, their families, their communities, and society.

Research Questions

Accordingly, the following questions guided the study.

1. What is the relationship between teens' communication with their parents and teens' sexual behaviors and attitudes?
2. What is the relationship between teens' faith and religious practices and teens' sexual behaviors and attitudes?
3. What is the relationship between parental involvement and teens' sexual behaviors and attitudes?

Hypotheses

Teens' sexual behaviors and attitudes are likely to be mediated by their communication with their parents, their own faith and religious practices, and parents' involvement in their lives. The following hypotheses, with the significance level set at $p < .05$, guided the study.

1. Teens with positive, regular communication with their parents will have healthier sexual behaviors and attitudes than teens with negative and/or little communication with their parents.

2. Teens with active faith and religious practices will have healthier sexual behaviors and attitudes than teens without active faith and/or religious practices.
3. Teens with parents who are involved in their lives will have healthier sexual behaviors and attitudes than teens without involved parents.

Null Hypotheses

This study will test three null hypotheses.

H₀ 1. Teens with positive, regular communication with their parents will have similar sexual behaviors and attitudes as teens with negative and/or little communication with their parents.

H₀ 2. Teens with active faith and religious practices will have similar sexual behaviors and attitudes as teens without active faith and/or religious practices.

H₀ 3. Teens with parents who are involved in their lives will have similar sexual behaviors and attitudes as teens without involved parents.

Variables

This study includes survey results from both treatment and control groups and their baseline and follow-up results; the treatment is participation in an abstinence program. Areas of parental communication, faith and religious practices, and parental involvement are analyzed as they relate to teens' sexual behaviors and attitudes. The independent variable in this study is program (treatment, control). Mediating variables are the teens' communication with their parents and parents' involvement in their lives. Moderating variables included in this study are participants' gender (female, male) and teens' faith and religious practices. Primary outcomes are teens' sexual behaviors and attitudes.

Theoretical Framework

Emerging from relevant literature and research is the theoretical perspective that frames the problem statement, research questions, methodologies, and data analysis of this study; Jessor's problem behavior theory values the complexity of teens' lives.

Richard Jessor's problem behavior theory seeks to explain teens' problem behaviors as a consequence of both risks and protective factors with domains in four conceptual systems (Aseltine, Doucet & Schilling, 2010). These four systems are as follows: perceived environment system (parental relationships, influence, and models for behavior), behavior system (teen's history of conduct), personality system (teen's motivation, attitudes, and beliefs), and social environment system (teen's social structural context and socio-demographic characteristics such as gender, race, and family structure) (Aseltine et al., 2010). According to Jessor, factors in each of the domains can serve as a catalyst or control factor towards teens' behavior. Problem behavior theory explains sexual initiation results from a complex interaction between a teen's family structure and a diverse set of interpersonal, behavioral, psychological, and environmental factors (Aseltine et al., 2010).

While the breadth of this study does not allow all four domains to be explored in a comprehensive manner, it does study aspects of three of the four domains. Teens' personality system (sexual attitudes and their faith), their behavior system (sexual behaviors and religious practices), and perceived environment system (parents' communication and involvement) are factors included in this study. Specifically, parents' communication, teens' faith and religious practices, and parental involvement are studied as they relate to teens' sexual behaviors and attitudes.

Research focusing upon a single variable is not likely to capture the complexity of teens' sexual behaviors and attitudes (Jessor, Donovan & Costa, 1991). Using the conceptual combination of teens' environment, interpersonal experiences, and behavior, similarly as Jessor applies his problem behavior theory, offers a more broad approach. Jessor's theory encourages the inclusion of a large number of variables from different domains. Such a complex framework is more apt to provide a textured understanding of teens' sexual behaviors and attitudes (Jessor et al., 1991). Similarly, a multitude of questions for the environmental factors of parents' communication and parental involvement and behavioral factor of religious practices are analyzed as they affect teens' interpersonal lives, specifically their sexual attitudes as well as their behavior, specifically their sexual behavior.

Jessor's problem behavior theory encourages the inclusion of a multitude of factors as both contributors and deterrents in teens' delinquent behavior. Teens' sexual behaviors and attitudes are the behaviors serving as the focus of this study; the multitude of contributing and deterrent factors in this study include parents' communication, teens' faith and religious practices, and parental involvement.

Significance of the Study

The analysis of data will serve to provide teens, parents, community and educational leaders, health educators, health professionals, and policy makers with data and insight in order to better understand teens' sexual behaviors and attitudes.

This study is significant in that it: (a) provides an overview of abstinence and comprehensive education in the United States from the Victorian era to 2012; (b) highlights the strengths and challenges of both abstinence and comprehensive

education; (c) offers current research on the relationship between teens' experiences of communication with their parents, faith and religious practices, parents' involvement in their lives, and the teens' sexual behaviors and attitudes; and, (d) adds to current research by examining how those teen experiences relate to teens' sexual behaviors and attitudes in this study.

Delimitations and Limitations of the Study

While the findings of this study add to the current research, caution should be used when making generalizations based on the results of this study as several limitations and delimitations apply. The research imposed the following delimitations:

1. This research examined data from students in grades 6 through 8 attending public middle schools in The Bronx, New York. Most participants are between 11 and 14 years old; sixty-seven percent are 11 or 12 years old. Participants are from working-class families or those in the middle or lower socio-economic groups. Teens in other grades, age groups, or communities are not included in this study.
2. Seventy-three percent of participants are of Hispanic or Latino origin; twenty-one percent are Black, 4% are White, and 1% is Asian. Thus, the majority of study participants are Hispanic or Latino.
3. In the baseline survey, 10% of participants revealed they have had sex; in the follow-up survey, 16% of respondents reported they have had sex. The number of teens who have had sex is limited.
4. For organizational purposes, this study is delimited by three areas of teens' personal experiences. The researcher acknowledges the existence of many factor

categories, but will confine this study to teens' communication with their parents, faith and religious practices, and parental involvement.

5. This study is delimited by selected research. Due to limited time and scope of the study, it would not be possible to review all existing research in the areas of teens' personal experiences and their sexual behaviors and attitudes.

6. Quasi-random sampling was used. To the extent possible, matched groups were used to control for extraneous variables.

The researcher also noted the following limitations of the study:

1. Selection of participants in the treatment and control groups was determined by class assignments. Researchers determined treatment and control schools using matched groups. School principals determined the classes participating on behalf of their school. This affected the randomization and the sample size.

2. This study is limited by the measurement of the outcomes. Direct outcomes, such as teen pregnancy rates or STD rates, are not measured. Only measured changes in self-reported behaviors are measured.

3. Data collected is of a self-reported nature, limiting the objectivity of the study.

4. A limitation exists in the researcher's bias toward the role of parents in their teens' lives due to her role as a teacher, school and district administrator, and university academic assistant.

Despite delimitations and limitations, the study has potential to add to the current body of research on teens' personal experiences and their sexual behaviors and attitudes.

Organization of the Study

This study, *The Relationship between Teens' Communication with Their Parents, Faith and Religious Practices, and Parents' Involvement in Their Teens' Lives and Sexual Behaviors and Attitudes*, is offered in five chapters.

Chapter I provides the background, purpose, significance, delimitations and limitations, and organization of the study. This section also includes the statement of the problem, research questions, hypotheses and null hypotheses, and definition of terms.

Chapter II gives a comprehensive review of the literature and research. A review of the history of abstinence and comprehensive education is provided to better understand the context of current programs. The strengths and challenges of both abstinence and comprehensive programs are reviewed. Also the curriculum components, role of teachers, peer impact, parents' perceptions, and qualities of effective programs are provided. The role of teens' personal experiences, specifically those of parental communication, faith and religious practices, and parental involvement, are explored as they relate to teens' sexual behaviors and attitudes.

Chapter III describes the methods and procedures used in data collection, analysis, and presentation of the data with a comprehensive description of the study design, data sources, survey instrument, procedures, and statistical techniques.

Chapter IV presents data collected and an analysis of these findings via various statistical techniques. Such a data analysis provides an understanding of how sources of data translate into interpretation of data.

Finally, Chapter V offers a discussion and summary of data previously presented. This discussion offers implications for teens, parents, community and educational

leaders, health educators, health professionals, and policy makers. Within Chapter V, the researcher offers policy implications, practice implications, and recommendations for future research.

Definition of Terms

The following terms are defined to clarify their meaning as used in this study.

Abstinence program. An education program that encourages abstinence from sexual intercourse as the first and best choice for teens. Usually does not include topics such as pregnancy, birth control, abortion, homosexuality, STDs, and HIV/AIDS.

Abstinence-plus program. An education program that encourages abstinence from sexual intercourse as the first and best choice for teens, but also encourages teens to use contraception if they do have sex.

Comprehensive program. An education program that includes topics such as protection against pregnancy, STDs, abortion, homosexuality, and other topics related to sexuality.

Faith and religious practices. For the purposes of this study, the importance of prayer in one's daily life and in making major decisions, and the frequency of attending church/synagogue/mosque services and/or youth programs.

Healthy sexual behaviors and attitudes. For the purposes of this study, sexual abstinence and plans for future sexual abstinence.

HIV education program. An education program that focuses primarily on HIV/AIDS prevention and understanding.

Parents' communication. For the purposes of this study, the quality and quantity of conversations between teens and parents.

Parents' involvement. For the purposes of this study, the quality and quantity of parents' participation in personal and school activities of their teens.

Protective factors. Factors that discourage behavior that could lead to a pregnancy or STD; factors that encourage behavior that could prevent those outcomes.

Risk factors. Factors that encourage behavior that could result in a pregnancy or STD; factors that discourage behavior that could prevent those outcomes.

Sex. For the purposes of this study, sexual behavior limited to sexual intercourse between a male and female.

Sexual initiation. One's first voluntary participation in sexual intercourse.

STD. Refers to sexually transmitted diseases including, but not limited to, herpes, HPV, gonorrhea, and syphilis, but not including HIV/AIDS.

The following chapter, Chapter II: Review of Selected Literature and Research, offers a relevant selection of research and background information for the study.

CHAPTER II

REVIEW OF SELECTED LITERATURE AND RESEARCH

Introduction

This chapter begins with a review of the literature on the history of abstinence and sex education in the United States, from the Victorian era through 2012. The strengths and challenges of abstinence education and comprehensive sex education are explored. Also provided in this review are important aspects of abstinence and comprehensive education programs such as curriculum components, role of teachers, peer impact, parents' perceptions, qualities of effective programs, and relevant information about the three dependent variables (communication between teens and parents, faith and religious practices, and parental involvement in teens' lives) and teens' sexual behaviors and attitudes.

History of Abstinence and Sex Education

To understand modern abstinence programs and sex education programs, it is helpful to have a perspective of the successes and failures of programs in the past. With an overview of sex education literature and programs for American teens from the beginning of the 20th century through 2012, we can identify trends and lessons derived from past mistakes. Since abstinence and sex education programs were not formally part of school curriculum until the 1960s, it is beneficial to look at the literature used by teachers, parents, physicians, and teens themselves to enlighten and inform teens about their own sexuality and related expectations during their era. Through this history, one learns "the almost unconscious movement of our culture's ideals and attitudes toward sex and youth," according to Patricia J. Campbell (1979). One aspect of the content of such

literature remains the same: As they strive to prevent teens from engaging in sexual activity outside of marriage, educators, parents, and other professionals are reluctant to inform teens of what they really want and need to know about sex (Campbell, 1979). As sex education literature reflects what current societal norms dictate is normal behavior, the combination of anatomical and moral information varies by both historical context and authors' expertise (Campbell, 1979). Most sex education literature accurately reflects, or may lag a bit behind, the predominant beliefs of the timeframe (Campbell, 1979). A common thread is apparent since the advent of sex education literature for teens in the beginning of the 20th century until the modern era: Withholding or distorting accurate information for teens can be unfair and harmful on a personal and societal scale (Campbell, 1979).

Social influences upon human sexuality operate on three levels. From broadest to most intimate, these levels are the macro-level (historical changes), the sub cultural level (social class and ethnic background), and the interpersonal level (interactions with others such as parents, teachers, and peers). Variables within each of the three levels impact the individual in ways which include knowledge, attitudes, and desire according to DeLamater (1987) (as cited in Sprecher et al., 2008, p. 1).

Answering the question, what are the curricular elements of an effective sex education program? is more complex and politicized than one might first expect (Irvine, 2002). Modern comprehensive sex education programs contain abstinence education as their core feature, but also include controversial issues such as contraception, abortion, masturbation, and homosexuality (Irvine, 2002). Abstinence education programs focus on the many positive aspects of abstinence from sexuality, often imploring teens to abstain

from any sexual activity outside of monogamous, heterosexual marriage; abstinence programs do not include the controversial issues of contraception, abortion, masturbation, and homosexuality (Irvine, 2002). Comprehensive education programs have the research of Alfred Kinsey and Masters and Johnson as their foundations; many abstinence programs have the teachings of the Bible as their foundation, though modern programs within public schools address abstinence with secular language and perspectives (Irvine, 2002).

Victorian Era

Referring to informal sex education from parent to child as “the birds and the bees” originates with the first sex education book for young teens written in 1892 (Campbell, 1979). *What a Young Boy Ought to Know?* by Lutheran minister Sylvanus Stall set the tone for the genre of teen sex education literature for the following 50 years as part of the Self and Sex Series: “Purity and Truth” (Campbell, 1979). With six editions, seven companion volumes, and 11 translations, Stall’s series included literature for girls, young men and women, husbands, wives, and adults as they reach middle age. Heavily spiritual, the books describe God’s purpose in giving plants, animals, and people reproductive organs. Stall (as cited in Campbell, 1979) used the fertilization of plants to infer human reproduction because it avoided the use of direct physical contact distasteful during the Victorian era. The Industrial Revolution created increased isolation of individuals as many left the family-focused life on the farm for cities and company towns. The changing landscape of American life brought about an intense fear of sexuality and especially masturbation. These fears resulted in the inclusion of misinformation in Stall’s popular books. Boys were told that by preserving semen and not

exploring their own sexuality in any form they would become strong, successful men and breed healthy children (Campbell, 1979).

The idea of adolescence was first a Victorian concept as adulthood with its responsibilities and expectations came at a later age (Campbell, 1979). Another effect of the increasing wealth created by the Industrial Revolution was greater consumption and less self-denial which caused concern, perhaps panic, among the older generation (Campbell, 1979).

These concerns are evident in both the literature and lack of literature available. For example, *Studies in the Psychology of Sex* though published in England in 1897 was only made available to physicians in the United States in 1935, 38 years after its publication (Campbell, 1979). Due to lack of sex education programs, charlatans spread misinformation and gained financially through fear. A traveling “museum of anatomy” was one method used to steal money from innocent young people yearning for information. This museum would come into town, charge little to nothing for boys and male teens to see a nude female figure in wax. Then the boys would view horrific scenes of war or violence, and then exaggerated representations of graphic results of venereal disease, masturbation, or other sexual vices. Upon leaving the museum, the frightened teen would receive a pamphlet guiding them to a nearby “doctor” for consultation (Campbell, 1979). Such forms of abstinence and sex education were not uncommon at the beginning of the 20th century.

Teenage girls did not benefit from a more comprehensive education. Though women’s suffrage had begun and women’s colleges were being established, women’s sexuality was limited to the joys of motherhood and the social and moral responsibilities

of having a family. Mary Wood-Allen played an important role in the education of teenage girls as a medical doctor and prolific writer of abstinence and sex education literature, from *What a Young Girl Ought to Know* in 1897, to the Teaching Truth series published from 1892 to 1915 (Campbell, 1979). According to Wood-Allen, (as cited in Campbell, 1979) knowledge of sex is dangerous to young people unless it is provided in small quantities. Though her books were developed for teens, it was assumed parents would select and obtain the appropriate literature for their daughters. Wood-Allen reassured parents by addressing them, "It is thought wise to put the information suited to different ages in different volumes so that the girls will find what meets her present need and not be led into fields of investigation wider than the immediate case demands" (as cited in Campbell, 1979, p. 20).

Though Wood-Allen's books (as cited in Campbell, 1979) provided information regarding menstruation that was accurate at the time, information about kissing, masturbation, and reading romances were designed to instill fear and loathing of such activities. In Wood-Allen's *Almost a Woman*, published in 1897, she used fiction to delicately educate readers. The main character, Helen, is taught by her mother, Mrs. Wayne. During one discussion, it is apparent Helen learned human physiology in school, but those lessons did not include the reproductive system. Thus, Mrs. Wayne teaches her daughter words such as womb, uterus, and vagina. However, much of the book focuses on the inherent dangers of "even the slightest unwarranted familiarity" with a young man (as cited in Campbell, 1979, p. 31). Withholding information and misinformation has pervaded sex education literature and programs throughout American history.

Early 1900s

In the beginning of the 20th century, educators continued to focus sex education on the prevention of any sexual activity and the indoctrination of teens into the prescribed gender roles of adulthood. The first advocates for sex education in schools were a varied group of moral reformers such as physicians, suffragists, temperance workers, and members of the clergy dedicated to eradicating venereal disease (Irvine, 2002).

Young boys were told “virile manhood must be created by strenuous self-discipline, vigorous effort, and self-denial” (Campbell, 1979, p. 34). A “bully boys” school of thought was exemplified in tremendous admiration of Teddy Roosevelt as an athletic outdoorsman as well as the establishment of The Boys Scouts of America. Self-discipline through abstaining from masturbation, and abhorrence of homosexuality and impure thoughts were the goals of abstinence and sex education. For example, in 1912, English schoolmaster H. Bissiker wrote *When a Boy Becomes a Man* for teens from 13 to 15 years of age. The pamphlet’s narrow focus addressed the perils of masturbation and the benefits of exercise and fresh air (Campbell, 1979).

During the beginning of the 20th century, teen girls were indoctrinated to avoid strenuous activity and any expression of their own sexuality. The embarrassment of menstruation was emphasized as were the dangers of going to dances or wearing short sleeves or a low neckline (Campbell, 1979). Such behavior would mean the girl would find herself in the “doctor’s hands or become a drug fiend” according to literature of the time (Campbell, 1979, p. 41). Young girls were also responsible for ensuring neither they nor young boys would explore physical contact with each other for danger of “getting in trouble” (Campbell, 1979). A sex educator of the time, David Steinhardt, on

the faculty of Cornell University Medical School, relayed a common message by emphasizing the necessity of girls to maintain virginity until marriage (as cited in Campbell, 1979). So much so, Steinhardt advised if a doctor must violate the hymen of an unmarried girl, he should give the patient a signed statement for “future protection against unfounded suspicions” (Campbell, 1979, p. 43).

Venereal disease was another important topic, but the prevention and treatment of such diseases were not given credence. Steinhardt wrote, “Far better to guard against contracting the disease in the first place through sexual abstinence” (as cited in Campbell, 1979, p. 44). A few words of warning were provided such as never wearing other’s clothing, swimming nude, consuming alcohol, reading “licentious matter,” and dancing. Steinhardt concluded, “Just be a real man!” (Campbell, 1979, p. 44).

Gradually and sporadically, the acknowledgment of female sexuality was expressed in literature for teens. In the 1913 publication *The Changing Girl; A Little Book for the Girl of Ten to Fifteen*, author Caroline Wormeley Latimer wrote, “The apparent absence of sex instinct in girls is largely a matter of training extending over many generations” (as cited in Campbell, 1979, p. 48). The first mention of intercourse to teen girls surfaced a year later in Mary Gould Hood’s *For Girls and the Mothers of Girls* (Campbell, 1979). Though it was perfunctory at best, its inclusion in the literature was groundbreaking.

World War I

With the onset of World War I, young women entered the workforce. Abstinence and sex education literature reflected the changing times by mentioning dating, but with disapproval, and working, with interesting advice (Campbell, 1979). In her 1918

Preparing for Womanhood, Edith Belle Lowry advised women to “do menial chores like dusting the office in addition to her regular duties.” A woman “should also be careful to dress modestly and inconspicuously” (as cited in Campbell, 1979, p. 49). While Lowry supported women’s role as first and foremost a wife and mother under the guise of preparing them for womanhood, Margaret Sanger was working in New York City’s impoverished Lower East Side against the suffering of “unlimited breeding in poverty” (Campbell, 1979, p. 55). Sanger’s work came to the forefront after a speech for working women in Manhattan. From that speech, she wrote a series of articles titled “What Every Girl Should Know” which included information about venereal diseases and *birth control*, a term she claims to have coined herself. Mailing of such articles was problematic and caused Sanger years of legal struggles (Campbell, 1979).

Two sex education leaders ahead of their time, Margaret Sanger and later Mary Ware Dennett, were prosecuted under The Comstock Laws in 1916 and 1929, respectively. The Comstock Laws prohibited “obscene” materials from transportation by the US Postal Service. Sponsored by and named after the solicitor of the US Post Office, Anthony Comstock, the Comstock Laws hindered sex education programs until the abolishment of the law in 1971. The Comstock Laws made it impossible for physicians and sex educators to provide accurate, detailed information to teens (Campbell, 1979). Instead of disseminating accurate information about contraception and the prevention and treatment of STDs, vague, flowery, and moralizing dogma continued to be provided to teens throughout much of the 20th century.

Advancements in the dissemination of accurate sex education information were the result of significant legal trials and societal changes such as World War I and World

War II. In 1915, Margaret Sanger returned from a year of exile in Europe to prepare for her trial for breaking The Comstock Laws. Her year absence coincided with a shift in popular belief toward her work regarding the benefits and availability of contraception. The personal opposition she faced for years from Anthony Comstock was no longer an issue since Comstock died prior to her trial. After she was found guilty, Sanger faced 30 days in jail (Campbell, 1979). Upon appeal, a New York judge determined a doctor would be permitted to give advice about contraception to a married woman for the maintenance of her own health. In 1923, Sanger reopened her birth control clinic in New York City which paved the path for other such clinics throughout the United States. At the start of World War II, soldiers received information about the prevention and treatment of venereal disease from Sanger's work; Sanger received neither credit nor compensation (Campbell, 1979).

Another significant trial resulted from a sex education innovator breaking The Comstock Laws. The President of the National Birth Control League, Mary Ware Dennett, was tried for publishing a brief pamphlet for 11 to 14 year old boys, "The Sex Side of Life," in 1918 (Campbell, 1979). Dennett's works were innovative because she used proper terminology in describing human reproductive organs, explaining human intercourse in detail, and telling teens that sex was pleasurable. Her work was produced for the benefit of her teenage sons, then privately for others. Due to its popularity, the information was produced in the form of a pamphlet, sold for 25 cents, and sent through the US mail. However, Dennett's main focus was to encourage politicians to amend The Comstock Laws. Finally in 1929, she faced a penalty of \$5,000 and 5 years in jail for violating The Comstock Laws due to distribution of her pamphlet. Among the

prosecution's arguments was the assertion that teens exposed to certain passages might be tempted to try sexual activities in response. With the support of numerous scientific, religious, and education leaders, including John Dewey, and a lack of expert witnesses on the prosecution's side, Dennett was found not guilty (Campbell, 1979).

Between the World Wars

Between World War I and World War II there was less social urgency to indoctrinate teens to avoid all sexual activities; thus, fewer abstinence and sex education books were released (Campbell, 1979). However, this was also the time when sex educators encouraged the inclusion of sex education as a formal, inclusive part of school curricula. Sex education pioneer Marie Stopes wrote in her book, *Sex and the Young*, "I must warn teachers against the books at present existing . . . so overload the horrors and dangers of sex experience . . . almost to terrify young people about the future awaiting them in their adult life . . ." (1926, Campbell, 1979, p. 64). Stopes supported infusing sex education into the curriculum instead of being singled out for special, separate instruction (Campbell, 1979).

The most popular sex education book of the era was Karl De Schweinitz's *Growing Up* first published in 1928 (Campbell, 1979). In an era in which scientific meant modern, De Schweinitz's scientific approach made intercourse seem like a medical procedure. The lack of a moral message and straightforward biological information was unique and among the first sex education books of its kind. Though the 1920s saw tremendous changes in the social and sexual behaviors of people, the literature did not reflect these changes until the 1930s. In response to more contraception options, some feared teenage sexuality might lead to premarital intercourse. Thus, the teen abstinence

and sex education literature returned the focus to repression of teen sexuality. In the 1930s, the author of *So Youth May Know; New Viewpoints on Sex and Love* Roy Ernest Dickerson asked the question, “Abstinence or promiscuity?” Dickerson explained to readers that contraception was only 60% effective (Campbell, 1979). He failed to include any details, instruction, or advice on pregnancy prevention other than to encourage abstinence. Dickerson resorted to Victorian techniques to maintain abstinence such as keeping busy, praying, and exercising (Campbell, 1979).

Prior to the 1930s, sex education literature contained prefaces for parents since such instruction was primarily a parental responsibility (Campbell, 1979). Increasingly during the 1930s, librarians began to take responsibility for the selection and distribution of sex education information. As parents, librarians, and schools began to share the responsibilities of educating teens about sexuality, the tug-of-war among differing views became a source of contention. Another aspect of sex education books that emerged during the 1930s was the inclusion of a question and answer format at the end of the book. First introduced by Frances Strain in the 1936 book *Being Born*, this format allowed the inclusion of teens’ concerns without making those the focus of the book. The third and final edition of *Being Born* was published in 1970; for 34 years the book played an integral role in educating teens (Campbell, 1979). Another longstanding source of information was “The Case for Chastity” article by Margaret Culkin Banning. With the purpose of destroying the “whispering campaign this is now condoning unchastity and even advocating premarital relations,” the article was printed as late as 1962, in Reader’s Digest, virtually unchanged from the its original publication in 1937, 25 years earlier (as cited in Campbell, 1979, p. 75).

The 1940s was a time of continued debate among college sex educators, librarians, and teachers. Frances Strain, author of *Being Born*, spoke at a librarians' conference in 1941. Strain suggested librarians should gain a better understanding of sex education and have suggestions to offer teachers and parents (Campbell, 1979). The following year, three educators, two high school teachers, and a professor of physical education produced a pamphlet titled "Life Goes On." The 35 page pamphlet included more accurate information about the cause and treatment of venereal diseases than previous publications. However, it also claimed that when teens explore their sexuality through kissing and petting, they "nearly always" have tragic results including, but not limited to, fear, shame, venereal disease, forced marriage, illegal abortions which often cause death or invalidism, and lastly, "decreased chances for happiness in marriage" (Campbell, 1979, p. 82). In "Life Goes On," the chart of the male sex organs failed to include the penis; such an approach was reminiscent of Victorian literature, 50 years earlier.

After World War II

Americans returned their focus to the stability of the home and more traditional male and female roles at the conclusion of World War II. A popular author of the era, Evelyn Duvall, wrote *Facts of Life* and *Love for Teenagers* in 1950. Both books explained the expectations for teens' dating behavior in scripted detail (Campbell, 1979). Reflected in television programs of the era, boys were to meet the girl's parents and behave like gentlemen, while girls were to bolster boys' egos and refrain from any physical activity. The teen dating ritual was expected to lack any sexual satisfaction; this would result in early marriage and a traditional family life. With reprints in 1956 and

1963, Duvall's work dominated teen sex education throughout the 1950s. With her advanced academic degrees, Duvall remained a respected expert during the decade as her essential message remained unchanged: Sex is dangerous unless controlled. This message was clearly communicated when she compared sex to electricity; when harnessed in a safe manner it can light and warm homes and cook meals. When allowed to run amok, sex can "run wild as lightning" and can "hurt and destroy and leave forever scarred all that you hold dear" (as cited in Campbell, 1979, p. 89). Duvall used the phrase "getting into trouble" to describe premarital pregnancy (as cited in Campbell, 1979, p. 90). Though in her work, she admitted contraception "works satisfactorily" she failed to elaborate. Briefly describing the symptoms of syphilis and gonorrhea, she again failed to provide details. She concluded the "only sure protection is in restricting sexual intercourse to marriage" (as cited in Campbell, 1979, p. 91).

Research about Americans' sexuality conducted by Alfred Kinsey infiltrated teen sex education literature, but remained filtered through the lens of the social beliefs of the time. Kinsey's *Sexual Behavior in the Human Male*, published in 1948, claimed one-third of American men had a homosexual experience (Campbell, 1979). The popular Duvall interpreted Kinsey's findings as revealing a "menace." In her sex education book for teens, *Facts of Life and Love*, she wrote, "... people give us little faith in them or in ourselves or in love itself, and so we may develop twisted feelings about others and distorted ways of responding to them ..." (as cited in Campbell, 1979, p. 91). Duvall concluded "we" should get over our anxieties about it, and "understand it as a not unusual part of growing up, although its overt forms are not to be actively sought" (as cited in Campbell, 1979, p. 91).

Two established institutions, the American Medical Association (AMA) and the National Education Association (NEA), published books in 1956 from earlier pamphlets. The AMA's *Learning About Love* and the NEA's *What's Happening to Me?* explained to teens the need to avoid actions that would make them feel guilty (Campbell, 1979). However, neither organization attempted to explain why sex should make a teen feel ashamed. Sex education literature virtually ignored Kinsey's research by resorting to the technique of instilling shame into teens as a method to encourage abstinence.

Though 1950s teen sex education expert Evelyn Duvall fed fears of masturbation and homosexuality, much of her focus on dating expectations and proper gender roles lingers to the modern day. Duvall upheld the expectation that teens conform to societal standards and date within their own "national, religious, and social" background (as cited in Campbell, 1979, p. 92). When on a date, she affirmed it was the girl's responsibility to ensure the couple does not get too sexually excited because "women are less easily excited and more slowly moved to demand sexual contact." If a couple "gets in trouble . . . it is the girl that is blamed . . . She should have known better" (as cited in Campbell, 1979, p. 93). Though the status quo of dating within one's own cultural group and the expected demands of each gender was established long before Duvall's arrival, as a respected expert and popular writer, her impact was still felt decades later.

The 1950s ended with a pivotal case concerning the definition of obscenity. In 1957, in *Roth v. United States*, the courts determined sexual explicitness and obscenity were separate and different (Irvine, 2002). In 1953, Hugh Hefner first published Playboy magazine which found increased popularity the following decade (Irvine, 2002). Both the decision of *Roth v. United States* and the popularity of Hefner's Playboy enterprise

supported the emergence of sexuality as a celebrated and integral part of American culture.

The 1960s

By adapting her *Love and the Facts of Life* in 1963, Duvall's sex education literature remained popular into the 1960s. Earlier cartoons were replaced with more dignified drawings; a chapter on emotional maturity was added; some changing cultural attitudes were included (Campbell, 1979). For example, in the final chapter Duvall changed her perspective on when couples should marry. In 1950s editions, early marriage was encouraged. Whereas, in the 1960s edition, Duvall stated early marriage was unwise and "better deferred for ten or twelve years while a young person gets an education" (as cited in Campbell, 1979, p. 94). Information on the dangers of masturbation was eliminated; while the dangers of "anti-pregnancy pills" were added. One constant was Duvall's lessons on proper dating etiquette which remained unchanged from the previous decade (Campbell, 1979).

In stark contrast to Duvall's claims of how teens should behave sexually was Alfred Kinsey's report on how teens did behave sexually. With the publication of Kinsey's *Sexual Behavior in the Human Male* in 1948 and *Sexual Behavior in the Human Female* 5 years later, Kinsey claimed that based upon education level, between 60 and 98% of married men were not virgins on their wedding day and 50% of women were not virgins on their wedding day (Campbell, 1979). Of those women not virgins upon marriage, only 13% had minor regrets, the rest had no regrets about their decision to not maintain their virginity. Published in 1961 in his *Premarital Intercourse and Interpersonal Relationships*, Lester Kirkendall's study of adult behavior supported

Kinsey's findings of frequent premarital intercourse among teens. However, in his pamphlet for teenagers, *Understanding Sex*, Kirkendall failed to acknowledge the commonness of teen sex, and warned "practically all dating relationships in which premarital intercourse occurs fail to continue into engagement or marriage" (as cited in Campbell, 1979, p. 104). Ignoring recent research, contraception, and medical developments, many sex education authors continued their strongly worded warnings to maintain abstinence until marriage throughout the 1950s and 1960s.

One area in which sex educators of the 1960s differed significantly from the previous decade was in the recognition of females' sexuality. Some sex educators and authors began to cautiously mention the clitoris as a source of sexual pleasure for girls. However, tremendous care was used to neither focus nor emphasize female gratification. Another trend in sex education literature that had its roots in the 1960s was the critique of popular culture's glorification of sexual indulgence (Campbell, 1979). In *What Teenagers Want to Know*, Florence Levinsohn wrote, "Peer group pressure is a strong influence on sexual attitudes, but parents want their sons and daughters to remain virgins until married" (1962, as cited in Campbell, 1979, p. 111). Levinsohn warned readers against extremism, "All the circumstances may combine to create strong inhibitions, to prevent [a young man or woman] from any sexual experimentation at all. At the other extreme, the circumstances may combine to lead to a great deal of sexual experience, to promiscuity, often in the form of conquests" (as cited in Campbell, 1979, p. 111). A teen living a life of either extreme should seek professional help, according to Levinsohn (as cited in Campbell, 1979).

The 1970s

The only empirical study of 1960s sex education controversies was completed by historians James Hottos and Neal Milner in the mid 1970s. Their conclusive findings were despite controversy and conflict about sex education programs, most programs merely continued and some even expanded. However, the quality of sex education program content was not analyzed (Irvine, 2002).

Dr. Mary Calderone, Founder of the Sexuality Information and Education Council of the United States (SIECUS), responded to a multitude of unsubstantiated depravity narratives about heinous events that occurred in comprehensive education classes. Calderone said in a 1970 interview, “These tales are utter nonsense and are never substantiated by name, place, or date. I look upon them as blatant insults to the integrity and intelligence of the teachers in our nation’s schools” (as cited in Irvine, 2002, p. 57).

Depravity narratives, and the consequential suspicion they fostered, created a climate in which sex educators were perceived as potential molesters for whom the sex education classroom provided the ideal opportunity to victimize teens (Irvine, 2002). Social conservatives created a chilling effect against comprehensive sex education. One Kansas teacher who was fired for teaching sex education said, “I was ready and willing to bring some responsible leadership to the movement [the family-life program] but now I’ll not get involved in any way in my next position” (as cited in Irvine, 2002, p. 60). Numerous studies between 1976 and 1981 consistently showed evangelicals were more politically involved than other religious people (Irvine, 2002).

One educator shared the warnings she received prior to starting a new job as a sex education teacher in 1970, “So they told me when I was hired that I couldn’t teach about

contraception. I couldn't teach about abortion. I couldn't teach – well, they didn't even mention homosexuality, forget that. This was 1970; it wasn't even mentioned. And I couldn't use any materials from this Communist organization named SIECUS" (as cited in Irvine, 2002, p. 60). The decade ended with the establishment of Planned Parenthood's Department of Education in 1979 (Irvine, 2002). The ongoing debate continued and heightened into the 1980s.

The 1980s

The 1980s had the emergence of evangelicals within the political arena. By 1988, church-attending evangelicals made up a larger voting bloc than mainstream Protestants (Irvine, 2002). Feminists and homosexuals replaced Communists as "scapegoats" for the new conservative movement in the early 1980s, according to political scientist Rosalind Petchesky (as cited in Irvine, 2002). Leaders of national organizations opposed to sex education, such as Jerry Falwell of the Christian Right, frequently used evocative sexual language as a means to discredit sex education as lowly pornography, not education (Irvine, 2002).

Perhaps the political event of the decade most influential upon sex education was the passing of President Reagan's Adolescent Family Life Act (AFLA) in 1980 (Irvine, 2002). With federal funding for prevention, care, and research related to adolescent pregnancy, AFLA rapidly shifted the national focus relating to teenage pregnancy from contraception to "chastity" or "morality" (as cited in Irvine, 2002). Initially, AFLA required that qualified grant applicants must involve religious organizations. After legal challenges, such a requirement was eliminated from the AFLA (Irvine, 2002).

The most influential aspect of AFLA upon the sex education debate was the changing of the context. Prior to AFLA, the debate questioned whether sex education should be taught in schools. The post-AFLA debate became which sex education curriculum, comprehensive or abstinence curricula, would be taught to public school students (Irvine, 2002). Throughout the United States, religious groups receiving AFLA funding developed abstinence curriculum for public schools overtly based upon conservative Christian beliefs (Irvine, 2002).

AFLA funded abstinence curricula flourished from the late 1980s into the early 1990s; in addition, AFLA supported evaluation programs to critique comprehensive and abstinence curricula (Irvine, 2002). However, since the mission of AFLA was to promote abstinence programs, such evaluation programs were flawed from their inception.

In 1987, a US district court judge determined AFLA was unconstitutional because it supported religion which resulted in the entanglement of church and state (Irvine, 2002). The Supreme Court overturned the district court's decision a year later (Irvine, 2002). By 1993, President Clinton dismantled AFLA; however many lawsuits and court battles lingered due to AFLA's use of public funds to support a religious agenda (Irvine, 2002).

In the middle of the 1980s it became increasingly difficult for opponents of sex education in the public schools to argue that sex education should solely be the responsibility of the home and church. After conservative Surgeon General C. Everett Koop published the controversial 1986 AIDS report, conservatives had to focus upon a different strategy. Koop called for detailed sex education which included information on heterosexuality and homosexuality starting "at the lowest grade possible" (as cited in

Irvine, 2002, p. 89). Koop later commented on his AIDS report, “You can’t talk of the dangers of snake poisoning and not mention snakes” (as cited in Irvine, 2002, p. 89).

In 1987, SIECUS Founder Dr. Mary Calderone said, “It doesn’t seem to me we’ve made any progress at all in the [past] 10 years. On the contrary, I think it’s degenerated, because our children are now more exposed, not having any training in thinking, intellectualizing about one’s sexual aspects” (as cited in Irvine, 2002, p. 60). Conversely, SIECUS opponent Eleanor Howe saw the 1980s quite differently. After shutting down the sex education program in the Anaheim, California school district, she said, “I’ve been vindicated . . . if they continued with this type of sex education – I never called it education – that they were going to find it necessary to distribute condoms and other birth-control devices in our junior high schools, and everybody laughed . . . And yet that’s precisely what they’re doing now . . . That’s what I foresaw, and now all I can say is, “I told you so some twenty-some years ago” (as cited in Irvine, 2002, p. 61).

Critics of comprehensive programs strategically used sexual words to increase anxiety. Sometimes they fabricated information to support their cause. For example, Christian Coalition founder Pat Robertson was accused of purposefully lying about Planned Parenthood when he said, “It is teaching kids to fornicate, teaching people to have adultery, teaching people to get involved in every kind of bestiality, homosexuality, lesbianism – everything the Bible condemns” (as cited in Irvine, 2002, p. 76).

After a debate on CNN, former president of SIECUS Debra Haffner responded to the representative on the other side of the debate who accused SIECUS of promoting necrophilia, bestiality, and coprophilia. Haffner said, “You know, the only people I know who use those words are you guys when I debate you on television” (as cited in Irvine,

2002, p. 76). Some opponents to comprehensive programs resort to base words to incite fears of perversion, especially in relation to children, to support their position (Irvine, 2002).

As the political climate changed from the 1980s to the 1990s, so did the beliefs about sex education in schools. National Gallup polls in 1981 and 1998 showed an increase in adults' belief that comprehensive programs belong in public high schools (Kirby, 2002c). In 1981, 70% of adults believed sex education belonged in schools; whereas that percentage increased to 87% in 1998 (Kirby, 2002c). Another national poll, one by Hickman-Brown in 1999, found 93% of adults believed sex education belongs in public schools (as cited in Kirby, 2002c). The question for the 1990s became which sex education curricula, comprehensive or abstinence, was best for teens.

The 1990s

President Clinton's Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) played a major role in the growth of abstinence programs through the encouragement of religious organizations' participation in federal social programs (Marx & Hopper, 2005). At the end of the decade, President George W. Bush strengthened this policy shift to not only encourage and support religious involvement in federal programs, but to allocate federal money directly to religious institutions (Marx & Hopper, 2005).

As one of the more overtly religious presidents in modern times, Bush's policy positions on abstinence education, abortion, and gay marriage permeated the political landscape of the late 1990s. In the July 2005 edition of *Social Work*, Marx and Hopper explained Bush's reliance on faith-based abstinence programs without fact-based or proven interventions as both troubling and reminiscent of a century earlier (Marx &

Hopper, 2005). The article “Faith-Based versus Fact-Based Social Policy: The Case of Teenage Pregnancy Prevention” compared Bush’s approach during the 1990s to the colonial system of church-administered social programs in which immorality was viewed as the cause of society’s social ills (Marx & Hopper, 2005). The political and social values of the 1990s contributed toward the growth of abstinence programs through legislative changes and financial support.

More than two dozen national organizations opposed comprehensive programs during the 1990s; there was tremendous political and financial support for their collective efforts (Irvine, 2002). Expansive, national advocacy organizations such as Focus on the Family, Eagle Forum, Beverly LaHaye’s Concerned Women for America, and legal centers such as the Rutherford Institute, collaborated in opposition to comprehensive education (Irvine, 2002).

Just one of the organizations, Focus on the Family, had an annual budget of more than \$110 million (Irvine, 2002). Whereas the other side of the debate, in support of comprehensive education, had just one organization dedicated to the cause, SIECUS. With an annual budget of \$2 million, SIECUS’s financial resources pale in comparison to those of its opponents (Irvine, 2002).

In 1996, the federal Section 510(b), Title V of the Social Security Act funded \$50 million annually for 5 consecutive years for sex education programs throughout the United States. With the tremendous influence and organizational strength of the conservative right, Section 510(b) required any financially supported program “teaches that a mutually faithful monogamous relationship in the context of marriage is the expected standard of human sexual activity” (as cited in Irvine, 2002, p. 102). SIECUS,

the lone comprehensive education advocate, criticized such doctrine for use in public schools. Due to spiritual messages within secular language, SIECUS representatives argued, “Religious bias influences the curricula and only one view-point on sexual behavior is discussed” (as cited in Irvine, 2002, p. 103).

At the conclusion of the 1990s, more than 20 significant abstinence curricula were available for use in public schools; the development of many of these programs was funded by AFLA in the 1980s and 1990s (Irvine, 2002). However, the tide was beginning to shift at the conclusion of the 1990s. At the end of the millennium, most American adults wanted comprehensive programs, including birth control, safe sex, and condom usage, taught to teens (Kirby, 2002c). In a 1998 poll, 87% of adults wanted birth control taught; a 1999 poll revealed 90% wanted condoms included in programs; another 1999 poll showed 82% thought most aspects of sexuality, including birth control and safe sex, should be included in programs for teens (Kirby, 2002c).

The pro-family movement made tremendous strides by expanding on the local, state, and national levels throughout the end of the 20th century (Irvine, 2002). However, continued social and health problems such as teen pregnancy, STDs, and HIV/AIDS forced adults to evaluate abstinence and comprehensive programs and demand positive results.

New Millennium

Strong language about sexuality and sexual issues can startle and provide a framework for evaluating sex education programs (Irvine, 2002). For example, the argument that comprehensive programs are pornographic is convincing, since topics such

as masturbation can be discomfiting. However, pornography and uncomfortable topics are on opposite ends of the sexuality continuum (Irvine, 2002).

The 2000s have been filled with controversy as to the most appropriate abstinence or sex education program for students. For example, at the beginning of the decade, after a video titled *That's A Family!* was approved by a board of education in California, parent opposition developed and grew into community outcry (Davis, 2009). After parents realized the content of the video focused solely on diverse family units, single-parent, and homosexual parent families, and excluded nuclear family units, the district had a problem to solve. Years later, a district in New Jersey faced a similar dilemma. Both districts devoted resources of time and effort to reach a consensus. The California district eventually used the video with older students and provided an opt-out procedure. The New Jersey district banned the video despite a committee recommendation to the contrary (Davis, 2009). In some cases, problems are resolved; in others, the good intentions of curriculum reformers are cast aside to quell dissent and reduce negative public relations. Sometimes controversial issues are avoided completely for fear of wasting resources and causing dissent (Davis, 2009).

However, teens have a real need to learn about controversial or sensitive issues. For example, when teens are taught the only acceptable sexual relationship is between a heterosexual, married couple, many teens are marginalized by those they trust, their teachers. In Field's 2008 book, *Risky Lessons: Sex Education and Social Inequality*, the author explains, "Approaching sex education as a response to 'children having children' anticipates particular sexual futures for young people considered at risk for poverty, pregnancy, and motherhood; this approach also reduces their sexual health to the

successful management of their reproductive capacities” (p. 67). Thus, other aspects of heterosexual female teens’ sexual lives, as well as male teens and homosexual female teens and their sexual behaviors and attitudes, are ignored (Fields, 2008).

Two archetypes emerged as tragic figures to consider in the modern sex education debate, the pregnant teenager and the suicidal gay youth (Irvine, 2002). Both sides, abstinence and comprehensive program supporters, used these archetypes to frame and promote their arguments. For example, Planned Parenthood’s educational branch, Guttmacher Foundation, began spouting in 1975 the epidemic of a “million pregnant teenagers” which was misleading (as cited in Irvine, 2002, p. 109). This statistic included married 19 year old women. In addition, teen birthrates reached a peak in the 1950s and declined by the 1970s (Irvine, 2002). A Health and Human Services report estimated, and subsequent research supported, gay teens were three times more likely than their straight peers to attempt suicide (Irvine, 2002). Thus, the suicidal homosexual teenager became a rallying cry for educational reform; however, the nature and effectiveness of such reform remains a source of much debate (Irvine, 2002).

Sex education has and continues to be at the center of fear that sexual language will trigger chaos. Such fear continues to fuel efforts to regulate speech of a sexual nature (Irvine, 2002). Ironically, as social conservatives advocate restricting sexual speech, they have used public talk about sex to build momentum and gain supporters. As a result, social conservatives have emerged as visible and powerful in our national sexual culture (Irvine, 2002).

Part of social conservatives’ power at the beginning of the millennium stems from federal financial support of abstinence programs. While parents and communities want

the education of their children to reflect their values, and abstinence and comprehensive programs are part of that education, financial support affects parental and community input. Teens living in poor areas are more likely to be exposed to abstinence programs since local districts and programs require more federal and state support than those in more affluent areas (Fields, 2008). Thus, financial need, not local parent or community support, is likely to determine the type of program these teens receive. Another aspect Fields explored was the narrow focus of many programs. She explained, [Stakeholders] “fail to insist that sex education challenge social inequalities, contribute to a compassionate response, and allow a full range of sexual expression in vulnerable young people’s lives” (p. 67).

As of March 2012, 21 states and the District of Columbia (DC) require sex education as part of public school programs; whereas, 33 states require HIV education (Guttmacher Institute, 2012). When sex education is provided to students, in 37 states and DC, parents must be aware, or approve of, the program. Also, when sex education is provided to students, 37 states require abstinence is either included or stressed. However, in only 18 states and DC, when sex education is taught, information on contraception must be included. Though most states do not require sex education as part of public school curricula, when it is included, abstinence education must be part of the curricula and parents must be aware of the program in most states (Guttmacher Institute, 2012). While most states do not require sex education, when they do, they expect abstinence and parental awareness to be part of the public school programs.

As the first decades of the current millennium are marked by competition for resources, immediate information via technology, and growing diversity in the US, the

complex issue of educating teens about sexuality is fraught with more challenges than ever. While the challenges are growing, so are the needs.

Need for Effective Programs

American educators have promoted the need for effective sex education programs, both abstinence and comprehensive, for three main reasons. First and foremost, the health of teens is impacted by their knowledge and behaviors. Second, society has a vested interest in promoting desired future adult behaviors by teaching teens how they should behave now and later as adults; sexual behavior is among the most important future adult behaviors. Third, with the increasing amount of information and the effect of competing sources of information, effective sex education programs combat harmful and misleading information.

“Adolescence is the crucial time in which individuals establish lifestyles and behavioral patterns that have profound effects on adult health,” according to diMauro in Davis’ article “Adolescent Sexuality: Disentangling the Effects of Family Structure and Family Context” (2001). Despite tremendous efforts of abstinence program and comprehensive program advocates from the 1960s through the end of the 20th century there have been steep increases in teen sexual activity, resulting in teen pregnancy, STDs, and poverty among teens (Tsubata, 2003). The National Campaign to Prevent Teen and Unplanned Pregnancy spokesman Bill Albert said in a 2010 issue of *The Futurist*, “Since the teen birthrate is on the rise for the first time in 15 years, it is critically important to focus resources and attention on this problem” (Docksai, 2010, p. 14). Both sides blame strides made by the other side for such troubling results.

Teens' knowledge and sexual behaviors are no longer a private, family matter due to their impact on teen health. Sexual activity is a linked risk behavior for teens. When teens choose to be sexually active, it can be a life-and-death decision (Tsubata, 2003). Due to teen pregnancy, STDs, and HIV/AIDS, teen sexuality is a public health issue according to the 2006 Advocates for Youth Report (as cited in Sprecher, Harris, & Meyers, 2008). For example, the number one risk factor for contracting HIV is having multiple sexual partners. Nineteen percent of teens have had four or more sexual partners (Tsubata, 2003). Compared to other industrialized nations, the United States has teen pregnancy rates which are quite high. For instance, per 1,000 teen girls ages 15 to 19, the pregnancy rates in the Netherlands is 8 per 1,000; Canada is 43 per 1,000; and England is 63 per 1,000; whereas the United States has 93 pregnancies per 1,000 young women (Poobalan et al., 2009). When comparing similar nations, teen pregnancy rates in the US are more than double those of their northern neighbor. Such statistics support the need for effective programs.

Teen mothers have tremendous challenges to overcome. They are more likely than adult mothers to be on public assistance, are more likely to remain single parents, are less likely to graduate high school, and have lower lifetime earnings (Marx & Hopper, 2005). Fewer than half of teen mothers graduate from high school and merely 2% of them earn college degrees by the age of 30 (Docksai, 2010). Children of teen mothers seem to face the same challenges as their mothers; these children are also less likely to graduate high school and are more likely to perform poorly in school (Marx & Hopper, 2005). Daughters of teen mothers have a 22% chance of becoming teen mothers themselves

(Marx & Hopper, 2005). The perpetuation of teen motherhood has serious, negative consequences at both the personal and societal levels.

Due to the negative physical, emotional, and economic effects of teen sexuality, abstinence is overwhelmingly advantageous for teens and thus, desired by many adults (Schramm, 1996). American teen sexuality was largely a private, family matter prior to the 1950s. From the 1950s through the beginning of the 21st century, adolescence has been connected to adults' concerns and attempts at positively affecting teen sexuality, according to Moran and Kidd (Pearce, 2008). American culture is strongly influenced by, and concerned with, sexuality; it has been and will continue to be an area invoking strong opinions from adults.

Influencers of teen culture, such as movies, television, books, and the Internet, inform, entertain, affect personal agendas, and highlight important issues in the pivotal time in which adolescents are preparing for adulthood according to Davis and Dickinson (as cited in Pearce, 2008). Informal sources of information, such as the media, peers, and parents, are important in shaping and developing sexual knowledge and attitudes among young people (Sprecher et al., 2008). Though such sources are important to both genders, it is more significant for young women. In a study of 6,527 college students from 1990 to 2006, the extent teens relied on their parents and their own reading as sources of information remained stable from 1990 to 2006 (Sprecher et al., 2008). The accuracy and impact of such sources are a wild card; whereas, accurate, reliable, and helpful information must be provided through effective sex education programs. The study suggested men received information about sex from fewer sources, such as from professionals, reading, dating partners, and same-gender friends, than did women. This

supports previous research by Fisher that indicated in general, men received less sex education than women (Sprecher et al., 2008). In that same study, from 1990 to 2006, teens received more information about sex from the media, peers, and professionals. Two important cultural changes during that time period are the increase in access to information about sex via the Internet and television, according to Escobar-Chaves et al., (as cited in Sprecher et al., 2008). Teens' health and future happiness demand effective sex education programs; such important information cannot be relegated to the information superhighway or mass media.

According to a review of reviews, Poobalan's (2009) study of 30 abstinence and comprehensive program analyses, one of the most important aspects of efficacy is the relationship between the age at which the program is taught and the teen's own sexual initiation. Teens must be taught sex education prior to sexual initiation. However, the ideal age for such programs must be researched further with the main purpose of delaying the age of sexual initiation. Poobalan's research asserts since the age of sexual initiation is decreasing and risk-taking behavior is more difficult to reverse than prevent, educating teens at the most influential age is of paramount importance. Starting a program prior to teens' sexual initiation may delay their sexual debut. Issues of parental consent, age appropriateness, and biological and psychological maturity all must be considered when determining the ideal age at which a teen participates in a program (Poobalan et al., 2009).

Other aspects influencing program efficacy are teens' skills and goals. Some teens have the knowledge and skills to avoid sexual activity, but not the desire. Conversely, others lack necessary knowledge and skills, but have connections to adults, a belief in the

future, and motivation to avoid pregnancy and STDs, and thus remain abstinent. Adults must determine the reasons for specific teens' risk-taking behaviors in order to select the most effective program for these teens (Kirby, 2002b).

Challenges of Abstinence Education

Defining abstinence and the goals of abstinence programs is complex and remains open to debate. Consequently, despite their common focus on abstinence from sex, abstinence programs include varied programs with diverse curricula, goals, and objectives (Kirby 2002b). Is a teen abstaining from sex permitted to show any physical affection to another? Is the goal of abstinence education abstaining from sexual activity until marriage, financial independence, or high school graduation? These and other questions are addressed in a myriad of ways. Comprehensive education advocate, SIECUS, advises teens to abstain. If teens are not going to abstain, then they need to behave responsibly (McIlhaney & Haffner, 1997). Abstinence is a complex message that requires balance and expertise in its effective dissemination.

An outcome-based definition of abstinence would include refraining from sexual activities such as oral, anal, or vaginal intercourse that are likely to cause harmful physical or emotional outcomes, mutual or personal masturbation, or possibly even "French" kissing (Schramm, 1996). A morality-based definition would include refraining from all forms of sexual expression. However, sexual behaviors such as flirting, kissing, hand-holding, and hugging would not be defined as immoral ways to express affection by most cultures within the United States (Schramm, 1996). A more generally accepted view of abstinence is refraining from oral, anal, and vaginal contact with another person (Schramm, 1996).

The time frame for abstinence in a morally-held perspective would be from birth until marriage (Schramm, 1996). However, 90% of men and 70% of women wanted their first experience with sexual intercourse to happen when it did, which for most, was prior to marriage (McIlhaney & Haffner, 1997). In American society, adults often marry between the ages of 22 and 30. Thus, asking a 12 year old to wait until marriage to become sexually active, 10 to 18 years from the onset of puberty, could make abstinence seem an impossible goal (Schramm, 1996). If the goal of abstinence programs for a 12 year old is to abstain from sexual activity until high school graduation, those 6 years may seem more realistic. Upon high school graduation, that same teen may likely have more developed decision-making skills, and thus may be better equipped to handle the responsibility of becoming sexually active, if he or she so chooses (Schramm, 1996).

Another important challenge of abstinence programs includes ensuring sexually active teens are given needed information in a supportive and respectful manner (McIlhaney & Haffner, 1997). Neglecting sexually active teens is irresponsible and could put teen lives in danger. Since the sole focus of abstinence programs is in fact, abstinence, by excluding contraception as a method for preventing pregnancy and disease, teens refuting abstinence are in jeopardy due to ignorance (Beh & Diamond, 2006). Abstinence programs may deny teens information that is needed at some point in their lives; for some, information about contraception is not needed until marriage, whereas for others, it was needed yesterday (McIlhaney & Haffner, 1997). The message that the only effective way to avoid pregnancy and STDs is abstinence, can give teens the impression that when they choose to become sexually active, condoms are not worth using (McIlhaney & Haffner, 1997). For example, in research sponsored by the Center

for Disease Control and Prevention, Manlove asserted the negative relationship between religiosity and contraceptive use; among sexually active male teens, the more observant his family, the less likely he is to use contraceptives (Manlove et al., 2008). The complex yet important message is missing from abstinence programs. Abstinence is the best protection, but condoms prevent pregnancy and protect health (Manlove et al., 2008).

In addition to dangers due to abstinence programs neglecting the needs of sexually active teens is the tremendous impact upon homosexual teens. Abstinence education defines the “expected standard of human activity” as one that is a monogamous, heterosexual married relationship (Beh & Diamond, 2006, p. 1). Thus, teens in the sexual minority, gay or lesbian, are completely ignored by the definition of “expected standard of human activity” (Beh & Diamond, 2006, p. 1). When a gay or lesbian teen learns from his or her teachers what is expected and normal is vastly different from their own desires and feelings, that teen is formally and definitively marginalized by society.

Another weakness in some abstinence programs is inclusion of inaccurate information to emphasize the value of teen abstinence. By exaggerating the failure rates of contraceptives, the physical and mental health risks of abortion, and the health risks faced by the gay population, some abstinence programs put the integrity and value of all abstinence programs in question (Beh & Diamond, 2006). In the “Waxman Report” released by U.S. Representative Henry A. Waxman, more than 80% of the most popular abstinence curricula used by federal grant recipients contained “false, misleading, or distorted information about reproductive health” (as cited in Beh & Diamond, 2006, p. 1). According to the Waxman Report, “[s]erious and pervasive problems with the accuracy

of abstinence-only curricula may help explain why these programs have not been shown to protect adolescents from sexually transmitted diseases and why youth who pledge abstinence are significantly less likely to make informed choices about precautions when they do have sex” (as cited in Beh & Diamond, 2006, p. 2). When the federal government supports education of its citizens, in this case abstinence programs for teens, it has the obligation to ensure information provided is accurate and complete (Beh & Diamond, 2006). Though society has an interest in promoting the value of abstinence, it is important to distinguish that interest from a misguided approach of disseminating incomplete, misleading, or false information for the purpose of promoting the value of abstinence. The use of such tactics is indefensible (Beh & Diamond, 2006).

Some organizations one may assume support abstinence programs, do in fact, criticize abstinence programs in support of a comprehensive approach. Respected organizations such as the American Medical Association, the National School Boards Association, the American Public Health Association, the YWCA of the USA, and the National Council of Churches support comprehensive programs which include both abstinence and contraception information (McIlhaney & Haffner, 1997). The CDC warns that increasingly teens are engaging in oral sex to prevent pregnancy (as cited in Beh & Diamond, 2006). Several STDs can be transmitted through this contact. Concern has been raised this may be in response to abstinence programs. Perhaps teens’ own ignorance of dangers from oral sexual contact has caused this increase (Beh & Diamond, 2006). In addition, abstinence programs are currently not popular; merely 15% of Americans believe teens should receive abstinence-only education and no information on how to obtain and use condoms (Beh & Diamond, 2006). A healthy and effective balance is the

desired approach. Adults want teens to abstain from sexual activity and remain physically, emotionally, and sexually healthy. Teens must become prepared for adulthood and all its complexities.

Evaluation of abstinence programs has been plagued with flaws. Many programs developed with AFLA financial support devoted merely 3% of funding to evaluation, whereas 10 to 15% is commonly reserved to evaluate social programs (Irvine, 2002). In 1997 and 2001, comprehensive evaluation of AFLA-supported abstinence programs found nearly all evaluations were so flawed as to be meaningless. Such evaluation problems include extreme brevity of program duration, small samples of participants, a lack of behavior measures or follow-up data, and a lack of appropriate comparison groups (Irvine, 2002).

An example of abstinence programs getting credit where it is not due is the San Marcos miracle. Teen-Aid leadership boasted 2 years after program implementation the adolescent pregnancy rate dropped from 20% to 3% (Irvine, 2002). Such statistics are encouraging and remarkable. However, the San Marcos miracle was in reality, the San Marcos myth. Arising from loosely configured numbers kept by one guidance counselor at San Marcos High School, the accurate findings were disappointing. Prior to the introduction of Teen-Aid's abstinence program, according to the Department of Health Services, 33 births occurred among high school teens. After the implementation of the program, 56 babies were born in 1986 and 47 were born in 1987 (as cited in Irvine, 2002). According to the Department of Health Services, there was an increase in teen pregnancies in California's San Marcos High School after Teen-Aid's abstinence program. However, Teen-Aid claims the opposite to be true (Irvine, 2002).

Evaluating only the most effective session or duration of a program can also be misleading (Poobalan et al., 2009). It seems multiple sessions over a longer duration may be more effective than short-term intervention. Such multiple-session programs require more resources and thus, may have higher attrition rates than short-term programs (Poobalan et al., 2009). Research is inconclusive regarding program duration and efficacy. Thus, evaluations should assess the entire program, not solely minor, selected aspects of a program.

In Poobalan's study of 30 abstinence and comprehensive programs, a challenge faced by many abstinence programs is the ineffectiveness of merely providing the "blunt message" that teen abstinence is imperative. This approach does not seem to be effective in delaying sexual initiation. Such a message should be integrated with lessons that value healthy relationships, encourage academic and vocational growth, and educate teens about contraception (Poobalan et al., 2009).

Wilson's (2005) study of 21 abstinence-only-until-marriage programs revealed that many programs do not include complex, sensitive sexual concepts. Merely 38% of the programs included information on sexual identity and orientation or human sexual development beyond puberty (Wilson, Goodson, Pruitt, Buhi, & Davis-Gunnels, 2005). The topic of diversity of sexual behaviors and values was included in 33% of the programs. Only 29% of the programs mention masturbation as an aspect of human sexuality (Wilson et al., 2005). Topics omitted from abstinence programs reveal to teens aspects of sexuality which are not valued.

Accuracy of anatomy or physiology in abstinence programs has improved through the years, but remains inconsistent. Not a single program earned *excellent* in Wilson's

evaluation of such accuracy. Three programs received *good* ratings in this area; whereas most programs earned *inadequate* when the accuracy of reproduction, contraception, or sexual health information was assessed (Wilson et al., 2005). For example, among the abstinence-only-until-marriage programs, all of which were published or revised between 1987 and 2002, one curriculum included the following information:

. . . the outward direction of sperm cells is supported by emphasis on an outward direction in the male's personality . . . The ovum, by contrast, is receptive and inward-directed . . . the female personality is generally more receptive and inward than the males. (Wilson et al., 2005, p. 96)

Such a value loaded statement with no basis in research is an anachronism in modern curricula.

Wilson's research demonstrated the impetus for improvements of abstinence programs such as greater scrutiny of materials and accountability by government. In 1993, a lawsuit in Florida cited abstinence program *Me, My World, My Future: Teen-Aid* violated "Florida state law mandating comprehensive sexuality education" due to "inaccurate, biased, and incomplete information" (Wilson et al., 2005, p. 97). The program's transformation 5 years later is remarkable. In Wilson's research, the 1998 revised *Teen-Aid* program earned excellent and good ratings in several categories, including accuracy of anatomy and physiology materials; Teen-Aid was also the only program of the 21 in the Wilson study to include all eight elements of the federal government's A-H Definition of Abstinence Programs (Wilson et al., 2005). Challenges in abstinence programs often develop into strengths as programs evolve.

Strengths of Abstinence Education

Abstinence is a practical and feasible skill, not merely a theory or ideal (Tsubata, 2003). To remain or return to abstinence after sexual initiation does not require money or expertise. Educational standards and the accountability movement emphasize high expectations and life-long learning for all students. While comprehensive programs set low expectations for students by expecting teens to be sexually active; abstinence programs set high expectations and healthy standards for teens (McIlhaney & Haffner, 1997). In other areas of education, researchers and practitioners establish desired and challenging, yet attainable standards. Why not in the area of sex education?

Abstinence programs can be effective at delaying teens' sexual initiation as well as having others return to abstinence. According to the 2001 Youth Risk Behavior survey, the emergence of abstinence programs in recent years resulted in the decrease of sexually active teens from 54% to 46% (as cited in Tsubata, 2003). A study of 2,541 teens, from 13 to 16 years of age, showed that 54% of teens who were formerly sexually active were no longer so a year after completing an abstinence program (Tsubata, 2003). When teens make an abstinence pledge, sexual activity is delayed by an average of 18 months, according to a 1997 National Longitudinal Study on Adolescent Health (as cited in Tsubata, 2003).

Unquestionably, abstinence is the only 100% effective form of birth control and STD prevention. When abstinence is embraced and practiced by teens, it is effective in protecting their sexual and physical health from pregnancy and STDs. Abstinence, not increased use of contraceptives, was the major cause of a decrease in pregnancy rates found in a study done between 1991 and 1995 and published in *Adolescent and Family*

Health by Mohn, Tingle et al., (2003) (as cited in Tsubata, 2003). That same study found teen pregnancies and abortions decreased and among sexually active teens, condom use increased due to abstinence programs.

In addition to the prescribed benefits of fewer pregnancies and abortions, other important benefits emerge from abstinence programs. Though abstinence programs vary in both content and quality, they all include nonsexual antecedents of sexual activity (Wilson et al., 2005). Abstinence programs build teens' skills such as peer pressure avoidance, self-discipline, and long-term planning (Wilson et al., 2005). Teens with the skills to abstain from sexual activity also have the skills to abstain from cigarettes, alcohol, and drugs (Wilson et al., 2005). From a broader perspective, the ability to delay gratification to a more appropriate time can have a positive impact upon other life goals (Wilson et al., 2005). Increased expectations through abstinence education resulted in more responsible behavior overall (Wilson et al., 2005). Thus, abstinence programs have secondary benefits above and beyond those from comprehensive programs.

When teens are supported in their own beliefs to abstain from sexual activity, they are supported against corresponding peer pressure. By abiding to an obtainable definition of abstinence, teens are empowered to resist sexual pressure (Schramm, 1996). For example, if a teen agrees to abstain until high school graduation, then they do not offend their boyfriend or girlfriend by refusal to engage in sexual activity. High school graduation is a clear, unambiguous goal (Schramm, 1996). In a 2000 study by The National Campaign to Prevent Teen Pregnancy, 93% of teens said society should provide a strong message to teens not to have sex until after graduation from high school (as cited in Tsubata, 2003). Abstinence programs provide necessary support teens need to make

the safe choice to abstain from sexual activity; teens believe society can contribute with clear, definitive abstinence messages.

The political consistency and moral foundation inherent in abstinence programs contribute toward their success. From the 1960s to the end of the millennium, Christian-right activists have been more culturally powerful than comprehensive program advocates (Irvine, 2002). The consistent voice and message used by national pro-family organizations against comprehensive programs strengthens their position (Irvine, 2002). With foundations of a complex and responsive organizational structure and ample curricular and informational materials, pro-family advocates were well prepared for community debates with supporters of comprehensive programs by the early 1990s (Irvine, 2002).

The Christian Coalition, among several organizations, aggressively acted to get their supporters in positions of political power. For example, Christian Coalition sponsored hundreds of workshops to train others how to win political seats, especially those on boards of education (Irvine, 2002). The strong, oppositional stances of social conservatives were effective in transforming the anti-sex education conflicts of the 1960s into popular, widespread, and unrelenting opposition in the decades which followed (Irvine, 2002). Social conservatives have fought fiercely for the establishment of their own abstinence education policies and programs within public education (Irvine, 2002).

Ironically, while social conservatives try to restrict communication about sex, they speak more about sex (Irvine, 2002). According to sociologist William Gamson, once a social movement defines terms in social discourse, it is very difficult for the opposing side to redefine those same terms without causing confusion among the public

(as cited in Irvine, 2002). Gamson added, “But in my analysis I focus more attention on the rhetorical strategies of one side [social conservatives] . . . This is for a compelling reason – quite simply, they say more” (as cited in Irvine, 2002, p. 12).

Two conservative Christian organizations, Concerned Women for America (CWA) and Teen-Aid, were among many organizations working in conjunction in support of abstinence education. Teen-Aid’s director, LeAnna Benn, wrote in the CWA newsletter, “Then how does one go about getting Godly principles disseminated in the public arena? . . . Teen-Aid, Inc. has written value-based materials for public schools making sure that the tenets of nearly all major world religions would not be offended” (as cited in Irvine, 2002, p. 118). While their opponents attempt to remove religion from sex education, abstinence advocates embrace spirituality and do not pretend it is separate and distinct from sexuality.

Kirby evaluated 10 abstinence programs for their effectiveness in delaying sexual initiation among teens in a 2002 study for the National Campaign to Prevent Teen Pregnancy. As a result of the study, one recommendation was to consider implementing a large mass communication campaign to promote abstinence. Among abstinence programs, it has the strongest evidence that it may delay sexual initiation among younger teens and even reduce teen pregnancy rates (Kirby, 2002a).

A study of 21 abstinence-only-until-marriage programs by Wilson in 2005 showed most covered a variety of topics integral to teens’ health and well-being. On average, the 21 programs dedicated the following percentages to the following areas: abstinence – 48%, character/youth development – 20%, sexual health – 13%, prevention of STDs and HIV/AIDS – 10%, and pregnancy prevention – 4% (Wilson et al., 2005).

The abstinence programs studied address a variety of relevant aspects of sexuality education; they address not solely the value of abstinence, but information and skills in support of abstinence.

The Wilson study contained the qualitative research approach of focus groups (Wilson et al., 2005). Directors and instructors from the 21 programs revealed they examined the alignment of curricula with the federal government's definition of abstinence programs prior to selection of the curriculum for their teens (Wilson et al., 2005). However, the coverage of the eight federal elements (A-H) varies significantly. Two items which define abstinence, element B, *the expected standard for all school-aged children* and element C, *the only certain way to avoid out-of-wedlock pregnancies and sexually transmitted infections*, were frequently included in the 21 programs. Two other items from the federal government's definition of abstinence programs, element F, *bearing children out-of-wedlock can be harmful* and element G, *alcohol/drug use will increase vulnerability to sexual advances*, were more subtly included in just more than half the programs. Only one of the 21 programs, *Me, My World, My Future: Teen Aid*, included all eight elements (A-H) of the federal definition of abstinence programs.

Whether this reflects poorly upon the programs or the federal definition is open to debate.

Regarding the breadth of curricular content among the programs analyzed in Wilson's study, all 21 programs explicitly addressed the issue of abstinence, as would be expected. Nearly all included intrapersonal and interpersonal skills; decision making was included in 95% of programs, peer pressure and refusal skills were included in 76% of programs, and goal setting was included in 71% of the programs. Thus, most programs

acknowledged the complexity of abstinence and gave teens knowledge and skills needed to remain or return to abstinence (Wilson et al., 2005).

Challenges of Comprehensive Education

Comprehensive education programs provide low standards and expectations for teens; fail to ensure teens are safe from pregnancy, STDs, and HIV/AIDS; fail to build teens' ability to protect themselves from other risky behaviors; and fail to address teens' unique peer pressure challenges and thought processes. Another fundamental failure of comprehensive programs is the absence of an important goal, teens abstaining from sexual activity, at the forefront. No comprehensive programs have dramatically decreased the number of teens who choose to be sexually active (McIlhaney & Haffner, 1997).

Schools cannot settle for the argument that teens will have sex regardless of the messages provided to them. Once, that same, weak argument was used pertaining to racial discrimination, cigarette smoking, and drunk driving. However, when serious efforts were made toward eradicating those problems such weak arguments were pushed aside (Tsubata, 2003). The highest goal of comprehensive programs is some risk reduction for teens through proper and consistent use of condoms (McIlhaney & Haffner, 1997). As teens develop their own views of sex and intimacy, when the benefits of condom use are taught, the message they receive is that condom use demonstrates responsibility and safety (McIlhaney & Haffner, 1997). This is not accurate. Though proper and consistent use of condoms is safer than non-condom use, abstinence is both responsible and safe for teens. According to a poll by the National Campaign to Prevent Teen Pregnancy in 2000, of sexually active teens, 63% said they regretted becoming sexually active (as cited in Tsubata, 2003). In the same poll, among 12 to 17 year olds,

78% said teens should not be sexually active (as cited in Tsubata, 2003). Teens themselves believe the goal should be abstinence, not merely safer sex.

Comprehensive programs fail to protect teens' health and futures from pregnancy and disease due to sexual activity. Studies fail to prove that comprehensive programs dramatically increase contraception use among sexually active teens (McIlhaney & Haffner, 1997). The rate of correct and consistent use of condoms by teens is dismal; some studies show merely 5% of sexually active teens use condoms both correctly and consistently. At the optimistic end of the range other studies show only 40% of sexually active teens consistently and correctly use condoms (McIlhaney & Haffner, 1997). Optimistic research on comprehensive programs is not very optimistic. One study by the Center for Disease Control revealed only half of sexually active teens used a condom the last time they had sex (as cited in McIlhaney & Haffner, 1997). Fifty percent success is failure.

Sexually active teens participate in other risky behaviors and may pay a high price for such behavior. A study by the CDC revealed 25% of teens used alcohol or drugs during their last sexual encounter (as cited in McIlhaney & Haffner, 1997). While ensuring teens use condoms correctly and during every sexual interaction is a daunting challenge, the costs of failure are immense. Teen pregnancy, resulting in loss of educational, personal, and professional opportunities, and STDs, HIV/AIDS, and death are the tremendous and tragic results of failure. Individual teens and our society have too much to lose when teens are sexually active.

Since decision-making processes and perceptions of teens are significantly different from adults, logic used with adults can have an opposite effect upon teens. In a

behavioral study by the CDC, teens said they used condoms during the first sexual contact with a partner and continued to do so, “until they felt the relationship was permanent” (as cited in Tsubata, 2003). To those same teens, a *permanent* relationship was one lasting 21 days or more. Thus, teens in the study believed they were acting responsibly by having a series of relationships and using a condom during the first 3 weeks of each relationship (Tsubata, 2003). Since teens’ mental and emotional capabilities are not yet fully developed, they are not realistic (Tsubata, 2003). When parents tell their teen they should not be sexually active, but if they decide to, they must use a condom, the teen’s perspective is different than the intention of the message. Teens translate their parents’ message that it is acceptable to be sexually active as long as they use a condom. Though adults intend for their messages of safe sex to keep teens safe, they are failing.

The political challenges inherent in supporting comprehensive programs are also tremendous. Discussing sex with teens is an uncomfortable and awkward conversation for most parents. Parents want teens to be safe by having accurate information when they need it. However, the age at which teens need education about sex and the content of that education is difficult to determine and difficult to accept for many parents. The realization that one’s son or daughter is a sexual being is fraught with internal conflict. Also, having another adult teaching one’s son or daughter about sex before a parent thinks the child is ready, or more explicitly than the parent would like, places the parent in a position to protect their child’s innocence. The balance between the *when* and the *what* of sex education is complex, personal, and sensitive. As parents, educators,

religious organizations, and government entities sift through this complex challenge, each must continually respond to arguments by competing interests.

One argument that comprehensive program supporters use against abstinence programs also commonly pertains to comprehensive programs. According to Wilson's (2005) study, comprehensive programs fail to adequately cover sensitive sexual topics such as homosexuality, masturbation, and abortion. While abstinence programs rarely address such hot button issues, comprehensive programs' exclusions of such issues may reveal they are not as comprehensive as one may expect.

As the Supreme Court determined prayer and the reading of the Bible were no longer permitted in public schools, religious leaders became more enthusiastic in their opposition to sex education in public schools. Many argued that since sex education was now forbidden to be taught within the context of the Christian framework, or religious moral teachings, it should not be addressed in any manner by the public schools; sex education should be completely the domain of the church and the home (Irvine, 2002). With a lack of success, social conservatives changed the argument from whether sex education would be taught in public schools to which curriculum would be taught there (Irvine, 2002).

Historically, the debate between comprehensive programs and abstinence programs came to the forefront in the 1960s. The first national organized, yet grassroots campaign against comprehensive education emerged through the efforts of The Christian Crusade. Led by Reverend Billy James Hargis and the John Birch Society, The Christian Crusade established the foundation against comprehensive programs in the late 1960s (Irvine, 2002). Hargis developed an extensive media approach against comprehensive sex

education. He developed a television show, radio show, weekly magazine, tabloid titled *Weekly Crusader*, taped sermons, and, quite influential in the arena of sex education, sex education records for boys and girls (Irvine, 2002). Hargis was the first religious leader of the modern era to have such a broad based approach in support of a religious perspective on sex education (Irvine, 2002).

Tantalizing article titles such as the *Christian Crusade's* "Is the School House the Proper Place to Teach Raw Sex?" mobilized then enraged citizens against comprehensive programs. Like Jocelyn Elders, U.S. Surgeon General in the 1990s, and Margaret Sanger in the 1920s, when SIECUS advocated for teens to discuss sexuality, they became targets of political scapegoating (Irvine, 2002). Published in 1968, the 40 page pamphlet by the *Christian Crusade's* education director Gordon Drake, strongly warned against the dangers of the "rawness" of sex education, "SIECUS Sexpot," and SIECUS leader Calderone's "revolutionary gospel" (as cited in Irvine, 2002, p. 51).

In addition to emotional, yet logical arguments against comprehensive programs, some zealots use aggressive, subversive, and illogical techniques. A member of the *Movement to Restore Decency*, Joseph Smithling, said those supporting sex education are part of a Communist conspiracy; teachers were foolishly contributing to a Communist plot to overthrow the United States by encouraging teens to be "interested in sex, drawing them away from religion and making them superficial and less rugged" (as cited in Irvine, 2002, p. 142). This argument is reminiscent of arguments first emerging in the early 1900s. Various political techniques have been, and continue to be, used effectively against comprehensive programs.

Strengths of Comprehensive Education

Though comprehensive programs include abstinence frequently as their foundations, many also include information on sensitive, but relevant issues of contraception, sexuality, and abortion. Thus, such programs provide both sexually active teens and their abstaining classmates with contraceptive information in order to prevent pregnancy, and in the case of condoms, to protect health. In a 1997 article, “Q: Are Abstinence-Only Sex-Education Programs Good for Teenagers?,” a strength of comprehensive programs was merely that they do not increase sexual activity among students (McIlhaney & Haffner, 1997). One study found the 1990s were characterized by an increase in comprehensive programs which resulted in a decrease in sexual activity among teens, according to Risman and Schwartz, (as cited in Sprecher et al, 2008). In a 2009 study of 30 abstinence and comprehensive programs, evidence showed changing risky sexual behavior was more difficult than improving sexual knowledge and attitudes (Poobalan et al., 2009). However, among changing behaviors, condom use seemed to be the most easily influenced. For sexually active teens, learning proper and regular condom usage can be an important, even life-saving skill. Such usage is higher among participants of HIV education programs than those in general sexual and relationship programs. It seems the perception of risk combined with the needed skills resulted in increased condom use among sexually active teens (Poobalan et al., 2009).

According to the American Academy of Pediatrics Committee on Adolescence, “Encouraging abstinence and urging better use of contraception are compatible goals.” (as cited in Beh & Diamond, 2006, p. 2). Teens who refrain from sexual activity during high school will eventually need information about contraception; schools may offer the

only opportunity to receive accurate, reliable information prior to adulthood (Schramm, 1996).

Most supporters of comprehensive programs see sexuality as an important aspect of the human experience and support gender equality and acceptance of sexual diversity (Irvine, 2002). Supporters such as SIECUS's Calderone, argue that a comprehensive knowledge of sexuality is vital to a healthy and enjoyable life (Irvine, 2002). Also, due to acceptance of diverse sexualities, all students in a comprehensive program feel accepted regardless of their personal sexuality. Comprehensive programs respect the complexities and importance of human sexuality.

Such respect for human sexuality is often at the core of critics' claims. Kirby's 2002 review of 73 studies and their respective programs addresses common critiques of comprehensive programs. Evaluations support the argument that HIV and sexuality curricula do not encourage or increase sexual intercourse among teens (Kirby, 2002b). Such comprehensive programs did not result in earlier sexual initiation, increased frequency, or increased partnership of sexual activity, despite unsubstantiated claims of such negative effects (Kirby, 2002b).

Specifically, HIV education programs and comprehensive programs seem to be more effective with teens at higher risk rather than lower risk of contracting HIV or STDs, according to the Kirby (2002b) study. This may be due in part to the nature of higher versus lower risk behaviors; there is more room for improvement with higher risk behavior (Kirby, 2002b). In addition, comprehensive programs may delay sexual initiation or reduce sexual activity among teens, according to Kirby's extensive review

(Kirby, 2002b). The aspects of comprehensive programs that make some adults uncomfortable are the same aspects that make them effective with teens.

Curriculum Components

Education can be defined as the “unilateral transfer of information from the one who knows more to the one who knows less” (Sprecher et al., 2008, p. 1). In the case of education in school, the one who knows more, the teacher with his or her curriculum, and the one who knows less, the student, are engaged in various instructional activities for the benefit of the student. Sex education readily responds to social and political changes and national issues; it is not an unmovable or stable ideology, according to Nelson and Martin (Pearce, 2008).

Curriculum components such as information, materials, organization of materials, variety of pedagogy used, and the overall depth and breadth of curriculum reveal what is valued within the topic to be explored (Wilson et al., 2005). Pedagogical methods used in abstinence and comprehensive programs commonly include a variety of the following: lecture, large-group or small-group discussion, cooperative learning, audiovisual materials, case studies/scenarios, journals/story writing/role playing, worksheets, and the use of resources outside the classroom, such as community or parental speakers, peer leaders, and mentoring (Wilson et al., 2005). Both inclusion and exclusion of content and pedagogy shows educators and students what is worth their time and effort and what is too trivial or too sensitive to include (Wilson et al., 2005).

Since the goals of sex education programs vary, their curricula vary. Goals of programs include preventing teen pregnancy, STDs, and HIV/AIDS; teaching teens about

their own bodies, sexual reproduction, and sexuality; and developing teens' decision-making, problem-solving, and life-planning skills.

According to SIECUS, the broader goal of sex education programs should be to provide a foundation for a lifetime of sexual health (as cited in McIlhaney & Haffner, 1997). Specifically, SIECUS supports abstinence education, but also the inclusion of elements from comprehensive programs. Such inclusions, from the SIECUS recommendations, include human development, personal skills, sexual health, sexual behavior, society, and culture (as cited in McIlhaney & Haffner, 1997). SIECUS provided the following among a total of 19 guidelines for a comprehensive program: "abstaining from sexual intercourse is the most effective method of preventing pregnancy and STD/HIV," "Early involvement in sexual behaviors poses risks," "Young people who are involved in sexual relationships need access to information about healthcare services," and "Sexuality includes physical, ethical, social, spiritual, psychological, and emotional dimensions" (Beh & Diamond, 2006, p. 10).

Sex education programs effective at preventing teen pregnancy have commonalities. A review of 35 studies of sex education programs by the World Health Organization found programs including abstinence information and building contraception knowledge and skills were those most effective at preventing teen pregnancy (as cited in McIlhaney & Haffner, 1997). The National Campaign to Prevent Teen Pregnancy published a report titled, "No Easy Answers: Research Findings on Programs to Reduce Teen Pregnancy." The report stated effective sex education programs are culturally relevant, include interactive learning techniques, and develop teens' skills to combat peer pressure (as cited in McIlhaney & Haffner, 1997).

Whereas, sex education programs focused on teen abstinence have different commonalities. Abstinence program objectives commonly include the following: provide teens with information about sexuality, support the development of their own values, self-esteem, and interpersonal skills, and to exercise responsibility in their relationships. Abstinence is at the core of such a program (McIlhaney & Haffner, 1997). In the federal government's Section 510 Abstinence Education Grant, abstinence education is defined as "abstinence from sexual activity outside marriage as the expected standard for all school age children," "mutually faithful monogamous relationship in context of marriage is the expected standard of human sexual activity," and "the importance of attaining self-sufficiency before engaging in sexual activity" (as cited in McIlhaney & Haffner, 1997).

An important characteristic of effective programs is focus. Programs must target single, specific behaviors and be content specific at any one point in time. Though, when looking at the program comprehensively, it must contain multiple topics, issues, and teaching techniques (Poobalan et al., 2009). In practice, programs focusing upon improving teens' sexual health are complex. Thus, it is imperative that all essential elements of effective sex education are used in conjunction with each other for optimal student benefit (Poobalan et al., 2009).

When curricula deemed successful at reducing unprotected sex among teens is compared to ineffective programs, 10 commonalities emerged in the successful programs, according to a study of 73 comprehensive programs (Kirby, 2002b). These curricular aspects were as follows: focused on reducing one or more sexual behaviors; based on theoretical approaches found effective in influencing other risk-taking behavior; offered a clear message and reinforced that message about teen sexual activity and contraception

use; provided accurate information about sexual activity, and avoiding sexual activity, pregnancy and STDs; included activities to build skills to handle peer pressure; modeled and allowed teens to practice effective communication and refusal skills; used various pedagogical techniques to allow teens to personalize and ensure involvement with the lessons; ensured materials, pedagogy, and goals fit with teens' ages, sexual experiences, and cultures; lasted an adequate duration to complete activities; and was taught by invested, voluntary teachers or peers who received adequate training (Kirby, 2002b). Developing and implementing effective programs requires commitments of time, expertise, and support. An integral aspect of that commitment is the role of the teacher.

Role of Teachers

Teachers of sex education programs serve a unique role within the program as well as in teens' decisions regarding their own sexuality. As other teachers keep teens' personal lives at arm's length, the sex education teacher delves into private issues for teens in general, and in some cases, specific teens. As most teens are keeping their own sexuality private from outsiders, their sex education teacher provides relevant information about sexuality, contraception, STDs, and, in many programs, decision making skills. Sex education teachers can help empower teens with communication skills to assert their own beliefs when faced with decision making about their own sexual activity (Schramm, 1996).

A balancing act must be achieved by such teachers. How does a teacher reach every student with relevant information they need today and in the future while respecting cultural, social, and personal differences? Such a question is challenging while teaching history, anthropology, or evolution. That same question seems more daunting

when teen sexuality is the focus. Outcome-based educators recognize that they are not powerful enough to ensure all teens will abstain (Schramm, 1996). Conversely, teachers should not “throw in the towel” by distributing condoms in school or merely accepting that teens will be sexually active (Schramm, 1996). Teachers balance a multitude of program elements as they respect teens’ personal and cultural differences and strive to meet the needs of their teens in their classroom and the future needs of those teens for when they become adults.

In Charlotte Schramm’s (1996) education magazine article, “What does it mean to teach abstinence?,” effective teachers support students’ commitments to make objective, outcome-based criteria in deciding to become sexually active. She adds, “In choosing words, materials, and activities, the educator always keeps in mind that the students’ needs are the highest priority” (Schramm, 1996, p. 506).

According to SIECUS, effective programs include age-appropriate lessons at every grade taught by trained teachers (as cited in McIlhaney & Haffner, 1997). Stakeholders such as parents, other educators, administrators, religious leaders, and students should have input and provide support to the program (McIlhaney & Haffner, 1997). Thus, SIECUS encourages the inclusion of a comprehensive team throughout the development of the program to ensure both appropriateness and effectiveness (as cited in McIlhaney & Haffner, 1997).

A review of reviews of 30 abstinence and comprehensive programs found adequate training of teachers delivering instruction and ensuring that instruction is culturally sensitive to students were important factors in determining the effectiveness of programs (Poobalan et al., 2009). Initially, a team of stakeholders developed the program,

as recommended by SIECUS among others, then well-trained and culturally sensitive and responsive teachers implemented the program; effective sex education programs benefit students in a multitude of ways.

Other teachers can also affect teens' sexuality in a less direct way. Early sexual initiation is consistently linked to poor educational aspirations and a lack of involvement in school (Aseltine et al., 2010). However, the direction of this relationship is not definitive due to lack of long-term studies. Does poor school performance result in early sexual initiation or does early sexual initiation result in poor school performance? A relationship exists and additional long-term studies are needed before consensus is reached.

Peer Impact

Teens' peer relationships are valued and influential. In a study conducted from 1990 to 2006 of 6,527 college students, informal sources of sex education, especially peers, were found to be more common across gender, ethnic, and socioeconomic groups, than formal sources of sex education such as teachers and other professionals (Sprecher et al., 2008). In that same study of college students, communication about sex with a source was associated with receipt of information about sex from that same source. Thus, peers are an important source of information since students commonly talk about the topic with their peers. Friends of the same gender and dating partners are the most likely participants in sex communication (Sprecher et al., 2008). Thus, as sex education curriculum is written and educators implement that curriculum, they must respect the influence of peers upon teens' lives and use that influence in a productive manner.

One aspect of peer influence that parents may more easily affect than teachers is the friendships teens have with peers from religious families and their own religious practices. The Centers for Disease Control and Prevention (CDC) sponsored Manlove's study of the relationships among parental involvement, religiosity, teens' sexuality, and contraceptive use. Manlove stated teens from religious families have peers who exhibit more positive behaviors than negative behaviors, specifically regarding teen sexuality. As such, these teens may positively influence their peers to abstain from sexual activity, according to Manlove et al (2008).

Peer achievement levels are also related to teens' sexual behaviors. Teens with high-achieving peers are less likely to engage in sex than those with low-achieving peers; low-achievement includes an early sexual initiation (Manlove et al., 2008).

Perhaps a more expected relationship would be between the sexuality of teens' and their peers' sexuality or, more specifically, the perception of their peers' sexuality. If a teen perceives their peers are sexually active, are they more likely to become sexually active? A related correlation is commonly found between early sexual initiation and friendships with delinquent peers. Specifically, delinquent behavior such as a lack of focus upon achievement and a greater emphasis upon popularity are commonly associated with early sexual initiation (Aseltine et al., 2010).

Though many reviews suggest peer and parental influence promote the effectiveness of abstinence and safe sex programs, according to Poobalan's review of 30 programs, adequate evidence is yet to be collected to make such claims (Poobalan et al., 2009).

Parents' Perceptions

Parents' roles as their child's first teachers and lifelong sources of guidance can be pivotal in all areas of life, including the area of sex education. Individual parental influence upon teens' sexuality, of course, varies significantly. Sex communication can be "initiated by either party (i.e., parent or child) and generally is mutual" according to Warren (2006) (as cited in Sprecher et al., 2008, p. 1). The majority of parents claim they want to be their child's main source of sex education, according to Alexander (1984) (as cited in Sprecher et al., 2008, p. 1). As such, parents might be concerned about the possible harm an abstinence or comprehensive program could have upon their teen, especially upon younger youth. Parents would need to be convinced by strong, research evidence of the benefits, and lack of negative effects, upon teens' participation in such programs during their early adolescence (Poobalan et al., 2009).

Though most parents want to serve as an important resource for their teen, regarding a teen's sexuality, it can be a daunting task. Both parents and teens admit parents avoid communicating about sex with their children (Fisher, 2004; King & Lorusso, 1997; as cited in Sprecher et al., 2008). Embarrassment, lack of confidence in their own knowledge, and fear that the conversation will encourage sexual activity, are among reasons found that parents avoid discussing sex with their teens (Fitzharris & Werner-Wilson, 2004; Jaccard, Dittus, & Gordon, 2000; as cited in Sprecher et al., 2008).

Gender differences affect communication between parents and teens in numerous combinations. Mothers are more likely than fathers to communicate about sex with their teens (Raffaelli, Bogenschneider, & Flood, 1998; as cited in Sprecher et al., 2008). Female teens are more likely than male teens to have their parents involved in their sex

education (Carter & Wojtkiewicz, 2000; Fisher, 1990; as cited in Sprecher et al., 2008). Thus, females, as both parents and children, communicate more about sexuality with their immediate family than their male counterparts. However, in a study of 6,527 college students conducted from 1990 to 2006, researchers found that, though not common, students were more likely to discuss sex with their same-gender parent. This contrasts with an earlier study that found young people were more likely to discuss sex-related topics with their mother than their father (Guzman et al., 2003; Miller, Kotchick, Dorsey, Forehand, & Ham, 1998; as cited in Sprecher et al., 2008). It seems fathers are making progress in communicating about sexuality with their sons.

Socio-economic differences also play a role in the amount of communication between parents and their teens. In a study conducted from 1990 to 2006 that included 6,500 college students, there was a significant, positive correlation between parents' social class and the amount of sex communication between parents and teens. The higher the social class, the greater the amount of sex communication ($r=.06, p < .001$) (Sprecher et al., 2008).

The content and context of parent-teen talk about sex provide interesting topics for study. With sex education programs, it is helpful to know the perspective of both the public at large and the parents of teens. More than 75% of Americans believe it is appropriate for sex education programs to cover a broad curriculum, including information about contraception and protection from STDs, according to a poll by Harvard University's John F. Kennedy School of Government, the Kaiser Family Foundation, and National Public Radio (as cited in Beh & Diamond, 2006). A poll of 1,245 parents from throughout the United States, commissioned by the pro-abstinence

Coalition for Adolescent Sexual Health showed parents the content of both comprehensive and abstinence-only sex education programs (as cited in Tsubata, 2003). In response, 75% opposed condom-based programs, 61% opposed comprehensive programs, while 73% supported abstinence programs.

Parents' attitudes and beliefs about sex education and sexuality, not unlike political attitudes, are often fluid; they change in response to events in local debates (Irvine, 2002).

Qualities of Effective Programs

The federal government developed a list of eight elements to be included in abstinence education programs in 1982 (as cited in Wilson et al., 2005). The A-H Definition of Abstinence Programs is the following:

- A. The curriculum has as its exclusive purpose, teaching the social, psychological, and health gains to be realized by abstaining from sexual activity.
- B. The curriculum teaches abstinence from sexual activity outside marriage as the expected standard for all school-aged children.
- C. The curriculum teaches that abstinence from sexual activity is the only certain way to avoid out-of-wedlock pregnancy, sexually transmitted diseases, and other associated health problems.
- D. The curriculum teaches that a mutually faithful monogamous relationship in the context of marriage is the expected standard of human sexual activity.
- E. The curriculum teaches that sexual activity outside the context of marriage is likely to have harmful psychological and physical effects.

F. The curriculum teaches that bearing children out of wedlock is likely to have harmful consequences for the child, the child's parents, and society.

G. The curriculum teaches young people how to reject sexual advances and how alcohol and drug use increases vulnerability to sexual advances.

H. The curriculum teaches the importance of attaining self-sufficiency before engaging in sexual activity (as cited in Wilson et al., 2005, p. 92).

Poobalan's study of 30 abstinence and comprehensive programs published between 1986 and 2006, identified the qualities of effective programs. Effective programs target teens prior to their sexual initiation, are tailored to the biological and physical stage of teens, include building relationship skills, and are based in theory. Qualities of effective abstinence programs also include links to contraceptive services (Poobalan et al., 2009). This review of 30 reviews showed other similarities among effective programs. Among the similarities, effective programs understood and acknowledged social and media influences, involved parents and peers, encouraged participation and physical movement, included skills training on decision-making, negotiation, and condom use, and embraced teens on an emotional level (Poobalan et al., 2009).

There is some evidence that when teens pledge abstinence, making the pledge proves effective for some participants (Kirby, 2002b). Community-wide mass media abstinence campaigns were shown to be effective in delaying sexual initiation and reducing teen pregnancy, in Kirby's (2002b) study of 73 reviews of comprehensive programs.

Communication Between Teens and Parents and Teen Sexuality

Maintaining a healthy frequency and quality of communication between parents and teens is challenging under the best of circumstances; when discussing issues of teen sexuality, it can be especially daunting for some parents. However, positive teen and parent communication can have numerous, important ramifications. Delay in sexual initiation, less frequent sexual activity, and fewer partners are among such benefits (Aseltine et al., 2010).

In Eisenberg's (2006) study, researchers found parents commonly begin having discussions about sexuality through the context of sexuality within marriage. This study included 1,069 telephone surveys of parents of teens; one aspect of the study was the belief that parents do not begin discussions of teen sexuality until their teen is involved in a romantic relationship. The timing of such conversations is problematic. By the time parents believe such conversations are necessary, the teen may have already become sexually involved. Once teens' sexual initiations have passed, their behavioral patterns have been established and the opportunity for the most influential communication may have passed as well (Eisenberg et al., 2006).

Aspects within parent-teen communication important to outcomes include frequency and approach, such as one big talk versus teachable moments, gender of teen and gender of parent combinations, family structure, race and ethnicity, and teen's age and development level (Eisenberg et al., 2006). The interaction between these personal characteristics, communication, and teens' sexual behaviors and attitudes is complex and the source of countless, and sometimes, conflicting studies. For example, in the study, "Explaining the Association between Family Structure and Early Intercourse in Middle

Class Adolescents,” both the quality of the teen and parent relationship and the warmth within that relationship were found to be important factors in the delay of sexual initiation. In the study, teen and parent communication is an integral aspect of warmth and directly linked to teen sexuality (Aseltine et al., 2010). In addition, the pattern of communication, not the substance and quality of teen and mother sexuality communication, was associated with positive teen sexual behaviors in the Aseltine study (2010). Other studies contradict these findings and find a correlation between the substance and quality of specific sexual discussions and teens’ sexual behaviors. The growing body of research makes this an interesting area of study.

While some challenges parents face as they attempt to communicate to their teens about sexuality are expected, others may be surprising. According to a study by Brown, Steele, and Walsh-Childers (2002), parents frequently found it very difficult to provide accurate, clear, and timely information about sexuality to teens. In one study cited by Brown et al., 90 teens and 73 mothers were asked to define numerous terms important to sexual development. Terms such as hormones, menstruation, semen, and puberty, were among those to be defined as part of the study. Mothers performed better than teens, however, neither group adequately defined the terms central to discussions about teen sexuality. In the Brown et al. study, the authors explained, “These results raise the concern that mothers are ill-prepared to teach their children about sex or reinforce information that adolescents learn in school” (p. 1). Studies consistently indicate mothers, more than fathers, are more likely to discuss sexuality with their teens.

It is important to know how various factors affect parent and teen communication. Brown’s qualitative study found about half of teens viewed parents as an important

source of information about contraception. The study, in which hundreds of teens participated in focus groups in four different towns in the southeast United States, revealed no correlation between race, parents' education levels, and communication with their teens. However, their study did show a relationship between parents' financial situation and their communication with their teens about contraception. While 54% of parents without financial woes spoke to their teens about contraception, just 46.8% of parents with financial worries had such conversations.

The number of parents who discuss issues of sexuality with their teens is affected by participation in abstinence or comprehensive programs. For example, in one study, it was found that prior to participation in a program approximately half of teens discussed abstinence with their parents, and merely 37% discussed contraception. After participation in a program, 66% of teens were found to have discussed abstinence with their parents and 52% were found to have discussed contraception with them (Brown et al., 2002). In a study by Byers, Sears and Weaver (2008), many parents and even more teens were not satisfied with their current parent-teen communication about sex. Quantity, quality, and sometimes both, were lacking, according to study participants (Byers et al., 2008). Abstinence and comprehensive programs do play a contributing role in communication between parents and teens about sexuality and may improve the quantity, quality, or both.

Faith and Religious Practices and Teen Sexuality

In the June 2008 issue of *Perspectives and Sexual and Reproductive Health*, Manlove shared research exploring associations among family and teen religiosity and sexual behaviors and attitudes. Using data from the National Longitudinal Survey of

Youth, collected between 1997 and 2003, researchers found an encouraging relationship between cohesive, religious families and teens' sexual behaviors (Manlove et al., 2008). Teens' faith impacts their sexuality; it is a complex relationship (Manlove et al., 2008).

Teens' religiosity seems to delay sexual initiation and reduce the number of sexual partners once teens become sexually active (Manlove et al., 2008). However, on the negative side, such religiosity relates to reduced use of contraceptives, including condoms (Manlove et al., 2008). More specifically, among sexually active male teens, family religiosity and contraception use were both directly and negatively associated. No relationship between female teens' religious and contraception practices were found (Manlove et al., 2008).

How teens' religious practices and sexuality relate to each other is complex; this relationship easily branches off into a multitude of subtopics. For example, parental religiosity and parenting styles are associated. Manlove's (2008) research revealed religious parents tend to have close, communicative, and involved relationships with their teens. Is this the impetus for the interaction between teen religious practice and sexual behaviors and attitudes? Their research points to the fact that teens whom regularly practice a religion are more likely to associate with other religious teens than their non-practicing peers (Manlove et al., 2008). Is this peer influence the impetus for interaction between religious practice and sexual behaviors and attitudes? The paths by which teens' religious practices and their sexual practices are connected are through numerous influences.

Manlove's analysis showed religious characteristics of sexually active teens. By the age of 17, sexually active teens prayed less, reported less belief in a religion, and

attended services less than their abstinent peers (Manlove et al., 2008). This analysis revealed family religiosity was significantly related to teen sexual activity with both a direct, negative relationship and an indirect relationship through parental monitoring and peer impact (Manlove et al., 2008). Religious parents claimed they were more aware of their teens' lives and actions than their non-religious counterparts; such active involvement was associated with lower levels of teen sexual activity (Manlove et al., 2008).

However, the research by Manlove also revealed the number of sexual partners did not relate to teens' religiosity. Teens with two or more sexual partners and sexually active teens with one partner reported the same level of participation in their religion (Manlove et al., 2008). In general, a weakness in the research is how sexuality is typically measured. Since it is often limited to sexual intercourse, other types of sexual activity, such as precursors to intercourse and activities that pose other health risks, are not included (Burdette & Hill, 2009). Another research area that has just recently seen improvement is the interaction patterns associated with teens' faith and sexuality. Which social characteristics – such as age, gender, race, ethnicity, socio-economic status – are significant moderators? This is a relatively new aspect of research on teens' faith and sexuality, and answers are just beginning to emerge (Burdette & Hill, 2009).

The interaction among numerous indicators of both religiosity and teen sexual activity, as they relate to teens' age, gender, and race/ethnicity, supports important assumptions and disputes others. Burdette and Hill used the 2005 National Survey of Youth and Religion to explore such interactions. In the study, religiosity was measured by church attendance, religious salience (prominence in one's life), personal religiosity,

and family religiosity; teen sexuality was measured by sexual touching, oral sex, and intercourse (Burdette & Hill, 2009).

Teens' religious practices and sexual activity are multi-layered, complex behaviors; the interaction of such complexities proves interesting and sometimes surprising. For example, in the Burdette and Hill (2009) study, religious involvement was associated with delayed sexual initiation, but religious tradition was not. Attendance at religious services and family religiosity was correlated with later sexual initiation. This may be because teens are placed in sexually conservative contexts and exposed to messages and expectations that premarital sex is unacceptable. Interestingly, attending religious services denotes exposure to anti-sexual messages, yet religious salience supported the internalization of such messages, according to Burdette and Hill (2009). This leads to the question, "If teens attend religious services, yet faith is not prominent in their lives, how does their faith and religious practices affect their sexual behaviors and attitudes?" This is a research area yet to be explored.

For the purposes of this study, self-reported religious participation, influence, and private prayers will define teens' religious practices.

Parental Involvement and Teen Sexuality

The CDC study by Manlove (2008) of the relationship between parental involvement and teens' sexuality highlights the tremendous effect parental behavior has upon teens' sexual behavior and attitudes. Parents with positive, engaged, interactive relationships with their teens were more likely to have teens who abstained from sex until later; once the teens became sexually active, they had fewer partners and were more likely to use contraceptives. In Miller's (2002) study, parents' values supporting

abstinence or contraception use were more effectively transmitted to their teens when they were found to have a close, involved relationship. Conversely, teens with parents they viewed as controlling or intrusive tended to have a higher risk of pregnancy (Miller, 2002). Many studies reveal living with a single or divorced parent is associated with earlier sexual initiation. Notably, earlier sexual initiation is associated with more sexual partners and less contraceptive use (Miller, 2002). It seems single and divorced parents tend to provide less adult supervision and more sexually permissive attitudes resulting in increased sexuality among teens (Miller, 2002). Teens of single parents are less likely to view marriage as necessary for sexual activity (Davis & Friel, 2001).

The role of gender in parental involvement and sexual behaviors and attitudes is notable and interesting. Even controlling for other factors, male teens have earlier sexual initiation than female teens, but this gap has been decreasing (Davis & Friel, 2001). A change in parents' marital status seems to increase the likelihood of sexual initiation for male teens, but not for females (Davis & Friel, 2001). Whereas family structure, single parent versus a two-parent home, increased the sexual frequency of female teens, but not for males (Davis & Friel, 2001). The relationship between gender, family structure, parental involvement and teens' sexual behaviors and attitudes is complex and multi-layered.

To combat such negative factors, parents should be aware that their involvement with teens is also associated with teens' sexual behaviors and attitudes. Parent-teen closeness and involvement seem to promote educational achievement, sense of self-worth, and social skills, which all correlate to healthier sexual behaviors and attitudes (Miller, 2002).

Parental involvement and expectations are intertwined aspects of parenting. An involved parent shows interest, expectations, and support for their teen. Such interaction between parents and their teens affect the teens' behaviors. When a parent's expectations, for their teen's sexual behaviors, for instance, fails to match the teen's behavior, the teen may adjust their behavior to be in line with expectations; this is called "behavioral confirmation" and has proven powerful in regards to teens' academic achievement (Mollborn & Everett, 2010). Whether behavioral confirmations have the same effect upon teens' sexual behaviors remains open to debate since there are no conclusive studies, but some studies infer such a relationship (Mollborn & Everett, 2010).

The number of teens' sexual partners and mothers' involvement in teens' lives are also associated. Teens with two or more sexual partners within the last year also said their mother were less aware and less involved in their lives (Manlove et al., 2008). Conversely, teens with parents who monitor their activities had their sexual initiation at a later age, had fewer sexual partners, and were more likely to consistently use contraceptives than those with less involved parents (Manlove et al., 2008). This is consistent with Miller's research years earlier (2002). Whereas Davis' research (2001) found an involved mother was effective at delaying sexual initiation for female teens, but not for males. Also, an involved mother had no effect upon the number of sexual partners for teens of either gender (Davis & Friel, 2001). Studies reveal complex and sometimes contradicting results.

Though research relayed in *Perspectives on Sexual and Reproductive Health* demonstrated the association between parents' involvement and teens' contraceptive use was stronger with female teens than male teens, positive parental involvement resulted in

reduced risky sexual behaviors for both genders (Manlove et al., 2008). Lifestyle qualities of sexually active teens, as compared to abstinent peers, included less involvement in religious activities, less participation in family activities, poorer relationships with their mother, and less parental involvement in their lives (Manlove et al., 2008).

The combination of high quality, frequent messages with positive parental involvement influence teens' sexual behaviors and attitudes in healthy ways. Since this relationship is important it is worthy of additional research and discovery.

Summary

In this chapter, a review of related literature and research of abstinence programs and comprehensive programs was presented. A review of the history of abstinence and comprehensive education was provided as the context for current programs. Also presented were the strengths and challenges of both abstinence and comprehensive programs. Curriculum components, the role of teachers, peer impact, parents' perceptions, and qualities of effective programs were provided. Chapter II concluded with the role of teens' personal experiences, specifically those of parental communication, faith and religious practices, and parental involvement; these aspects are explored as they relate to teens' sexual behaviors and attitudes.

The following chapter, Chapter III: Methodology, describes the methods and procedures used in data collection, analysis, and presentation of the data with a comprehensive description of the study design, data sources, survey instrument, procedures, and statistical techniques.

CHAPTER III

METHODOLOGY

Introduction

This chapter on research methodology provides descriptions of the methods and procedures used in the analysis and presentation of survey data. More specifically, the chapter provides the purpose, hypotheses, overview, design, population, program, procedures, techniques, and analyses of the study. Chapter subsections include the following: (a) purpose of the study, (b) research questions, (c) hypotheses and null hypotheses, (d) overview of the study, (e) design of the study, (f) population of the study, (g) parental program, (h) procedures, (i) statistical techniques, and (j) data analyses.

Purpose of the Study

The purpose of this study was to assess teens' pre and post abstinence program survey results in order to report and analyze three aspects of teens' experiences as they relate to their sexual behaviors and attitudes. This study assessed the relationship between (a) teens' communication with their parents, (b) their faith and religious practices, and (c) their parents' involvement in their lives as all three influenced those teens' sexual behaviors and attitudes.

Research Questions

Within the context of an abstinence program, both participating and non-participating teens were surveyed about a multitude of topics such as their personal experiences, relationships, faith, and sexual behaviors and attitudes. The purpose of such data was to offer a descriptive picture of the population that consented to the study in

both the treatment and control groups. This study was guided by the following research questions:

1. What is the relationship between teens' communication with their parents and teens' sexual behaviors and attitudes?
2. What is the relationship between teens' faith and religious practices and teens' sexual behaviors and attitudes?
3. What is the relationship between parental involvement and teens' sexual behaviors and attitudes?

Hypotheses

Teens' sexual attitudes and behaviors are likely to be mediated by their communication with their parents, their own faith and religious practices, and their parents' involvement in their lives. The following hypotheses, related to the research questions, were tested with the significance level set at $p < .05$. For the purposes of this study, healthy sexual behaviors and attitudes were defined as sexual abstinence and plans for future sexual abstinence.

Hypothesis 1. Teens with positive, regular communication with their parents will have healthier sexual behaviors and attitudes than teens with negative and/or little communication with their parents.

Hypothesis 2. Teens with active faith and religious practices will have healthier sexual behaviors and attitudes than teens without active faith and/or religious practices.

Hypothesis 3. Teens with parents who are involved in their lives will have healthier sexual behaviors and attitudes than teens without involved parents.

Null Hypotheses

This study will test three null hypotheses.

H₀ 1. Teens with positive, regular communication with their parents will have similar sexual behaviors and attitudes as teens with negative and/or little communication with their parents.

H₀ 2. Teens with active faith and religious practices will have similar sexual behaviors and attitudes as teens without active faith and/or religious practices.

H₀ 3. Teens with parents who are involved in their lives will have similar sexual behaviors and attitudes as teens without involved parents.

Overview of the Study

This study used survey research as a tool to explore the relationship between teens' sexual behaviors and attitudes and the communication with their parents, faith and religious practices, and parental involvement. The results of this study can provide valuable insights to teens, parents, community and educational leaders, health educators, health professionals, and policy makers. This study will add to the growing body of research on the relationship between teens' personal experiences and their sexual behaviors and attitudes. Through additional insight into these relationships and appropriate responses to such insight, interested stakeholders can attempt to affect teens' sexual behaviors and attitudes for the benefit of teens themselves, their families, their communities, and society.

The purpose of this study was to assess the impact teens' communication with parents, faith and religious practices, and parental involvement, have upon their sexual behaviors and attitudes.

Considerations for this study were given to the following: study design; survey development; school selection/population for the study; data collection procedures; and statistical techniques.

Design of the Study

The study incorporated quasi-randomized control groups that explored the relationship among teens' personal experiences and their sexual behaviors and attitudes. A quasi-experimental design has three components, as reflected in this study: (a) establishment of groups, either by randomization or purposeful sampling, (b) the exposure of the experimental group to the treatment (program) while the control group is not exposed to the treatment (program,) and (c) the use of an outcome or dependent variable (survey) as a means to compare the groups and make inferences regarding the treatment.

Six middle schools were participant schools, and received the Family Life Abstinence Program (FLAP), the program treatment. Six other, comparable middle schools were control schools, and did not participate in the FLAP program. Among a dozen middle schools, pairs were matched for similarities on demographic variables such as gender, race, ethnicity, and age distributions; then one school from each pair was randomly selected as a participant school. Due to the numerous difficulties of conducting a randomized study within natural settings, specifically public schools, several adjustments were made during the program to accommodate schools departing and entering the program after its inception.

This study used a survey designed and developed by The Department of Health and Human Services to evaluate the impact of FLAP upon teens involved in the program.

The 50-question survey resulted in 130 individual variables. The baseline survey and follow-up survey were composed of the Core OAPP baseline questions with additional questions supplemented by the evaluation team.

The follow-up survey differed from the baseline survey due to the omission of a few questions and an improved design. This was in response to various conditions such as fluctuations in teens' participation, the lack of continuity in the implementation of the treatment, and the lack of adequate support for the program which resulted in the need to reduce the time required for the survey. Thus, some questions included in the baseline survey were removed from the follow-up survey and not included in this study.

Statistical procedures and quantitative methods used in this study included descriptive statistics, analysis of variance (ANOVA), and chi-square analysis. These procedures and methods were employed to disaggregate and analyze the baseline and follow-up survey responses by gender (female, male), program (treatment, control), and teens' experiences, such as communication with parents, faith and religious practices, and parental involvement. Such statistical analyses were conducted using SPSS software 19.0.

Descriptive statistics were run and analyzed. Then ANOVAs were run and analyzed. Sets of questions were selected which assessed each of the three research questions. Eighteen questions assess teens' communication with their parents; six questions assess teens' faith and religious practices; 16 questions assess parents' involvement in their teens' lives. Each of the three sets of questions were run using the response to questions as the dependent variable and a factor of program (treatment, control) and then gender (female, male) as the independent factor. ANOVAs were used to

test the difference(s) among two or more means, in these cases, multiple means. By rejecting the null hypotheses, we are rejecting the notion that one or more of the differences were created by random sampling errors. Significance was set at the .05 level.

Chi-square tests allowed the researcher to consider how likely it was that the observed differences between the two groups, program and gender, were due to random sampling errors. Chi-square analyses were appropriate because the study was assessing differences in nominal data. Thus, chi-square tests can help eliminate chance as an explanation.

For the chi-square analyses, seven questions were selected to assess teens' sexual behaviors and attitudes; among those, two questions evaluated sexual behaviors and five questions evaluated sexual attitudes. The questions that were found to be statistically significant in the ANOVAs that assessed program were input. There were two such questions regarding parental communication and two questions about parental involvement; no questions about faith or religious practices assessing program were statistically significant, thus, were not included in the chi-square tests.

Population of the Study

Students attending a participating public middle school in The Bronx, New York during the 2008-2009 and 2009-2010 school years were eligible for the study. Both females and males, ranging in age from 9 to 19 years of age, with most between 11 and 14 years of age, participated. Demographic variables such as gender, race, ethnicity, and age were considered regarding the participant and control groups. The participants came from a variety of ethnic, racial, and socio-economic backgrounds, while most were of Hispanic descent, living in a working-class, suburban-urban neighborhood. Teens from

participant schools and control schools were also found to be similar in their responses to sexual intention and behavioral outcomes as indicated in their baseline surveys.

For the purposes of this study, data from treatment schools and control schools were used to answer the research questions. The total number of student identification numbers assigned to both treatment and control group teens was 1210. However, 95 of those numbers did not submit any data for the database. Thus, the total number of participants for which data was collected was 1115. The net number of teens served in the treatment schools was 811; the net number of teens served in the control schools was 304.

Since this was a 3 year study, and participant schools did not maintain intact classes from year to year, some teens received the program the first year, but not the second; consequently, other teens did not receive the program the first year, but did the second year and received make-up sessions from the previous year's program. This affected approximately half of the 811 participating teens. It is complicated and difficult to track and evaluate the dosage, or quantity of participation in the program, for the 811 teens for whom this study compared baseline and follow-up surveys in the treatment or participant group.

Among the six participant schools, the number of teens in the program ranged from 40 to 331 with a total of 1,096 possible participants. Due to scheduling challenges during the 2 years, as well as student mobility, 811 teens were served by the program throughout the six middle schools. Among the six control schools, the number of teens selected to complete the baseline and follow-up surveys ranged from 46 to 147, with a total of more than 300 students completing surveys. For the purpose of this study, data

from participating teens attending the participating schools (treatment) and non-participating schools (control) was assessed.

Parental Program

“The Active Parent” was a nine-session curriculum designed for parents of teens participating in the FLAP program. Offered to all participating parents, the program was located at three participating schools. Generally, school administrators wanted the program open to all parents. One program objective was to have full participation from 200 parents with baseline and follow-up interviews of 10 participating parents after they completed all nine sessions. However, only 31 parents attended one or more sessions, with 13 of those attending all nine sessions. Due to tremendous scheduling challenges, five telephone interviews were conducted with parents participating in “The Active Parent” program. The designers of the program evaluation believe “The Active Parent” program was partially implemented in terms of both scope (numbers of parent participants) and depth (dosage of program). For the purposes of this study, data from “The Active Parent” program will not be considered.

Data Collection

Teens within the participating schools and the treatment schools completed a 50 question baseline survey; at the end of the program, the teens then completed the follow-up survey which was nearly identical to the baseline survey. The difference between the baseline and follow-up surveys was the removal of a few unnecessary questions and improvement by ensuring no questions were divided onto two consecutive pages, as was the case in the baseline survey; the division of a question on to two pages seemed to have confused some teens.

Statistical Techniques

Using the Statistical Program for the Social Sciences (SPSS) version 19.0 for windows, a computer-based software package, to analyze survey results, the researcher applied several statistical analyses to the data. First, descriptive analyses were run for each question, both pre and post program, to test how comparable the groups were at baseline. The compared groups were not even in number; there were 811 in the treatment group and 306 in the control group. Also, there were 606 females and 504 males (see Table 1); five students did not answer the question on gender. By comparing the mean scores however, group size was found to be inconsequential. Comparisons of the two groups are tested using ANOVAs.

Thus, the analysis of variance (ANOVA) tests were run to compare the means in order to find those questions which were statistically significant and to determine if there were differences between the groups at baseline. The significance was set at $p < .05$, the acceptable level in the social sciences. The results of the ANOVAs were used to answer the three research questions. Also, the researcher conducted chi-square analyses to examine differences in nominal data. Using the statistically significant questions determined from the ANOVAs, two communication questions and two parental involvement questions were tested using chi-square. The rows were a set of seven questions assessing teens' sexual behaviors and attitudes; the layer was program (treatment, control); the columns were the four questions found to be statistically significant. To answer the research question about faith and religious practices, univariate ANOVAs were run. Five faith and religious practices questions and seven

sexual behavior and attitude questions were used for a total of 35 univariate ANOVA outputs. The use of computer software allowed thorough assessment of the data.

Data Analysis

The follow-up data were analyzed after the intervention using the Statistical Program for the Social Sciences (SPSS) 19.0 computer program. Both descriptive and inferential statistics were calculated. Data were analyzed in accordance with the methods that follow.

First, descriptive statistics were run and analyzed by the researcher. Each baseline survey question and each follow-up survey question was analyzed in isolation and in comparison with other, related questions.

Second, to determine statistical significance at the $p < .05$ level, a one-way analysis of variance (ANOVA) was conducted for both gender (female, male) and program (treatment, control). Groups of questions were analyzed using ANOVAs. Sixteen questions were used to analyze parental communication; six questions were used to analyze teens' faith and religious practices; 18 questions were used to analyze parental involvement. Those found to be statistically significant at the $p < .05$ level were then studied further.

Third, chi-square tests were completed for those questions found to be statistically significant for program (treatment, control). Two communication questions, no faith and religious practices questions, and two parental involvement questions were statistically significant. Thus, four questions were run using chi-square tests. A total of seven questions that assessed teens' sexual behaviors and attitudes were used. Two questions assessed sexual behaviors and five questions assessed sexual attitudes.

Four, univariate ANOVAs were completed for faith and religious practices. A total of 35 univariate ANOVAs were run and analyzed.

The data was entered into the SPSS 19.0 software program.

Variables

Variables which were the focus of this study were program, gender, communication with parents, faith and religious practices, and parental involvement in teens' lives. The independent variables of program (treatment, control) and gender (female, male) were used.

Respondents were asked numerous questions about their own experiences with their family, such as communication and involvement, faith and religious practices, and their own sexual behaviors and attitudes. The dependent variables used in this study were the responses to the survey questions relating to one of the three foci of this study (communication with parents, faith and religious practices, parental involvement in teens' lives).

Survey Questions Used in Study

More specifically, 16 questions were selected to assess communication with parents, six questions were selected to assess faith and religious practices, and 18 questions were selected to assess parental involvement. These questions were categorized as follows.

Communication with parents

How often in the last 3 months have you talked to one or both parents about any of these things? (Mark one answer for each) (a) not at all, (b) 1, (c) 2-3 times, (d) 4 times or more.

1. Dating behavior that is ok?
2. How your mother feels about teen sex?
3. How your father feels about teen sex?
4. How your friends feel about teen sex?
5. Questions about facts about sex?
6. Reasons for not having sex?
7. Things that happen to teens who have sex?
8. Why not having sex is important?
9. Diseases people can get having sex?
10. How babies are made?
11. What TV, radio, movies, magazines and/or the Internet say about sex?
12. How your body grows and changes?
13. Peer pressure?
14. Sex in marriage?
15. What other people will say or think about you or your friends?
16. How easy is it for you to talk to your parents about these things? (a) never talk to my parents about these things, (b) never easy, (c) a little easy, (d) very easy.

Faith and religious practices

Questions 1, 2, 4, and 5 were answered with one of the following responses: (a) never, (b) a few times, (c) about once a month, (d) 2-3 times a month, (e) once a week, (f) more than once a week.

1. In the past year, how often have you attended religious services, NOT counting weddings, baptisms, funerals or similar religious ceremonies?

2.How often do you pray by yourself alone?

3.Are you currently involved in any religious youth group? By youth group we mean an organized group of young people that meets regularly for social time and to learn more about their religious faith. (a) yes, (b) no.

4.How important or unimportant is religious faith in how you live your daily life?

5.How important or unimportant is religious faith in helping you make major life decisions?

6.This is about how decisions are made in your family. Whether you take part in religious training/education? (a) my parent(s) decide, (b) my parent(s) decide after discussing it with me, (c) we decide together, (d) I decide after discussing it with my parent(s), (e) I decide by myself.

Parental involvement

For questions 1 through 4, the question begins with “How much do your parents TRY to know. . .” and respondents are to select from, (a) try a lot, (b) try a little, (c) don’t try.

1.Who your friends are?

2.Where you go at night?

3.What you do with your free time?

4.Where you are most afternoons after school?

For questions 5 and 6, the question begins with “What do you think about these statements? They are about your mother or the person who is like a mother to you. For each, mark how true the statement is.” Respondents were to select from (a) mostly true,

(b) sometimes true, (c) hardly ever true, as their answer. Questions 7 and 8 are parallel, yet they are referring to the father or someone like a father to them.

5.It is easy to talk with her about things that happen in school.

6.It is easy to talk with her about things that happen in my life.

7.It is easy to talk with him about things that happen in school.

8.It is easy to talk with him about things that happen in my life.

Questions 9 through 18 are parallel sets of questions; the first set of questions asks teens about their mother's involvement in their lives and the second set asks about their father's involvement. The groupings of the questions begin with, "How much are your mother or someone who is like a mother to you and father or someone who is like a father to you involved in your education? (If you do not have a mother or father, mark NA (Not Applicable) for that column.)" Respondents select *never*, *sometimes*, *always*, or *NA* (Not Applicable).

A. Mother or someone who is like a mother to you.

9. Helps with homework when I ask.

10. Knows how I am doing in school.

11. Goes to school programs for parents.

12. Watches me in sports or activities.

13. Helps me in choosing my courses.

B. Father or someone who is like a father to you.

14. Helps with homework when I ask.

15. Knows how I am doing in school.

16. Goes to school programs for parents.

17. Watches me in sports or activities.

18. Helps me in choosing my courses.

Chi-Square Tests

Chi-square tests were run and analyzed to determine how likely it was the differences between the two groups (treatment, control) was created by something other than chance alone. In the case of this research, chi-square tests were appropriate since the researcher was examining differences in nominal data. Chi-square tests allow the researcher to rule out chance as an explanation of such differences. Thus, those questions found to be significant using ANOVAs, were analyzed using chi-square analysis. Chi-square analyses were performed for the seven questions that assessed teens' sexual behaviors and attitudes and the four questions found statistically significant via ANOVAs. Among the four statistically significant questions, two assessed teens' communication with parents and two assessed parental involvement. No questions about teens' faith and religious practices were found to be statistically significant in the ANOVA analyses.

For the chi-square analyses, the sexual behavior and attitude questions used were preceded by the following clarification: "Some of the following questions use the term 'having sex.' We want to be clear on what that means. 'Having sex' means vaginal intercourse." Additional reminders about confidentiality preceded questions about sexuality throughout the survey; "Remember that all your answers will be kept private and will not be shared with anyone," was one such reminder. Those questions in the communication with parents category that used program as their dependent variable and were found to be statistically significant with the ANOVA test were:

Communication with Parents

1. How often in the last 3 months have you talked to one or both of your parents about any of these things? Peer pressure (a) not at all, (b) 1 time, (c) 2 -3 times, (d) 4 times or more.

2. How easy is it for you to talk to your parents about these things?

(Fifteen items were listed immediately preceding this question; topics such as dating, friends' and parents' feelings about sex, STDs, and consequences from sex are assessed.) (a) never talk to my parents about these things, (b) never easy, (c) a little easy, (d) very easy.

Faith and Religious Practices

None of the questions about faith and religious practices were found to be statistically significant. Thus, chi-squares were not run for those questions. Thus, univariate ANOVAs were run for the faith and religious practices questions to provide data for analyses and to help answer the research questions.

Parental Involvement

1. How much do your parents TRY to know . . . Who your friends are? (a) don't try, (b) try a little, (c) try a lot.

2. How much is your mother involved in your education? Knows how I am doing in school. (a) never, (b) sometimes, (c) always, (d) NA (Not Applicable).

Sexual Behavior and Attitude Questions

Two questions assessed sexual behaviors and five questions assessed sexual attitudes. Those pertaining to sexual behaviors and sexual attitudes are listed separately for clarification.

Sexual behavior questions

1. Have you ever had sex? (a) yes, (b) no.
2. Have you had sex during the last 6 months? (a) yes, (b) no.

Sexual attitude questions

3. How likely is it that you will have sex in the next 12 months? (a) definitely likely, (b) probably likely, (c) somewhat likely, (d) not very likely, (e) not at all likely.
4. Think about the future. How important is it for you to not have sex until marriage? (a) very important, (b) quite important, (c) somewhat important, (d) not too important, (e) not important at all.
5. I intend to wait until I am older before I have sex with someone. (a) strongly agree, (b) agree, (c) in the middle, (d) disagree, (e) strongly disagree.
6. Do you think you will abstain from sex from now until you complete high school? (a) yes, (b) no.
7. No sex is the only sure way to not get pregnant. It is also the only sure way to avoid health problems like diseases people can get when having sex. (a) agree a lot, (b) agree a little, (c) disagree a little, (d) disagree a lot.

The communication and involvement questions found to be statistically significant via the ANOVAs were input into the chi-square analyses with the sexual behavior and attitude questions. Those statistically significant questions are as follows:

Communication with Parents

1. How often in the last 3 months have you talked to one or both of your parents about any of these things? Peer pressure. (a) not at all, (b) 1 time, (c) 2-3 times, (d) 4 times or more.

After 15 questions for communication frequency of sensitive topics, teens answer:

2. How easy is it for you to talk to your parents about these things? (a) never talk to my parents about these things, (b) never easy, (c) a little easy, (d) very easy.

Parental Involvement

3. How much do your parents TRY to know . . . Who your friends are? (a) try a lot, (b) try a little, (c) don't try.

4. How much is your mother or someone who is like a mother to you involved in your education? (If you do not have a mother, mark NA (Not Applicable) for that column.) Knows how I am doing in school. (a) never, (b) sometimes, (c) always, (d) NA.

Summary

This chapter described the methods and procedures used in the collection and analysis of the data. A comprehensive description of the study design, data sources, survey instrument, procedures, statistical techniques, and data analysis were also included in this chapter. The following chapter, Chapter IV: Data Analysis and Findings, will present the results and findings as they related to the research questions posed in support of the purpose of this study. The final chapter, Chapter V: Policy Implications, Practice Implications, and Future Research, will provide a discussion of the data and recommendations for future policy, practice, and research.

CHAPTER IV

DATA ANALYSIS AND FINDINGS

Introduction

The purpose of this study was to investigate and explore the relationship between teens' personal experiences and their sexual behaviors and attitudes. Specific foci were on the teens' communication with their parents, their own faith and religious practices, and parental involvement.

Given the aforementioned, the research questions guiding this study were as follows:

1. What is the relationship between teens' communication with their parents and teens' sexual behaviors and attitudes?
2. What is the relationship between teens' faith and religious practices and teens' sexual behaviors and attitudes?
3. What is the relationship between parental involvement and teens' sexual behaviors and attitudes?

The relevant statistical methods used to examine each null hypothesis are explained in the following paragraphs. The significance of each hypothesis was established at the .05 probability level, which is standard for social research. The procedures for conducting this study and, specifically, for addressing the research questions are now presented.

Using SPSS 19.0, descriptive statistics were run for each baseline and each follow-up survey question. The researcher then analyzed each statistic individually, and then compared the baseline to the follow-up results. Questions were selected that

pertained to each of the three research questions (communication with parents, faith and religious practices, parental involvement). Using gender (female, male) and program (treatment, control) as the independent variables, ANOVAs were run using the categories of questions that pertained to each research question as dependent variables. Thus, six ANOVAs that were conducted and subsequently analyzed were:

communication with parents.

- 1.gender
- 2.program

faith and religious practices.

- 1.gender
- 2.program

parental involvement.

- 1.gender
- 2.program

A total of 80 chi-squares were run and analyzed. A two-way chi-square test was performed to determine the significance of the difference in frequencies within each category in the treatment and control groups. Each chi-square test was reviewed to determine which ones, if any, showed statistical significance at the .05 level. Eighteen of the 80 chi-squares showed significance in at least one of the three areas: treatment, control, or total. Of these 18 chi-square tests, two were statistically significant in the treatment, control, and total rows. The other 16 chi-square tests were statistically significant in another combination such as only one or two of the three areas. The two

chi-square tests found statistically significant in all three areas are explained later in this chapter.

Accordingly, this chapter presents the findings of this study.

Statistical Analyses

As explained in Chapter III, the data collected in the baseline and follow-up surveys were analyzed for descriptive statistics using the Statistical Program for Social Sciences (SPSS) version 19.0.

The researcher reviewed the descriptive statistics to understand the teens' experiences and perspectives. These descriptive statistics, in the form of frequency tables for every baseline and every follow-up survey question, were produced, printed and reviewed by the researcher. Thus, trends, tendencies, and contradictions among teens' answers were determined.

Analysis of variance (ANOVA) tests were completed to test the differences among multiple means. Through numerous ANOVAs, the researcher determined whether to reject the null hypothesis, which was determined by the value of p . Analysis of variance tests were conducted to examine the interaction of the independent variables program (treatment, control) and gender (female, male) on the dependent variables: communication with parents, faith and religious practices, and parental involvement in teens' lives. If the ANOVA is significant (i.e., the reported p -value falls below the threshold of .05 typically used in social science research) then the two groups do not have approximately equal variance on the dependent variable.

The use of chi-square analyses of the differences in frequencies between teens' sexual behaviors and attitudes and two statistically significant questions produced a

p value $<.05$ indicating that the differences in results was not random or occurring by chance.

Microsoft Word software, Microsoft Excel software, and SPSS software were used for the creation of tables. One-hundred and eight tables provide details relating to the research and relevant findings.

Student demographics will be explained. For baseline data, each of the three research question areas (communication with parents, teens' faith and religious practices, and parental involvement) will be discussed in terms of descriptive statistics, analysis of variance, and chi-square tests, where applicable. Also, for follow-up data, each of the three research question areas will be discussed using descriptive statistics, analysis of variance, and chi-square tests, where applicable. Finally, the area of teens' sexual behaviors and attitudes will be discussed both in isolation and in relation to the three research question areas.

Student Demographics at Baseline

Descriptive statistics highlight characteristics of study participants. The researcher carefully reviewed the teens' answers and included the most relevant details below.

Age, Race and Ethnicity

The majority of research participants were between the ages of 11 and 14; the breakdown was as follows: age 11 – 23%; age 12 – 38%; age 13 – 21%; age 14 – 6% (see Table 1). Fifty-four percent of the participants were girls and 45% were boys (see Table 1). When asked if they were of Hispanic or Latino origin, 66% selected *yes* (see Table 1). Respondents said their race was as follows: Black - 21%, White - 4%, Asian - less than 1%, and *other*, the majority of 58%, was a multitude of combinations with most having

some connection to Central or South America. The remainder of respondents did not answer or selected more than one option.

Table 1

Baseline Demographics: Age, Gender, Hispanic Status

Variable	Frequency	Percent
Age		
9 or younger	2	0.2
10	9	0.7
11	279	22.7
12	469	38.2
13	252	20.5
14	79	6.4
15	10	0.8
16	2	0.2
No answer	125	10.2
Error	1	0.1
Total	1228	100.0
Gender		
Female	606	54.3
Male	504	45.2
No answer	116	0.3
Error	2	0.1
Total	1228	100.0
Hispanic Status		
Hispanic or Latino	809	65.9
Not Hispanic or Latino	275	22.4
No answer	141	11.5
Error	1	0.1
Total		100.0

Family Roles

Only 2% indicated they had no mother or mother figure, but slightly more, 9%, had no father or father figure (see Table 2). Thus, most teens contributing to the survey have both a mother and father or someone in their lives they view as mother and father figures. To have a clearer idea of the adult support respondents receive, additional questions were considered. For example, 15% *disagree* or *strongly disagree* that “I know adults who often cheer me on” (see Table 3). In addition, 19% *disagree* or *strongly disagree* that “I know adults I could talk to about my problems” (see Table 3). Though supportive, communicative adults are frequently, but not necessarily, teens’ parents, between 15 and 19% of respondents do not consider they have any adult in their life that supports them or communicates with them. Thus, the majority of teens do have an adult who cheers them on and with whom they communicate with about their problems. Most teens in this study feel supported by adults in their lives.

Family Rules

Family rules are an area in which respondents were found to vary considerably. The majority of respondents, 70%, indicated their family did not have rules regarding the “people I hang around with” (see Table 4). In a related area, 65% indicated their family did not have rules concerning “dating and going to parties with boys or girls” (see Table 4). The following questions offered teens one of five responses: *my parent(s) decide*; *my parent(s) decide after discussing it with me*; *we decide together*; *I decide after discussing it with my parent(s)*; *I decide by myself*. To determine teens’ bedtime, it was reported that 39% of parents decide without teen input and at the other end of the continuum, 27% of

Table 2

Baseline Mother or Mother Figure for Respondent Population

		Frequency	Valid Percent
Valid	No	25	2.2
	Yes	941	84.4
	Error	1	.1
	Error	3	.3
	No Answer	145	13.0
	Total	1115	100.0
Missing	System	113	
Total		1228	

Baseline Father or Father Figure for Respondent Population

		Frequency	Valid Percent
Valid	No	100	9.0
	Yes	865	77.6
	Error	3	.3
	Error	1	.1
	Error	1	.1
	No Answer	145	13.0
	Total	1115	100.0
Missing	System	113	
Total		1228	

Table 3

Baseline for I Know Adults Who Often Cheer Me On of Respondent Population

		Frequency	Valid Percent
Valid	Error	1	.1
	Strongly Agree	438	39.3
	Agree	476	42.7
	Disagree	111	10.0
	Strongly Disagree	51	4.6
	Error	37	3.3
	Error	1	.1
	Total	1115	100.0
Missing	System	113	

Table 3 continued
Baseline for I Know Adults I Could Talk to about My Problems of All Respondents

		Frequency	Valid Percent
Valid	Strongly Agree	349	31.3
	Agree	559	50.1
	Disagree	129	11.6
	Strongly Disagree	69	6.2
	Error	7	.6
	Error	2	.2
	Total	1115	100.0
Missing	System	113	
Total		1228	

teens decide by themselves; 18% reported that bedtime was decided in collaboration. Similar responses were given when asked, "If you can go on an afternoon outing with a friend." Thirty-six percent of parents were reported to decide without teen input, yet 13% of the responses indicated that teens decided without parental input; 20% of teens were reported to make such decisions in collaboration with their parents. Teens seem to have a lot more autonomy regarding their money. Most teens, 58%, responded *I decide by myself* when asked how decisions are made regarding "What you do with your money?" Television viewing is another area in which respondents seem to have a great deal of the decision-making control. While 12% of teens said *parent(s) decide* "What you watch on TV or whether you watch TV at all?" 15% decide in collaboration with their parents and 52% *decide by myself*.

Table 4

Baseline for Family Rules for Which Friends Teen Spends Time of All Respondents

		Frequency	Valid Percent
Valid	No	302	27.1
	Yes	775	69.5
	No	37	3.3
	Answer		
	Error	1	.1
	Total	1115	100.0
Missing	System	113	
Total		1228	

Baseline for I Know Adults I Could Talk to about My Problems of All Respondents

		Frequency	Valid Percent
Valid	No	338	30.3
	Yes	722	64.8
	No	54	4.8
	Answer		
	Error	1	.1
	Total	1115	100.0
Missing	System	113	
Total		1228	

Sexual Behaviors and Attitudes

Teens who contributed toward this study seem to mirror those of many other studies in terms of their own sexual activity and expectations for abstinence. Teens overestimate the sexual activity of others. For clarification, throughout the survey “sex” was defined as “vaginal intercourse.” Of the survey respondents, 85% have never had sex (see Table 5) and 91% have not had sex in the last 6 months (see Table 5). While 74% of teen respondents said it is *not very likely* or *not at all likely* they will have sex in the next 12 months. Their perceptions, however, showed they think more classmates have had sex, than actually have had sex. When asked, “Out of 100 teens your age, how many do you think have had sex?” respondents greatly overestimated the number. Though 15% of peers had sex, 88% suspected from 20-39 up to 80 or more of their peers have had sex,

with 30% of all teens suspecting either *60-79* or *80 or more* have had sex. If teens' perceptions were accurate, 100% would have responded *fewer than 20* (see Table 6). Teens think many other teens are having sex; however, most teens are not having sex. Teens underestimate the number of other teens who are abstinent.

Regarding abstinence, the survey revealed respondents had varying views in terms of how long they would remain abstinent. While 61% said *yes* to the question, "Do you think you'll abstain from sex from now until you complete high school" (see Table 7) 69% either *agree* or *strongly agree* that "I intend to wait until I am older before I have sex with someone" (see Table 8). However, how long that will be is interesting. Merely 45% said they *agree* or *strongly agree* that "I intend to wait until I am married before I have sex with someone" (see Table 9). An interesting contrast is that 77% think it is *somewhat, quite, or very* important for them to not have sex until marriage. The majority of survey respondents seem to value sexual abstinence and intend to remain abstinent, but they do not believe they will remain so until marriage.

Table 5

Baseline for Have You Ever Had Sex? of Respondent Population

		Frequency	Valid Percent
Valid	No	952	85.4
	Yes	110	9.9
	No Answer	50	4.5
	Error	3	.3
	Total	1115	100.0
Missing	System	113	
Total		1228	

Table 5 continued

Baseline for Have You Had Sex During the Last 6 Months? of Respondent Population

		Frequency	Valid Percent
Valid	No	1009	90.5
	Yes	61	5.5
	No Answer	44	3.9
	Error	1	.1
	Total	1115	100.0
Missing	System	113	
Total		1228	

Table 6

Baseline for Among 100 Teens Your Age, How Many Do You Think Have Had Sexual Intercourse? of Respondent Population

		Frequency	Valid Percent
Valid	Fewer than 20	136	12.2
	20-39	107	9.6
	40-59	120	10.8
	60-79	83	7.4
	80 or More	253	22.7
	Error	1	.1
	Not Sure	383	34.3
	No Answer	29	2.6
	Error	3	.3
	Total	1115	100.0
Missing	System	113	
Total		1228	

Table 7

Baseline for Do You Think You Will Abstain Until High School Graduation? of Respondent Population

		Frequency	Valid Percent
Valid	No	344	30.9
	Yes	679	61.0
	No Answer	88	7.9
	Error	3	.3
	Total	1114	100.0
Missing	System	114	
Total		1228	

Table 8

Baseline for Intend to Wait Until Older Before Having Sexual Intercourse of Respondent Population

		Frequency	Valid Percent
Valid	Strongly Agree	534	47.9
	Agree	233	20.9
	In the Middle	198	17.8
	Disagree	60	5.4
	Strongly Disagree	51	4.6
	Error	1	.1
	No Answer	38	3.4
	Total	1115	100.0
Missing	System	113	
Total		1228	

Table 9

Baseline for Intend to Wait Until Married Before Having Sexual Intercourse of Respondent Population

		Frequency	Valid Percent
Valid	Strongly Agree	141	12.6
	Agree	139	12.5
	In the Middle	296	26.5
	Disagree	175	15.7
	Strongly Disagree	314	28.2
	Error	1	.1
	No Answer	49	4.4
	Total	1115	100.0
Missing	System	113	
Total		1228	

Substance Use

Their own health and substance use showed most teen respondents still practiced abstinence from drugs and alcohol. Specifically, 95% have not smoked marijuana, 94% have not smoked cigarettes, and 73% have not consumed alcohol (beer, wine, liquor) (see Table 10).

After-School Activities

While 80% of study participants were active in an adult-supervised after-school activity at least once per week, most of those students, 61% of the total population, have planned after-school activities two or more times every week (see Table 11). Selecting after-school activities ranged from 21% of teens claiming parents decided, 22% of teens and parents decided together, 30% of teens decided alone, and 23% of the decisions were determined either by parent(s) or teen after discussion (see Table 12). Of all survey questions, this was the most evenly distributed.

Table 10

Baseline for Have You Ever Smoked Marijuana? of Respondent Population

		Frequency	Valid Percent
Valid	No	1059	95.0
	Yes	25	2.2
	Error	1	.1
	No Answer	28	2.5
	Error	2	.2
	Total	1115	100.0
Missing	System	113	
Total		1228	

Table 10 continued

Baseline for Have You Ever Smoked Cigarettes? of Respondent Population

		Frequency	Valid Percent
Valid	No	1043	93.8
	Yes	50	4.5
	No Answer	17	1.5
	Error	2	.2
	Total	1112	100.0
Missing	System	116	
Total		1228	

Baseline for Have You Ever Consumed Alcohol? of Respondent Population

		Frequency	Valid Percent
Valid	No	810	72.6
	Yes	280	25.1
	No Answer	24	2.2
	Error	1	.1
	Total	1115	100.0
Missing	System	113	
Total		1228	

Table 11

*Baseline for How Often Do You Participate in After-School, Adult Supervised Activities?**of Respondent Population*

		Frequency	Valid Percent
Valid	Never	219	19.6
	1 x per week	213	19.1
	2 x per week	293	26.3
	3 or more x per week	384	34.4
	No Answer	5	.4
	Error	1	.1
	Total	1115	100.0
Missing	System	113	
Total		1228	

Table 12

*Baseline for How Decisions Are Made in Family:**In Which After-School Activities You Participate of Respondent Population*

		Frequency	Valid Percent
Valid	Error	1	.1
	Parents Decide	230	20.6
	Parents Decide After Discussion	112	10.0
	Decide Together	244	21.9
	Teen Decides After Discussion	139	12.5
	Teen Decides	327	29.3
	No Answer	58	5.2
	Error	4	.4
	Total	1115	100.0
Missing	System	113	
Total		1228	

ANOVA Means at Baseline

ANOVA tests were run for program (treatment, control) and gender (female, male) for each dependent variable. Thus, the responses to the sets of questions which assessed each of the three dependent variables (parental communication, faith and religious practices, and parental involvement) were run with program and gender. A total of 80 ANOVAs were run; the 40 ANOVAs for program and 40 ANOVAs for gender yielded 16 ANOVAs that were statistically significant at baseline.

Two parental communication questions were significant in regard to program at baseline. For the parental communication question, "How often in the last 3 months have you talked to one or both of your parents about any of these things? Peer pressure" the mean for the treatment group was 1.04 and the mean for the control group was 1.26.

Thus, the teens in the treatment group were found to talk to their parents about peer pressure an average of once in the past 3 months; teens in the control group were slightly more likely to discuss peer pressure with their parents. After asked about frequency of parental communication regarding a multitude of sensitive topics, teens were asked, “How easy is it for you to talk to your parents about these things?” The mean for the treatment group was 1.62 and the mean for the control group was 1.75. Thus, teens in the treatment group reported finding it between *never easy* with a value of 1 and *a little easy* with a value of 2, while teens in the control group reported finding it even easier to discuss sensitive topics since their mean is a bit higher. For the two parental communication questions found significant for program, at baseline the control group had more frequent communication and a greater ease with sensitive communication with their parents.

Also, eight parental communication questions were significant in regard to gender at baseline. Responses to six of the questions suggested female students had more frequent parental communication and responses to two of the questions suggested male students had more frequent parental communication. All eight questions began with “How often in the last 3 months have you talked to one or both of your parents about any of these things?” The higher the mean, the more frequently the teen reported speaking to at least one parent about the sensitive topic. For “Reasons for not having sex” the mean for females was 1.38 and the mean for males was 1.07. For “Things that happen to teens who have sex” the mean for females was 1.75 and the mean for males was 1.42. For “Why not having sex is important” the mean for females was 1.27 and the mean for males was .94. For “How your body grows and changes” the mean for females was 2.01

and the mean for males was 1.65. For “Peer pressure” the mean for females was 1.21 and the mean for males was 1.05. For “What other people will say or think about you or your friends” the mean for females was 1.35 and the mean for males was 1.06. Thus, at baseline, female teens in the study were found to have more frequent conversations with their parents about the sensitive topics. Just two parental communications questions were statistically significant and the results showed male teens had more frequent parental communication than their female counterparts. For “Dating behavior that is OK” the mean for female teens was .94 and the mean for male teens was 1.19. For “How your father feels about teen sex” the mean for female teens was .57 and the mean for male teens was .81. At baseline, male teens talk to their parents about dating behavior and their father’s expectations more frequently than female teens.

No faith and religious practices questions were significant in regard to program at baseline. However, one faith and religious practices question was significant in regard to gender at baseline. When asked “How often do you pray by yourself alone?” the mean for females was 3.79 and the mean for males was 3.32. With the response of *about once a month* having a value of 3 and *2-3 times a month* having a value of 4, both genders ranged between those responses. However, at baseline, female teens were found to pray more frequently than male teens.

Two parental involvement questions were significant in regard to program at baseline. For the question “How much do your parents TRY to know who your friends are?” the mean for the treatment group was 2.26 and the mean for the control group was 2.36. With *try a little* having a value of 2 and *try a lot* having a value of 3, the teens in the control group were found to have parents that made a greater effort to be involved and

know their teens' friends than teens in the treatment group. For the question "How much is your mother or someone who is like a mother to you involved in your education? Knows how I am doing in school" the mean for the treatment group was 2.6 and the mean for the control group was 2.28. Since the response of *sometimes* has a value of 2 and *always* has a value of 3, both groups of teens, those in the treatment group and those in the control group, were found to have involved mothers. However, at baseline, teens in the treatment group were found to have mothers who more frequently tried to know how their teens were performing in school than their control group counterparts.

Also, three parental involvement questions were significant in regard to gender at baseline. For the question "What do you think about these statements? They are about your mother or the person who is like a mother to you. For each, mark how true the statement is: It is easy to talk with her about things that happen in my life" the mean for females was 1.75 and the mean for males was 1.64. Since the value for *mostly true* is 1 and the value for *sometimes true* is 2, the higher the mean, the less likely the teen agrees that it is easy to discuss life issues with her or his mother. At baseline, females were found to be less likely to discuss life issues with their mother than their male counterparts. For the question ". . . mark how true the statement is: It is easy to talk with him (father or the person who is a like a father to you) about things that happen in school," the mean for females was 1.99 and the mean for males was 1.77. Thus, again at baseline, the females were found to be less likely to discuss school with their father than their male counterparts. For the question ". . . mark how true the statement is: It is easy to talk with him (father or the person who is like a father to you) about things that happen in my life" the mean for females was 2.1 and the mean for males was 1.75. Females were

found to be less likely to discuss life issues with their fathers than their male counterparts at baseline.

These means provide insight into how the teens in the study differed at baseline when program (treatment, control) and gender (female, male) are considered. Qualities of respondents in regard to the three dependent variables (parental communication, faith and religious practices, and parental communication) will be explored in detail on the following pages, beginning with parental communication.

Parental Communication Descriptive Statistics at Baseline

Descriptive statistics which shed light on aspects of the first research question, “What is the relationship between teens’ communication with their parents and teens’ sexual behaviors and attitudes?” showed most parents communicated with their teens about sex. The specific topics they discussed and the frequency of the communication is complex.

Frequency of Communication

When asked, “How often in the last 3 months have you talked to one or both parents about any of these things?” respondents were to select one of the following: *not at all*; *1 time*; *2-3 times*; or *4 times or more*. Keeping in mind nearly all survey respondents are between 11 and 14 years of age, one may expect parents are frequently talking about various topics relating to sex in order to protect, prepare, and persuade their children. This is true in some aspects, yet not in others.

To start with a lack of communication between parent(s) and teens, the following topics were answered *not at all* in the corresponding percentages from survey respondents. “How often in the last 3 months have you talked to one or both parents

about any of these things?” *Not at all*, was the answer for 47% of teens for “Sex in marriage” (see Table 13), 44% for “Why not having sex is important” and “Questions about facts about sex.” Forty-three percent of teens said parent(s) have spoken *not at all* to them in the last 3 months about “Dating behavior that is ok,” 42% for “Peer pressure” (see Table 13), and 41% for “Reasons for not having sex” (see Table 13).

As for proactive parental communication, though 41% of teens were found to have not spoken to their parents about “Reasons for not having sex,” 24% of teens indicated their parents spoke to them *4 times or more* about the topic (see Table 13). In a similar manner, though 32% of teens indicated they had not spoken to their parents about “What other people will say or think about you or your friends,” 55% of teens indicated they spoke between *1 time to 4 times or more* in the last 3 months about perceptions of them and their friends. Teen respondents had a great deal of communication with their parent(s) about the physical and health aspects of sex. For example, 79% of teens reported they spoke between *1 time to 4 times or more* about “How your body grows and changes.” Seventy-one percent indicated they spoke between *1 time to 4 times or more* about “Diseases people can get when having sex” (see Table 13). The topic of “Things that happen to teens who have sex,” was reported to have been communicated between *1 time to 4 times or more* by 70% of teen respondents.

Ease of Communication

On another positive note, when asked, “How easy is it for you to talk with your parents about these things?” after numerous sexuality topics were addressed, 61% of teens responded either *a little easy* or *very easy*. Though 19% indicated *never easy*, and 18% said *never talk to my parents about these things*, the majority of respondents were

found to report not having difficulty communicating with their parents about a myriad of issues relating to sex, health, and intimate relationships (see Table 14).

Table 13

Baseline for In Last 3 Months, How Many Conversations with Parent(s) About Sex in Marriage of Respondent Population

		Frequency	Valid Percent
Valid	Not At All	518	46.5
	1 x	152	13.6
	2-3 x	167	15.0
	4 x or More	242	21.7
	No Answer	34	3.1
	Error	1	.1
	Total	1114	100.0
Missing	System	114	
Total		1228	

Baseline for In Last 3 Months, How Many Conversations with Parent(s) About Peer Pressure of Respondent Population

		Frequency	Valid Percent
Valid	Not At All	465	41.7
	1 x	202	18.1
	2-3 x	196	17.6
	4 x or More	209	18.7
	No Answer	39	3.5
	Error	4	.4
	Total	1115	100.0
Missing	System	113	
Total		1228	

Baseline for In Last 3 Months, How Many Conversations with Parent(s) About Reasons for Not Having Sex of Respondent Population

		Frequency	Valid Percent
Valid	Not At All	455	40.8
	1 x	167	15.0
	2-3 x	180	16.1
	4 x or More	265	23.8
	No Answer	47	4.2
	Error	1	.1
	Total	1115	100.0
Missing	System	113	
Total		1228	

Table 13 continued
Baseline for In Last 3 Months, How Many Conversations with Parent(s)

About Diseases People Can Get When Having Sex of Respondent Population

		Frequency	Valid Percent
Valid	Not At All	294	26.4
	1 x	175	15.7
	2-3 x	181	16.2
	4 x or More	431	38.7
	No Answer	33	3.0
	Error	1	.1
	Total	1115	100.0
Missing	System	113	
Total		1228	

Table 14

Baseline for How Easy Is It to Discuss Sensitive Issues with Parents? of Respondent

Population

		Frequency	Valid Percent
Valid	Never Discuss	196	17.6
	Never Easy	215	19.3
	A Little Easy	422	37.8
	Very Easy	258	23.1
	No Answer	22	2.0
	Error	2	.2
	Total	1115	100.0
Missing	System	113	
Total		1228	

Faith and Religious Practices Descriptive Statistics at Baseline

Descriptive statistics revealed the faith and religious practices of survey respondents. In connection to the second research question, "What is the relationship between teens' faith and religious practices and teens' sexual behaviors and attitudes?" most respondents seemed to be faithful, yet did not necessarily practice their religion regularly. Teens were found to believe in their faith, value their faith, and pray. However,

those same teens might not participate in religious services regularly or participate in a youth group.

Faith

Though respondents were found to not commonly attend religious services or training, they were found to be faithful. When asked, “How often do you pray by yourself alone?” 45% of teens indicated they do between *2 -3 times a month* and *more than once a week*. At the other end of the continuum, 16% *never* prayed by themselves alone. A small percentage, 5%, were found to pray *about once a month* and 28% were found to pray *a few times* (see Table 15). Most participants were found to pray and value faith as part of their lives.

Table 15

Baseline for How Often Do You Pray By Yourself? of Respondent Population

		Frequency	Valid Percent
Valid	Error	1	.1
	Never	173	15.5
	A Few Times	312	28.0
	About Once a Month	54	4.8
	2-3 x a Month	80	7.2
	Once a Week	86	7.7
	More than Once a Week	338	30.3
	No Answer	69	6.2
	Error	2	.2
	Total	1115	100.0
Missing	System	113	
Total		1228	

Faith also seemed to play a daily role in the lives of teen respondents. When asked, “How important or unimportant is religious faith in helping you make major life decisions?” 69% of teens indicated it was *somewhat* to *extremely important*. Conversely,

25% said it is *not at all* or *not very important*. In a related question, “How important or unimportant is religious faith in how you live your daily life?” even more teens were found to value their faith. Seventy-one percent indicated it was *somewhat* to *extremely important*. Whereas, 24% indicated it was *not at all* or *not very important*. However, among all respondents, 30% were found to consider their faith *extremely important* in how they live their daily lives.

It seems study participants reflected a growing trend in American society. They are faithful and value their own faith, yet they do not regularly practice their faith in a formal manner. Faith and religion seemed to be personal and valued, despite the fact most participants rarely attended religious services.

Religious Practices

When asked, “Are you currently involved in a religious youth group?” 64% of teens indicated *no*, while 26% indicated *yes*. How that decision was determined varied widely. Thirty-two percent of teens said their parents decided, “Whether you take part in religious training or education.” The decision was reported to be made together for 22% of teens, while 23% of teens reported they made the decision themselves; 18% of teens indicated the decision was made either by the parent or the teen after a discussion. Thus, the decision to participate in religious training was done in a variety of ways by respondents and their parents. Attendance at religious services was not found to be common. When asked, “In the past year, how often have you attended religious services, NOT weddings, baptisms, funerals, or similar religious ceremonies?” 60% of teens responded, *never* or *a few times*. Just 4% said *about once a month* and 26% said between *2 – 3 times a month* and *more than once a week* (see Table 16).

Parental Involvement Descriptive Statistics at Baseline

To reflect upon the role of parental involvement in respondents' lives, descriptive statistics help us gain insight into the third research question, "What is the relationship between parental involvement and teens' sexual behaviors and attitudes?" Parental involvement pertains to parents' attempts at knowing about their teens, ease at which teens talk with their parents about personal issues, and parental participation in teens' school and personal life.

Table 16

Baseline for In The Past Year, How Often Have You Attended Religious Services? of Respondent Population

		Frequency	Valid Percent
Valid	Error	2	.2
	Never	375	33.6
	A Few Times	296	26.5
	About Once a Month	49	4.4
	2-3 x a month	74	6.6
	Once a Week	115	10.3
	More Than Once a Week	105	9.4
	Error	1	.1
	No Answer	96	8.6
	Error	2	.2
	Total	1115	100.0
Missing	System	113	
Total		1228	

Parents' Communication Attempts

Most parents were found to make strong attempts to know their teen's location when away from home. When asked, "How much do your parents TRY to know. . . Where you go at night?" 70% of teens indicated *try a lot*. Fourteen percent indicated

parents *try a little* and 11% said *don't try*. With a similar question about how much parents try to know “Where you are most afternoons after school?” more parents were found to make the effort. Eighty-three percent of teens indicated their parents *try a little* or *try a lot*. However, 14% indicated their parents *don't try*.

Ease of Communication

Regarding the ease with which teens talk with their mothers and fathers about issues, more teens indicated it was easier to communicate with their mothers than their fathers, and more teens indicated it was easier to discuss school as compared to life. In answer to the survey questions, “It’s easy to talk with (mother/person like a mother) or (father/person like a father) about things that happen in school,” 46% of teens indicated *mostly true* of their mothers, yet just 32% answered *mostly true* for their fathers. *Sometimes true* was close between mothers and fathers with each getting 38% and 35%, respectively. While 10% of teens responded *hardly ever true* for the ease of school discussion with their mothers, 22% found it *hardly ever true* with their fathers.

For a similar question, about ease of discussion “about things that happen in life,” teens’ responses regarding each parent were nearly the same with *mostly true* at 44%, *sometimes true* at 34%, and *hardly ever true* at 16% (see Table 17). However, teens find conversations with their fathers about personal matters even more difficult than about school discussions. Thirty percent of teens indicated it was *mostly true* that they found it easy to talk with their fathers about things that happen in life. However, 33% indicated it was *sometimes true*, and 25% of respondents indicated it was *hardly ever true*. A quarter of participants found it *hardly ever true* that they find it easy to talk with their fathers

about things that happen in life (see Table 17). Similar parental involvement questions were also explored to offer insight into respondents' family experiences.

Parental Involvement Frequency

Five questions asked teens how often their mother and their father got involved in aspects of their lives. Teens indicated their parents were more likely to help them with daily or common school related tasks, as compared to less frequent or less common school related tasks. Also, for every question, mothers were indicated as more involved in teens' lives than fathers. While 44% of mothers *always* "Helps with homework when I

Table 17

Baseline for It Is Easy to Talk to Your Mother About Things That Happen In Life of

Respondent Population

		Frequency	Valid Percent
Valid	Mostly True	486	43.6
	Sometimes True	381	34.2
	Hardly Ever True	174	15.6
	No Answer	73	6.5
	Error	1	.1
	Total	1115	100.0
Missing	System	113	
Total		1228	

Baseline for It Is Easy to Talk to Your Father About Things That Happen In Life of Respondent Population

		Frequency	Valid Percent
Valid	Mostly True	336	30.1
	Sometimes True	366	32.8
	Hardly Ever True	278	24.9
	No Answer	128	11.5
	Error	3	.3
	Total	1115	100.0
Missing	System	113	
Total		1228	

ask,” less than half that amount, 20%, of fathers were reported to *always* help. Just 12% of mothers were reported to *never* help with homework, but 29% of fathers were reported to *never* help teens with their homework when they ask. Also, mothers found to know more about teens’ progress in school. Fifty-two percent of mothers were reported to *always* “Knows how I am doing in school” (see Table 18). However, 38% of fathers were reported to *always* know about their teens’ school progress (see Table 18).

Table 18

*Baseline for How Much Does Your Mother Know Your School Performance
of Respondent Population*

		Frequency	Valid Percent
Valid	Never	128	11.5
	Sometimes	256	23.0
	Always	582	52.2
	Error	43	3.9
	No Answer	102	9.1
	Error	4	.4
	Total	1115	100.0
Missing	System	113	
Total		1228	

*Baseline for How Much Does Your Father Know Your School Performance
of Respondent Population*

		Frequency	Valid Percent
Valid	Never	175	15.7
	Sometimes	328	29.4
	Always	428	38.4
	Error	1	.1
	Error	44	3.9
	No Answer	138	12.4
	Error	1	.1
	Total	1115	100.0
Missing	System	113	
Total		1228	

Attendance at school events was somewhat evenly distributed among parents. When asked how frequently their mother “Goes to school programs for parents,” 22% of respondents indicated *never*, 30% said *sometimes*, and 39% indicated *always*. Fathers’ attendance at school events was worse; 36% indicated he *never* attended, 24% indicated he *sometimes* attend, and merely 15% indicated he *always* attended. Mothers’ viewing of their teens’ sports events was reported to be a bit less than their attendance at school programs, yet the fathers’ attendance at athletic events was found to be similar. Twenty-two percent of mothers were reported to *never* “Watches me in sports activities.” While 31% of mothers were reported to *sometimes* watch, and 34% of mothers were reported to *always* watch. Fathers’ attendance at their teens’ athletic contests was found to be nearly identical to that of mothers. Twenty-three percent of fathers were reported to *never* watch; 29% were reported to *sometimes* watch and 30% *always* “Watches me in sports activities.”

Regarding selection of academic courses, both mothers and fathers were found to be evenly distributed regarding participation, yet mothers were found to be more involved than fathers in this aspect of teens’ lives as well. Though 33% of mothers were reported to *always* “Helps me in choosing my courses,” another 33% were reported to *sometimes* help. Twenty-three percent of mothers were reported to *never* help their teens select their academic program. While 23% of fathers were reported to *always* help, 26% of fathers were reported to *sometimes* help, and another 26% of fathers were reported to *never* help their teen select their academic program. Though mothers were reported to be more involved than fathers in every question asked on the survey, parental participation

was an area of respondents' lives in which active, involved parents did not seem to be in the majority.

Baseline data for teen demographics, family roles and rules, teens' sexual behaviors and attitudes, substance use, after school activities, parental communication, faith and religious practices, and parental involvement were explained in the previous pages. Next, baseline data will be compared to follow-up survey results.

Comparison of Baseline and Follow-up Data

Parents' Communication

Through 16 survey questions pertaining to communication with their parents, teen respondents provided insight into the frequency with which they communicated with their parents within the previous 3 months about a myriad of topics. After teens respond to 15 questions about communication frequency, they were asked about the ease with which they communicated with their parents about the sensitive topics. The same 16 questions were asked on the baseline and follow-up surveys. Each question began with "How often in the last 3 months have you talked to one or both parents about any of these things?" Throughout this analysis of descriptive statistics, treatment and control groups are included together. Treatment and control groups were analyzed separately for additional insight through chi-square test analysis.

Dating Expectations

When asked about "Dating behavior that is OK" more teens responded that they had such conversations in the follow-up survey than in the baseline survey, though still many others never had such a communication with their parents. For the treatment and control groups, teens indicating they did not discuss appropriate dating behavior

decreased from 43% to just more than 40% in the follow-up survey. The response *one time* increased slightly from 19.3% to 20%, while the response *2-3 times* increased from nearly 23% to just more than 27%. Those teens responding that they discussed “Dating behavior that is OK” *4 times or more* within the previous 3 months remained steady, at just more than 12%. Though most respondents reported their parents discussed acceptable dating behavior with them, approximately 40% of respondents reported their parents did not. Slightly more teens and parents discussed dating as time progressed.

Others’ Opinions about Sex, Respondents, and their Friends

There was also a slight improvement in the number of teens who reported within the previous 3 months they communicated with one or both parents about “How your mother feels about teen sex.” For the treatment and control groups combined, the percentage of teens responding they did not have any such conversations decreased from 50% to 47%; those responding *1 time* remained steady at 16%; those responding *2-3 times* increased from 16% to nearly 20%; and those responding they had such a discussion *4 times or more* within the previous 3 months increased from just more than 14% to 17% (see Table 19). More teens reported having communication with one or both parents about their mother’s views of sex during the follow-up survey than the previous baseline survey.

For a parallel question which asked about conversations about “How your father feels about teen sex,” fewer teens had a conversation with their parent and the percentages remained relatively stable between the baseline and follow-up surveys among the treatment and control groups. Nearly 63% of teens reported not having had that conversation as indicated in the baseline, whereas 64% in the follow-up survey

reported they had no such conversation. At the other end of the continuum, nearly 12% reported having had a conversation about their father's feelings about sex *4 times or more* prior to the program and slightly more than 11% reported having had such frequent conversations after the program (see Table 20). Frequency of conversations about the mother's feelings about sex was found to be greater than the frequency of conversations about the father's feelings about sex. Also, the frequency of conversations about the mother's feelings was found to improve over time, whereas the frequency of conversations about the father's feelings did not improve over time.

Table 19

Baseline for In The Last 3 Months, How Many Conversations Did You Have with Your

Mother About How She Feels About Sex of Respondent Population

		Frequency	Valid Percent
Valid	Not At All	560	50.2
	1 x	178	16.0
	2-3 x	178	16.0
	4 x or More	159	14.3
	No Answer	37	3.3
	Error	3	.3
	Total	1115	100.0
Missing	System	113	
Total		1228	

Follow-Up for In The Last 3 Months, How Many Conversations Did You Have with Your

Mother About How She Feels About Sex of Respondent Population

		Frequency	Valid Percent
Valid	Not At All	346	47.1
	1 x	119	16.2
	2-3 x	144	19.6
	4 x or More	125	17.0
	Total	734	100.0
Missing	System	494	
Total		1228	

During that same timeframe and with a related question, “How your friends feel about teen sex,” the reported frequency of communication with one or both parents during the previous 3 months increased among the entire respondent population in both treatment and control groups. While just more than 48% indicated they did not have such communication in the baseline survey, just fewer than 43% answered the same in the follow-up survey. Thus, with the other three options, the percentages increased over time. Teens responding they had such a conversation *1 time* increased from 15% to 17.5%, *2-3 times* also increased from 14.5% to 17.5%, and those with frequent conversations with

Table 20

Baseline for In The Last 3 Months, How Many Conversations Did You Have with Your Father About How He Feels About Sex of Respondent Population

		Frequency	Valid Percent
Valid	Not At All	697	62.6
	1 x	127	11.4
	2-3 x	100	9.0
	4 x or More	132	11.8
	No Answer	57	5.1
	Error	1	.1
	Total	1114	100.0
Missing	System	114	
Total		1228	

Follow-Up for In The Last 3 Months, How Many Conversations Did You Have with Your

Father About How He Feels About Sex of Respondent Population

		Frequency	Valid Percent
Valid	Not At All	465	63.9
	1 x	96	13.2
	2-3 x	86	11.8
	4 x or More	81	11.1
	Total	728	100.0
Missing	System	500	
Total		1228	

one or more parents about their friends' feelings about teen sex increased from 18% to nearly 22.5%. The majority of respondents reported having such a conversation with at least one parent during the 3 months prior to the survey. Another question about other's opinions was "What other people will say or think about you or your friends" showed an increase in the percentage of teens responding *not at all* to the frequency of conversations. In the baseline survey, 31.5% of teens responded they have not had such a talk with one or both parents in the last 3 months. During the follow-up survey, nearly 41% reported they had that talk *not at all*. The other responses remained relatively steady as follows: *1 time* (20%, 22%), *2-3 times* (18.5%, 19.5%), and *4 times or more* (16%, 18%). The majority of teens were found to have had a conversation with a parent about perceptions of them or their friends within the 3 months prior to the survey, but fewer parents were having that conversation with their teens as time passes.

Physiological Aspects of Sex

Communication teens have with their parents about biological or physiological aspects of sex was assessed with three related questions. When asked about the frequency of communication within the 3 months prior to the survey about "How babies are made," "How your body grows and changes," and "Questions about facts about sex," fewer teens failed to speak to their parents about the topics within the last three months at the beginning of the program than at the end of the program; this is for both the treatment and control groups. First, for "How babies are made," 30% of teens reported they had not spoken to a parent prior to the program, yet 35.5 % reported having had no such conversations after the program. For those selecting *1 time*, *2-3 times*, or *4 times or more*, the totals remained rather constant at (20%, 17.5%), (17%, 20%), and (28%, 27%),

respectively. In a similar pattern, for “How your body grows and changes,” 19% of respondents selected *not at all* in regard to communication within the last 3 months during the baseline survey, yet 25% had that selection for the follow-up survey. At the other end of the continuum, *4 times or more* was selected by 40% of respondents at baseline, yet 27.5% of respondents at follow-up (see Table 21). Thus, as time progressed, fewer teens spoke about changes in their bodies at all and fewer spoke about the topic frequently. As far as “Questions about facts about sex,” more teens communicated with a parent. At baseline, 44% of teens reported they did not speak about this, though at the follow-up, 40% reported having had no such recent conversations. More teens had occasional conversations and fewer teens had frequent conversations. Comparing the baseline to the follow-up surveys was as follows: *1 time* (17%, 19.5%), *2-3 times* (17%, 23%), and *4 times or more* (19.5%, 18%). Thus, communication about biological or physiological aspects of sex tended to decrease as time progressed.

Table 21

Baseline for In The Last 3 Months, How Many Conversations Did You Have with a Parent About How Your Body Grows and Changes of Respondent Population

		Frequency	Valid Percent
Valid	Not At All	211	18.9
	1 x	187	16.8
	2-3 x	245	22.0
	4 x or More	444	39.8
	No Answer	27	2.4
	Error	1	.1
	Total	1115	100.0
Missing	System	113	
Total		1228	

Table 21 continued

Follow-Up for In The Last 3 Months, How Many Conversations Did You Have with a

Parent About How Your Body Grows and Changes of Respondent Population

		Frequency	Valid Percent
Valid	Not At All	183	25.0
	1 x	139	19.0
	2-3 x	207	28.3
	4 x or More	202	27.6
	Total	731	100.0
Missing	System	497	
Total		1228	

Media and Peer Pressure

Two communication questions assessed aspects of teen life that have been shown to influence teens' sexual behaviors and attitudes; the media and peer pressure play important roles in teens' lives. When asked how frequently teens communicated with one or more parents in the previous 3 months about "What TV, radio, movies, magazines and/or the Internet says about sex" and "Peer pressure," the percentage of teens stating they did not have any such conversations was high and consistent among the entire population of teen respondents, both the treatment and control groups. First, concerning the media question, slightly more than half (50.5%) indicated they have not had such a conversation in the baseline survey and 51.5% indicated that response in the follow-up survey. The responses of *1 time* (17%, 18%), *2-3 times* (13.5%, 15%), and *4 times or more* (15%, 15%) remained steady (see Table 22). The question of frequency of communication about peer pressure showed a similar pattern. Among both treatment and control groups, 42% of teens reported they had not discussed peer pressure with a parent in the previous 3 months at baseline, and 42% reported they did not have such discussion at follow-up. The other responses remained steady too. The percentages of teens for

baseline and follow-up surveys are *1 time* (18%, 21%), *2-3 times* (18%, 20%), and *4 times or more* (19%, 18%), respectively. Thus, the topics of media's representation of sex and teens' peer pressure are less frequently the topic of conversation for parents and teens than the less philosophical and more scientific topics of reproduction, biological changes, and factual information about sex.

Table 22

Baseline for In The Last 3 Months, How Many Conversations Did You Have with a Parent About What TV, Radio, Magazines and/or Internet Say About Sex for Respondent Population

		Frequency	Valid Percent
Valid	Not At All	563	50.5
	1 x	191	17.1
	2-3 x	150	13.5
	4 x or More	169	15.2
	No Answer	39	3.5
	Error	2	.2
	Total	1114	100.0
Missing	System	114	
Total		1228	

Follow-Up for In The Last 3 Months, How Many Conversations Did You Have with a Parent About What TV, Radio, Magazines and/or Internet Say About Sex for Respondent Population

		Frequency	Valid Percent
Valid	Not At All	380	51.5
	1 x	135	18.3
	2-3 x	113	15.3
	4 x or More	110	14.9
	Total	738	100.0
Missing	System	490	
Total		1228	

Sex in Marriage

“Sex in marriage” was reported not to have been discussed with a parent in the 3 months prior to the survey by 46.5% of teens in the baseline survey and 45% in the follow-up survey for both the treatment and control groups. While the total of teens who had spoken between one and four times or more remained steady between the baseline and follow-up, there were shifts among responses. Those teens selecting *1 time* (14%, 20%) and *2-3 times* (15%, 17%) increased over time. However, those selecting frequent communication with a parent about “Sex in marriage” of *4 times or more* within the 3 months prior to the survey decreased from 22% to 18%. Fewer teens communicated frequently about the topic.

Negative Aspects of Sex

Four communication questions focus upon negative aspects of sex such as “Diseases people can get when having sex,” “Things that happen to teens who have sex,” “Reasons for not having sex,” and “Why not having sex is important.” Response to the first two questions, about STDs and consequences of teen sex, indicated more teens did not discuss the topic at all as time progressed; fewer teens discussed these topics at all. Whereas the opposite was true for the more nebulous topics of reasons for not having sex and a similar topic of reasons why abstinence is important. Among both the treatment and control groups, the percentage of teens who discussed these topics increased. As may be expected, the results for the two questions about not having sex, similar in nature, mirror each other.

Among the treatment and control groups, for “Diseases people can get when having sex” teens responded as follows: *not at all* (26%, 29%), *1 time* (16%, 15%) *2-3*

times (16%, 21%), and *4 times or more* (39%, 35%). For “Things that happen to teens who have sex” teens responded *not at all* (27%, 30%), *1 time* (16.5%, 17%), *2-3 times* (21%, 24%), and *4 times or more* (33%, 29%). For both questions the percentage of teens not having such conversations increased with time and the percentage of responses that indicated frequent conversations decreased with time. More teens and parents are not discussing these topics and fewer are discussing them frequently.

Similar questions about the negative aspects of sexual behavior showed similar results. When asked how frequently they discussed “Reasons for not having sex” with a parent in the last three months, among the entire teen respondent population, both treatment and control groups, teens responded *not at all* (41%, 38%), *1 time* (15%, 16%), *2-3 times* (16%, 22%), and *4 times or more* (24%, 24%). The frequency with which teens communicated with one or both parents about “Why not having sex is important” was found to be *not at all* (43%, 39%), *1 time* (18%, 18%), *2-3 times* (16%, 21%), and *4 times or more* (19.5%, 22.5%) (see Table 23). Teen and parent communication about reasons not to have sex and its importance did not occur in fewer families during the follow-up and those reported to discuss such topics *2-3 times* in the 3 months prior to the survey increased by 5 or 6% between the baseline and follow-up surveys. Thus, the negative aspects of teen sexual behavior was ignored by fewer parents and teens and discussed by more of them as time progressed. Communication about negative aspects of teen sexual behavior described in a more general manner showed an increase, but communication about diseases and “things that happen” due to teen sex showed a decrease over time.

Table 23

Baseline for In The Last 3 Months, How Many Conversations Did You Have with a

Parent About Why Not Having Sex Is Important of Respondent Population

		Frequency	Valid Percent
Valid	Not At All	483	43.3
	1 x	196	17.6
	2-3 x	182	16.3
	4 x or More	217	19.5
	No Answer	36	3.2
	Error	1	.1
	Total	1115	100.0
Missing	System	113	
Total		1228	

Follow-Up for In The Last 3 Months, How Many Conversations Did You Have with a

Parent About Why Not Having Sex Is Important of Respondent Population

		Frequency	Valid Percent
Valid	Not At All	285	39.3
	1 x	128	17.6
	2-3 x	150	20.7
	4 x or More	163	22.5
	Total	726	100.0
Missing	System	502	
Total		1228	

Parental Communication ANOVAs

For the research question, "What is the relationship between teens' communication with their parents and teens' sexual behaviors and attitudes?" 18 questions assessed parental communication. At baseline, ANOVAs were run for both program (treatment, control) and gender (female, male). At the significance level of .05, two program questions and eight gender questions were statistically significant. These are explained in the following sections.

Parental Communication and Program ANOVAs

For program, two questions were statistically significant, one for the frequency of communication about peer pressure and the other for the ease of communication.

“How often in the last 3 months have you talked to one or both of your parents about any of these things? Peer pressure” was significant at the .05 level. The dependent variable is parental communication and the independent variable is program (treatment, control). A one-way ANOVA was run ($F = 9.361$), ($df = 1070$), ($p = .002$) (see Table 24). The mean for the control group is 5.24 and the mean for the treatment group is 4.59. This indicates that at baseline, a member of the control group had more frequent conversations with their parents than a member of the treatment group. This signifies that the main effect of program has a significant impact on teens’ communication with their parents about peer pressure at baseline.

The second question found to be statistically significant is, “How easy is it for you to talk to your parents about these things?” “These things” refers to a variety of sensitive issues and topics. This question was immediately followed by a series of 15 questions in which teens were asked about the frequency of communication with one or both parents in the previous 3 months about sexuality or relationship topics. The dependent variable is parental communication and the independent variable is program (treatment, control). A one-way ANOVA was run ($F = 4.270$), ($df = 1089$), ($p = .039$) (see Table 24). The mean for the control group is 4.32 and the mean for the treatment group is 3.31. This indicates that at baseline members of the control group had more frequent conversations with their parents than members of the treatment group. This signifies that the main effect of program has a significant impact on teens’

communication with their parents regarding teens' comfort level with numerous sensitive topics.

Table 24

ANOVA: Baseline, Dependent Variable: Frequency of Communication; Ease of Communication, Factor: Program

		Sum of Squares	df	Mean Square	F	Sig.
3m Peer Pressure	Between Groups	12.804	1	12.804	9.361	.002
	Within Groups	1463.486	1070	1.368		
	Total	1476.290	1071			
Ease of Comm.	Between Groups	4.473	1	4.473	4.270	.039
	Within Groups	1140.885	1089	1.048		
	Total	1145.358	1090			

Parental Communication and Gender ANOVAs

Regarding the relationship between gender and parental communication, eight questions were statistically significant at the .05 level at baseline. Each of the eight questions began with the following: "How often in the last 3 months have you talked to one or both of your parents about any of these things?" Teens were to select *not at all*, *1 time*, *2-3 times*, or *4 times or more*. For each, the dependent variable is parental communication and the independent variable is gender (female, male) (see Table A1).

To assess "Dating behavior that is OK," ($F = 13.825$), ($df = 1085$), ($p < .000$). The mean for females is 3.02 and the mean for males is 3.11.

For "How your father feels about teen sex," ($F = 13.255$), ($df = 1050$), ($p < .000$). The mean for females is 4.91 and the mean for males is 6.61.

The topic of "Reasons for not having sex," ($F = 16.655$), ($df = 1061$), ($p < .000$). The mean for females is 5.52 and the mean for males is 5.11.

For “Things that happen to teens who have sex,” ($F = 19.585$), ($df = 1075$), ($p < .000$). The mean for females is 4.29 and the mean for males is 4.68.

To assess “Why not having sex is important,” ($F = 19.918$), ($df = 1072$), ($p < .000$). The mean for females is 3.82 and the mean for males is 4.79.

For “How your body grows and changes,” ($F = 27.779$), ($df = 1081$), ($p < .000$). The mean for females is 3.91 and the mean for males is 4.51.

To assess “Peer pressure,” ($F = 4.521$), ($df = 1066$), ($p = .034$). The mean for females is 4.56 and the mean for males is 5.09.

For the eighth and final statistically significant analysis of variance for parental communication and gender “What other people will say or think about you or your friends” ($F = 15.465$), ($df = 958$), ($p < .000$).

Parental communication questions found statistically significant for program will be analyzed using chi-square tests for additional insight.

Parental Communication Chi-Square Tests

From the ANOVAs at baseline, the two communication questions that were statistically significant with the independent variable of program were further analyzed as to their effects on questions assessing teens’ sexual behaviors and attitudes. Chi-square tests were done for this purpose, with each statistically significant question done separately with the baseline and follow-up data, then analyzed together. The results are explained below.

Peer Pressure Communication and Sexual Behaviors and Attitudes

For the first communication question, “How often in the last 3 months have you talked to one or both of your parents about any of these things? Peer pressure” teens were

to answer *not at all*, *1 time*, *2-3 times*, or *4 times or more*. Comparing baseline chi-square test results to their comparable follow-up chi-square test results using seven sexual behavior and attitude questions provided rich insight.

At baseline, “I intend to wait until I am older before I have sex with someone” was one of two questions for which there were no differences between treatment and control groups.

However, at follow-up among the treatment group, there was a significant association between frequency of communication with parents and intention to abstain $\chi^2 (12, N = 413) = 25.981, p = .011$ (see Table 25). Teens in the treatment group, who reported the most frequent communication and the most likely to remain abstinent remained steady at 60%; the control group saw a drop of 6% to 53% (see Table A2). It seemed the combination of frequent parental communication and the abstinence program helped a high percentage of teens to maintain sexual abstinence until they are older.

Table 25

Baseline Chi-Square Test for Peer Pressure and Wait Until Older

	TreatmentControl	Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	23.753	12	.022
	Likelihood Ratio	28.490	12	.005
	Linear-by-Linear Association	.442	1	.506
	N of Valid Cases	452		
1.00	Pearson Chi-Square	17.154	12	.144
	Likelihood Ratio	17.251	12	.140
	Linear-by-Linear Association	2.523	1	.112
	N of Valid Cases	589		
Total	Pearson Chi-Square	31.439	12	.002
	Likelihood Ratio	33.787	12	.001
	Linear-by-Linear Association	2.949	1	.086
	N of Valid Cases	1041		

Table 25 continued
Follow-Up Chi-Square Test for Peer Pressure and Wait Until Older

Program		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	8.917	12	.710
	Likelihood Ratio	9.030	12	.700
	Linear-by-Linear	.599	1	.439
	Association			
	N of Valid Cases	288		
1.00	Pearson Chi-Square	25.981	12	.011
	Likelihood Ratio	26.160	12	.010
	Linear-by-Linear	11.689	1	.001
	Association			
	N of Valid Cases	413		
Total	Pearson Chi-Square	23.309	12	.025
	Likelihood Ratio	23.389	12	.025
	Linear-by-Linear	8.932	1	.003
	Association			
	N of Valid Cases	701		

For the question, “How important is it for you to not have sex until marriage?” for the control group at baseline a significant association between peer pressure and the importance of abstaining until marriage was found, $\chi^2 (30, N = 454) = 44.901, p = .039$ (see Table 26).

The follow-up chi-square analysis was statistically significant for both control and treatment groups. At follow-up, for the control group, $\chi^2 (12, N = 288) = 21.360, p = .045$ (see Table 26). At follow-up, for the treatment group, $\chi^2 (12, N = 423) = 21.330, p = .046$. For the control group, the chi-square analysis found an increase between 4 and 9% from baseline to follow-up for those responding abstinence until marriage was *not important at all*. Conversely, for those teens in the treatment group, there were decreases or small percentage increases in those not valuing abstinence until marriage. For example, for teens in the treatment group who indicated they had discussed peer pressure with their parents 2-3 times within the 3 months prior to the baseline survey, 9% viewed abstinence as *not important at all* until marriage. After participation in the program, just

6% of teens in this group did not value abstinence until marriage (see Table A5). It seems exposure to the abstinence program had a positive effect upon teens less likely to remain abstinent regardless of the amount of parental communication.

For the communication question analyzed by chi-square tests, “How often in the last 3 months have you talked to one or both of your parents about any of these things? Peer pressure,” some trends emerged. Those teens in the treatment group with the most frequent communication tended to have healthier sexual behaviors and attitudes. More teens within the treatment group with lots of communication about peer pressure planned to remain abstinent and value abstinence more than their less communicative peers in the control group. This suggests the combination of high parental communication frequency and participation in an abstinence program plays a role in teens’ sexual behaviors and attitudes. The ease with which teens communicate with their parents as it relates to their sexual behaviors and attitudes will be discussed with the next communication question.

Table 26

Baseline Chi-Square Test for Peer Pressure and No Sex Until Marriage

Program		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	44.901	30	.039
	Likelihood Ratio	35.914	30	.211
	Linear-by-Linear	16.467	1	.000
	Association			
	N of Valid Cases	487		
1.00	Pearson Chi-Square	26.889	30	.629
	Likelihood Ratio	27.148	30	.615
	Linear-by-Linear	1.136	1	.286
	Association			
	N of Valid Cases	628		
Total	Pearson Chi-Square	46.927	30	.025
	Likelihood Ratio	37.707	30	.157
	Linear-by-Linear	16.086	1	.000
	Association			
	N of Valid Cases	1115		

Table 26 continued

<i>Follow-Up Chi-Square Test for Peer Pressure and No Sex Until Marriage</i>				
Program		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	21.360	12	.045
	Likelihood Ratio	20.737	12	.054
	Linear-by-Linear	3.229	1	.072
	Association			
	N of Valid Cases	288		
1.00	Pearson Chi-Square	21.330	12	.046
	Likelihood Ratio	21.974	12	.038
	Linear-by-Linear	7.587	1	.006
	Association			
	N of Valid Cases	423		
Total	Pearson Chi-Square	26.496	12	.009
	Likelihood Ratio	26.702	12	.009
	Linear-by-Linear	9.531	1	.002
	Association			
	N of Valid Cases	711		

Ease of Communication and Sexual Behaviors and Attitudes

For the second communication question, “How easy is it for you to talk to your parents about these things?” (“These things” refer to 15 previously listed sensitive topics.) Teens are to answer *never easy*, *a little easy*, or *very easy*. Comparing baseline chi-square test results to their comparable follow-up chi-square test results using seven sexual behavior and attitude questions provided rich insight.

Six questions were not found statistically significant at baseline, follow-up, or both. These six questions were as follows: “Have you ever had sex?,” “Have you had sex during the last 6 months?,” “How likely is it that you will have sex in the next 12 months?,” “I intend to wait until I am older before I have sex with someone,” “No sex is the only sure way to not get pregnant. It is also the only sure way to avoid health problems like diseases people can get when having sex,” and “How important is it for

you to not have sex until marriage?” The one question found to be statistically significant for the treatment and control groups at follow-up is explained next.

For the question “Do you think you will abstain from sex from now until you complete high school?” there was a pattern between treatment and control groups; neither was statistically significant at baseline, but both were statistically significant at follow-up. At baseline, for the control group $\chi^2(3, N = 434) = 5.415, p = .144$. At baseline, for the treatment group $\chi^2(3, N = 576) = 5.361, p = .147$ (see Table 27). Among those teens in the treatment group who reported finding it *very easy* to discuss sensitive topics with their parents, 73% reported they would remain abstinent until high school graduation (see Table A6). As the comfort level communicating with parents decreased, so did the percentage planning abstinence. For example, for those who indicated they *never talk* to their parents about such issues, 60% also indicated *yes*, they think they will abstain from sex until they complete high school (see Table A6).

The chi-square tests at follow-up were statistically significant for both the treatment group, $\chi^2(3, N = 392) = 11.630, p = .009$ and the control group at follow-up, $\chi^2(3, N = 268) = 11.636, p = .009$ (see Table 27). From prior to the program to after the program, the number of teens intending to remain abstinent was found to decrease among all communication groups; however, there was less of a decrease among those with a greater ease of communication. In the treatment group, for those who reported it *very easy* to communicate with their parents, the percentage stating they would remain abstinent decreased from 73% at baseline to 71% at follow-up, a minor shift in intentions (see Tables A6 and A7). Teens that reported they *never talk* to their parents about sensitive issues saw a more dramatic decrease in planned abstinence. At baseline, among

non-communicators, 60% planned abstinence, and after the program, just 52% planned abstinence (see Table A6 and A7). Whereas, both groups of communicators in the treatment group saw fewer planning abstinence, parental communication stemmed the tide of a downturn in future abstinence.

Parental communication is a mediating factor regarding future abstinence for participating teens.

The chi-square analyses provide insight into the relationship between parental communication and teens' sexual behaviors and attitudes. There seems to be a positive correlation between the frequency and ease of parental communication and teens' sexual behaviors and attitudes. Teens with frequent communication about peer pressure or a higher level of ease of communication about sensitive issues with their parents tend to have healthier sexual behaviors and attitudes. This will be summarized at the end of this chapter.

Table 27

Baseline Chi-Square Test for Ease of Communication and Abstain Through High School

TreatmentControl		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	5.415	3	.144
	Likelihood Ratio	5.380	3	.146
	Linear-by-Linear	1.449	1	.229
	Association			
	N of Valid Cases	434		
1.00	Pearson Chi-Square	5.361	3	.147
	Likelihood Ratio	5.269	3	.153
	Linear-by-Linear	5.047	1	.025
	Association			
	N of Valid Cases	576		
Total	Pearson Chi-Square	8.255	3	.041
	Likelihood Ratio	8.067	3	.045
	Linear-by-Linear	5.737	1	.017
	Association			
	N of Valid Cases	1010		

Table 27 continued
*Follow-Up Chi-Square Test for Ease of Communication and
 Abstain Through High School*

Program		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	11.636	3	.009
	Likelihood Ratio	11.666	3	.009
	Linear-by-Linear	7.271	1	.007
	Association			
	N of Valid Cases	268		
1.00	Pearson Chi-Square	11.630	3	.009
	Likelihood Ratio	11.241	3	.010
	Linear-by-Linear	7.757	1	.005
	Association			
	N of Valid Cases	392		
Total	Pearson Chi-Square	18.355	3	.000
	Likelihood Ratio	18.150	3	.000
	Linear-by-Linear	14.516	1	.000
	Association			
	N of Valid Cases	660		

Faith and Religious Practices Descriptive Statistics

Comparing Baseline to Follow-Up

The research question “What is the relationship between teens’ faith and religious practices and teens’ sexual behaviors and attitudes?” was analyzed using data from six faith and religious practices questions and the same seven sexual behaviors and attitudes questions discussed in the previous section.

Six questions assessed teens’ faith and religious practices. “Are you currently involved in a religious youth group? Youth group is defined as an organized group of teens that meet regularly for social time together to learn more about their religious faith?” In the baseline survey, 64% of respondents did not participate, and in the follow-up survey 75% did not participate in a youth group (see Table 28). However, those who stated they did have such a religious practice remained stable at 26% and 25%,

respectively. The difference was in non-respondents. Ten percent of teens did not answer the question in the baseline survey, yet answered in the negative at follow-up.

Another question assessing religious practice was “In the past year, how often have you attended religious services, NOT weddings, baptisms, funerals or similar religious ceremonies?” Those answering *never* or *few* was 60% of teens at baseline and 73% of teens at follow-up. Reported active religious participation of either *2-3 times a month*, *once a week*, or *more than once a week* decreased from 26% to 21%, while those who reported attending religious services *about once a month* increased from 4% to 6%. Thus, two questions about religious practices showed the majority of teens did not practice their religion regularly and participation decreased over time.

An interesting related question asked teens how decisions were made in their family and whether they took part in religious training or education. At baseline, 32% of teens reported their parents’ decided, and at follow-up 20.5% of respondents reported their parents’ decided. At baseline 23% of teens reported they decided themselves their religious education, whereas at follow-up 34% of teens reported they made the decision themselves. When asked “How often do you pray by yourself alone,” 15.5% of teens responded *never* in the baseline survey and 23% gave this response in the follow-up survey. Those that indicated they pray *a few times* rose from 28% to 36.5%; teens who reported praying more frequently, either *2-3 times a month*, *once a week*, or *more than once a week* decreased from 45% to 36% from baseline to follow-up. Teens who reported praying monthly remained rather steady from 5% to 4%. Though most teen respondents reported they pray alone, fewer reported this as time progressed, and the frequency of praying alone decreased as well.

Table 28

Baseline Youth Group Participation of Respondent Population

		Frequency	Valid Percent
Valid	No	714	64.1
	Yes	286	25.7
	No Answer	113	10.1
	Error	1	.1
	Total	1114	100.0
Missing	System	114	
Total		1228	

Follow-Up Youth Group Participation of Respondent Population

		Frequency	Valid Percent
Valid	No	462	75.1
	Yes	153	24.9
	Total	615	100.0
Missing	System	613	
Total		1228	

The role faith and religion play in decision-making in their own lives is important for most teens, yet decreasingly so. When asked “How important or unimportant is religious faith in helping you make major life decisions?” the majority, 69%, indicated it was *somewhat important, very important, or extremely important* in the baseline survey, yet 66% selected a form of importance in the follow-up survey. Teens who indicated their faith was *not important at all* increased from 12% to 15% from baseline to follow-up; similarly, those that indicated their faith was *not very important* increased from 13% to slightly more than 19%. Though most teens considered their faith when important decisions were to be made in their lives, the role of faith diminished a bit as time passed.

Faith and Religious Practices One-Way ANOVAs

The second research question, “What is the relationship between teens’ faith and religious practices and teens’ sexual behaviors and attitudes?” used five questions to

evaluate teens' faith and religious practices. ANOVAs were run for both program (treatment, control) and gender (female, male) at baseline. Not a single program question and only one gender question was statistically significant at the .05 level. The single gender question found statistically significant is "How often do you pray by yourself alone"; for the one-way ANOVA ($F = 14.285$), ($df = 1036$), ($p < .000$) (see Table 29).

Table 29

ANOVA: Baseline, Dependent Variable: Prayer Frequency, Factor: Gender

		Sum of Squares	df	Mean Square	F	Sig.
Pray Alone	Between Groups	55.802	1	55.802	14.285	.000
	Within Groups	4047.061	1036	3.906		
	Total	4102.863	1037			

Faith and Religious Practices Univariate ANOVAs

Thirty-five univariate ANOVAs were run for five questions assessing teens' faith and religious practices and seven questions assessing their sexual behaviors and attitudes. In each of the 35 tests of between-subjects effects for the program and faith and religious practices questions, not a single p-value was statistically significant at the .05 level. The same was true when assessing the tests of between-subject effects for only the program. However, of the 35 univariate ANOVA tests of between-subjects effects, 25 of them were statistically significant for the faith or religious practices question. Those 25 univariate ANOVA tests will be explained in the following sections. First, the two faith questions will be explained with their seven sexual behavior and attitude questions, then the three religious practices questions will be explained with their seven sexual behavior and attitude questions.

Prayer Frequency

“How often do you pray by yourself alone?” was a question assessing teens’ faith. Teens were instructed to select *never*, *a few times*, *about once a month*, *2-3 times a month*, *once a week*, or *more than once a week*. When input into the univariate ANOVA with the response to the question, “Have you ever had sex?,” the results support the hypothesis. *No* responses were coded 0 and *yes* responses were coded 1. In the tests of between-subjects effects, for the question about prayer frequency at follow-up, ($F = 3.669$), ($df = 5$), ($p = .003$) (see Table 30); in the descriptive statistics, at follow-up for teens in the treatment group who prayed more than once a week, ($N = 101$), ($M = .0891$) and for teens in the treatment group who prayed once a week, ($N = 24$), ($M = .000$). However, for teens in the treatment group who never prayed, ($N = 90$), ($M = .2444$) (see Table A8). This indicates that, for students in the treatment group, those who prayed frequently were less likely to have sex than those who did not pray at all.

Also, notable is that for every prayer frequency category, with one exception, at follow-up, teens in the abstinence program were found to report less likelihood to have sex as compared to the same prayer frequency level in the control group. Teens who reported they prayed once or more times per week and participated in the abstinence program were the most likely to remain abstinent; this combination of factors corresponds with a high rate of teen sexual abstinence.

The question, “Have you had sex during the last 6 months?” addressed teens more recent sexual behaviors. In the univariate ANOVA with the question about prayer frequency, patterns emerged. Teens who reported praying one or more times per week, and participated in the abstinence program more strongly agreed that they did not have

Table 30

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Prayer Frequency and Ever Had Sex

Dependent Variable: Sex Ever						
Source	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.	
Corrected Model	2.793	11	.254	1.965	.029	
Intercept	7.476	1	7.476	57.849	.000	
VAR00001	.118	1	.118	.915	.339	
Ques38bf	2.371	5	.474	3.669	.003	
VAR00001 *Ques38bf	.192	5	.038	.298	.914	
Error	87.614	678	.129			
Total	107.000	690				
Corrected Total	90.407	689				

sex within the 6 months prior to the survey than teens with the same prayer frequency in the treatment group. In the tests of between-subjects effects, for the prayer frequency question, ($F = 2.921$), ($df = 5$), ($p = .013$) (see Table 31). In the descriptive statistics, for teens in the treatment group who reported they prayed more than once per week, ($N = 101$), ($M = .0396$), whereas for teens in the control group with the same prayer frequency, ($N = 55$), ($M = .0545$) (see Table A9). A similar pattern was found at the prayer frequency level of once per week. Also, among all categories, the lowest incidence of reported previous sexual activity was among teens in the treatment group who reported the highest prayer frequency. This suggests that the combination of participation in an abstinence program and weekly prayer corresponds with a high rate of sexual abstinence.

Table 31

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Prayer Frequency and Sex in Last 6 Months

Dependent Variable: Sex Last 6 Months						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Corrected Model	1.866	11	.170	1.870	.040	
Intercept	4.366	1	4.366	48.127	.000	
VAR00001	.111	1	.111	1.226	.269	
Ques38bf	1.325	5	.265	2.921	.013	
VAR00001	.335	5	.067	.738	.595	
*Ques38bf						
Error	61.870	682	.091			
Total	71.000	694				
Corrected Total	63.736	693				

To assess future sexual behaviors, teens were asked “How likely is it that you will have sex in the next 12 months?” In the univariate ANOVA with the question about prayer frequency, a pattern emerged. At follow-up, teens who reported they prayed once or more per week tended to indicate *not very likely* or *not at all likely* to having sex within the year, regardless of program. In the tests of between-subjects effects for the faith question, ($F = 6.198$), ($df = 5$), ($p < .05$) (see Table 32); in the descriptive statistics, for teens who reported praying more than once per week and who participated in the abstinence program, ($N = 101$), ($M = 4.3465$), whereas for teens with the same prayer frequency in the control group, ($N = 55$), ($M = 4.3636$) (see Table A10). Regardless of program, as the reported prayer frequency decreased, the likelihood of the teen having sex in the next 12 months increases. This indicates prayer frequency had an effect upon predicted future sexual behaviors, while participation in an abstinence program did not.

Table 32

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Prayer Frequency and Sex in 12 Months

Dependent Variable: Sex in 12 Months						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Corrected Model	59.292	11	5.390	3.171	.000	
Intercept	5825.315	1	5825.315	3426.671	.000	
VAR00001	.009	1	.009	.005	.941	
Ques38bf	52.679	5	10.536	6.198	.000	
VAR00001	4.491	5	.898	.528	.755	
*Ques38bf						
Error	1167.895	687	1.700			
Total	11952.000	699				
Corrected Total	1227.187	698				

The question, “Do you think you will abstain from sex from now until you complete high school?” assessed teens’ sexual attitudes regarding their own planned abstinence. When input into the univariate ANOVA with the question “How often do you pray by yourself alone?” a notable pattern emerged. For teens in the treatment group, as prayer frequency increased so did the likelihood that teens would abstain through high school graduation. With the answers for future abstinence coded as 0 for *no* and 1 for *yes*, for *never* pray alone ($M = .5465$) to *more than once a week* pray alone ($M = .7895$) (see Table A11). The average mean for the treatment group was also higher than the average mean for the control group. In tests of between-subjects effects for the prayer frequency question, ($F = 4.837$), ($df = 5$), ($p < .05$) (see Table 33). For most of the prayer frequency categories, the treatment group had a higher mean than the control group. One notable difference was with the prayer frequency level of *once a month* in the control group ($M = .9167$). However, ($N = 12$) was the smallest sample size for this group (see Table A11);

this may been the cause of the break in the pattern and the high percentage of planned abstinence in the group with less frequent prayer.

The next sexual attitude question input into the univariate ANOVA with the prayer frequency question was “I intend to wait until I am older before I have sex with someone.” The descriptive statistics indicated teens in the abstinence program tended to have stronger intentions to remain abstinent than those in the control group, regardless of prayer frequency. Prayer frequency also played a role since the more frequently a teen prays, the more likely the teen was to strongly agree they plan to remain abstinent. In the tests of between-subjects effects for the prayer frequency question, ($F = 10.198$), ($df = 5$), ($p < .05$) (see Table 34). In the descriptive statistics, for teens in the program who prayed once a week, ($N = 24$), ($M = 1.4583$). For teens in the control group with the same prayer frequency ($N = 21$), ($M = 1.7143$) (see Table A12). This indicated that, despite the

Table 33

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Prayer Frequency and Abstain through High School

Dependent Variable: Abstain Through High School						
Source	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.	
Corrected Model	8.089	11	.735	3.269	.000	
Intercept	159.400	1	159.400	708.517	.000	
VAR00001	.040	1	.040	.177	.674	
Ques38bf	5.441	5	1.088	4.837	.000	
VAR00001 *Ques38bf	2.092	5	.418	1.859	.099	
Error	146.909	653	.225			
Total	419.000	665				
Corrected Total	154.998	664				

same frequency of personal prayer, those in the abstinence program were more likely to plan abstinence until they are older than those in the control group.

A related question assessing teens' sexual attitudes about abstinence was "How important is it for you to not have sex until marriage?" The data revealed for every prayer frequency group, teens in the treatment group viewed abstinence until marriage of greater importance than teens in the corresponding control group. Also, as frequency of prayer increased, so did the importance of abstinence until marriage. In the tests of between-subjects effects for the prayer frequency question, ($F = 11.437$), ($df = 5$), ($p < .05$) (see Table 35). According to the descriptive statistics, for teens who pray more than once a week in the abstinence program ($N = 102$), ($M = 1.8627$) and for teens with the same prayer frequency in the control group ($N = 55$), ($M = 1.8727$). The mean difference was greater among teens who never prayed. Teens in the abstinence group who never prayed

Table 34

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Prayer Frequency and Wait Until Older

Dependent Variable: Wait Until Older						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Corrected Model	77.055	11	7.005	5.251	.000	
Intercept	1572.089	1	1572.089	1178.523	.000	
VAR00001	1.304	1	1.304	.977	.323	
Ques38bf	68.019	5	13.604	10.198	.000	
VAR00001	3.851	5	.770	.577	.717	
*Ques38bf						
Error	909.753	682	1.334			
Total	3921.000	694				
Corrected Total	986.808	693				

had ($N = 92$), ($M = 2.8261$) and teens in the control group who never pray had ($N = 69$), ($M = 3.1159$) (see Table A13). This reveals the differences in the importance teens place upon abstinence until marriage correlates to prayer frequency and participation in an abstinence program. Those differences are even greater among teens who never prayed. The combination of weekly prayer and participation in an abstinence program corresponded with valuing abstinence until marriage as very important.

The final assessment of the frequency of prayer and teens' sexual attitudes used the following statement, "No sex is the only sure way to not get pregnant. It is also the only sure way to avoid health problems like diseases people can get when having sex." Teens were asked how much they agreed with the statement; they were to select *agree a lot*, *agree a little*, *disagree a little*, or *disagree a lot*. The univariate ANOVA using the previous questions in the tests of between-subjects effects for the prayer

Table 35

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Prayer Frequency and No Sex Until Marriage

Dependent Variable: No Sex Until Marriage					
Source	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Corrected Model	111.780	11	10.162	5.772	.000
Intercept	2311.346	1	2311.346	1312.798	.000
VAR00001	5.749	1	5.749	3.265	.071
Ques38bf	100.678	5	20.136	11.437	.000
VAR00001	4.044	5	.809	.459	.807
*Ques38bf					
Error	1209.550	687	1.761		
Total	5534.000	699			
Corrected Total	1321.330	698			

question yielded, ($F = 3.243$), ($df = 5$), ($p = .007$) (see Table 36). The descriptive statistics for teens in the program who reported they prayed more than once a week ($N = 99$), ($M = 1.7475$); whereas for teens in the control group who prayed more than once a week ($N = 54$), ($M = 1.9444$) (see Table A14). This indicated that teens who prayed more than once per week were more likely to agree a lot that abstinence is the only certain way to avoid pregnancy and STDs. This level of agreement was also stronger for teens who prayed once per week in the program than those in the control group. The combination of frequent, personal prayer and participation in an abstinence program made a difference upon teens' beliefs of the value of abstinence.

Table 36

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Prayer Frequency and Abstinence Is Effective Against STDs and Pregnancy

Dependent Variable: Abstinence Is Only Effective Way						
Source	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.	
Corrected Model	27.651	11	2.514	2.139	.016	
Intercept	1566.017	1	1566.017	1332.734	.000	
VAR00001	.346	1	.346	.294	.588	
Ques38bf	19.052	5	3.810	3.243	.007	
VAR00001 *Ques38bf	3.223	5	.645	.549	.740	
Error	787.277	670	1.175			
Total	3571.000	682				
Corrected Total	814.928	681				

Importance of Faith in Major Life Decisions

The second of five faith and religious practices questions is, "How important or unimportant is religious faith in helping you make major life decisions?" Teens were

instructed to select *not important at all*, *not very important*, *somewhat important*, *very important*, or *extremely important*. Of the seven sexual behavior and attitude questions, only one was not statistically significant for the faith and religious question, thus, it will not be included in the analysis; that question was “Have you had sex during the last 6 months?” The univariate ANOVA results from the faith question and the other six sexual behavior and attitude questions are explained in the following pages.

The first question, “Have you ever had sex?” and the importance of faith in making major decisions offered interesting results from the univariate ANOVA. Teens who indicated they believed faith was *not important at all* in making decisions were more likely to have had sex than students who valued faith. However, teens who reportedly did not value faith in decision making, and participated in an abstinence program were less likely than their control group counterparts to have sex. In the tests of between-subjects effects, for the faith question, ($F = 2.753$), ($df = 4$), ($p = .027$) (see Table 37). The question “Have you ever had sex?” was coded with 0 for *no* and 1 for *yes*. In the descriptive statistics, for teens in the treatment group who responded faith was *not important at all* in making decisions ($N = 59$), ($M = .2203$), whereas for teens in the control group with the same level of faith ($N = 42$), ($M = .2381$) (see Table A15). Both means are higher than those from teens who value faith as more important. This indicates there is a correspondence between how important a teen values faith in making decisions, participation in an abstinence program, and their likelihood of abstinence. The combination of greater faith and an abstinence program does correlate with a greater likelihood of sexual abstinence.

Table 37

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Faith Importance and Ever Had Sex

Dependent Variable: Sex Ever					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.680	9	.187	1.458	.160
Intercept	14.755	1	14.755	115.280	.000
VAR00001	.065	1	.065	.504	.478
Ques40b	1.409	4	.352	2.753	.027
VAR00001 *	.302	4	.075	.589	.670
Ques40b					
Error	84.861	663	.128		
Total	102.000	673			
Corrected Total	86.541	672			

To assess the planning of abstinence in the near future, teens were asked, "How likely is it that you will have sex in the next 12 months?" In both treatment and control groups, the more important they valued faith, the less likely the teen was to expect to have sex within the year. For most levels of faith, those in the abstinence program were less likely to expect to have sex than those in the corresponding control group. In the tests of between-subjects effects, for the faith question, ($F = 6.330$), ($df = 4$), ($p < .05$) (see Table 38). The sexual behavior question was coded from 1 to 5 with the higher numbers corresponding to a decreased likelihood of future sexual activity. The mean for the treatment group ($M = 3.9824$) whereas for the control group ($M = 3.8838$) (see Table A16). Also, for four of the five levels of faith, the treatment group had a higher mean than the corresponding treatment group. This indicates, teens valuing faith in making major life decisions and participating in an abstinence program are more likely to expect

to remain abstinent the following year, than teens with less faith and not in an abstinence program.

Regarding future abstinence for the next several years, teens were asked, "Do you think you will abstain from sex from now until you complete high school?" In both the treatment and control groups, the more important faith was to teens, the less likely they were to predict they would have sex before high school graduation. In the tests of between-subjects effects for the faith question, ($F = 7.371$), ($df = 4$), ($p < .05$) (see Table 39). The mean for teens in the treatment group who viewed faith as *extremely important* ($N = 70$), ($M = .8143$), the highest of any group. For teens in the control group and the same high level of faith, ($N = 38$), ($M = .6579$) (see Table A17). For four of the five levels of faith, those in the abstinence program were found to be less likely to predict they would have sex than those in the control group placing the same importance upon faith. However, the more faithful a teen was, the more strongly they felt they would

Table 38

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Faith Importance and Sex in 12 Months

Dependent Variable: Sex in 12 Months						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Corrected Model	48.106	9	5.345	3.186	.001	
Intercept	9424.307	1	9424.307	5618.355	.000	
VAR00001	.978	1	.978	.583	.445	
Ques40b	42.473	4	10.618	6.330	.000	
VAR00001 *	6.982	4	1.746	1.041	.385	
Ques40b						
Error	1125.545	671	1.677			
Total	11752.000	681				
Corrected Total	1173.651	680				

remain abstinent through the end of high school. Thus, the combination of valuing faith in decision making and participation in an abstinence program were strong indicators of a teens' planned future abstinence.

Another question about teens' intention for abstinence in the future is "I intend to wait until I am older before I have sex with someone." When input into the univariate ANOVA with the faith question which asked how important religious faith was in helping make major life decisions, a pattern similar to that of the previous question emerged. The greater the role of faith in life decisions, the more strongly the teen agreed to stay abstinent until they are older. Also, this planned abstinence was stronger in the treatment group than the control group at every level of faith with just one exception, at the ambivalent level of *somewhat important*. In the tests of between-subjects effects for the faith question, ($F = 14.689$), ($df = 4$), ($p < .05$) (see Table 40). The descriptive

Table 39

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Faith Importance and Abstain through High School

Dependent Variable: Abstain Through High School					
Source	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Corrected Model	8.527	9	.947	4.302	.000
Intercept	228.963	1	228.963	1039.681	.000
VAR00001	.717	1	.717	3.255	.072
Ques40b	6.493	4	1.623	7.371	.000
VAR00001 * Ques40b	1.340	4	.335	1.521	.194
Error	140.283	637	.220		
Total	415.000	647			
Corrected Total	148.810	646			

statistics showed for teens in the treatment group who valued faith as *extremely important* ($N = 73$), ($M = 1.5616$), whereas for teens in the control group with the same high level of faith ($N = 41$), ($M = 1.6829$) (see Table A18). This indicated teens who viewed faith as very important in making major life decisions and participated in an abstinence program tended to select *strongly agree* to their statement they plan to remain abstinent until older.

When asked about intentions to remain abstinent until marriage, similar patterns emerged. Though teens were found to be less likely to plan abstinence until marriage than a more immediate time, program and faith were important factors in determining how teens responded to the question, "How important is it for you to not have sex until marriage?" In the tests of between-subjects effects for the faith question, ($F = 15.526$), ($df = 4$), ($p < .05$) (see Table 41). For teens in the abstinence program who viewed faith as *extremely important* ($N = 75$), ($M = 1.6800$) and for teens in the control group with the

Table 40

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Faith Importance and Wait Until Older

Dependent Variable: Wait Until Older					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	85.183	9	9.465	7.247	.000
Intercept	2613.113	1	2613.113	2000.835	.000
VAR00001	4.090	1	4.090	3.132	.077
Ques40b	76.735	4	19.184	14.689	.000
VAR00001 *	6.639	4	1.660	1.271	.280
Ques40b					
Error	871.109	667	1.306		
Total	3802.000	677			
Corrected Total	956.292	676			

same level of faith ($N = 40$), ($M = 2.100$). For teens in the abstinence program who viewed faith as *not important at all* ($N = 60$), ($M = 3.000$) and for teens in the control group with the same level of faith ($N = 42$), ($M = 3.2143$) (see Table A19). At both ends of the faith continuum, among extremely faithful teens and non-faithful teens, those in the abstinence program placed a higher level of importance on remaining abstinent until their wedding day.

For the final univariate ANOVA using the faith question about importance of faith in making major life decisions, the following sexual attitude question was used:

“No sex is the only sure way to not get pregnant. It is also the only sure way to avoid health problems like diseases people can get when having sex.” For teens who indicated they viewed their faith as *somewhat*, *very*, or *extremely* important, those in the abstinence program were more likely to agree with the value of abstinence than teens

Table 41

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Faith Importance and Abstain Until Marriage

Dependent Variable: No Sex Until Marriage					
Source	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Corrected Model	129.047	9	14.339	8.223	.000
Intercept	3633.938	1	3633.938	2084.119	.000
VAR00001	5.034	1	5.034	2.887	.090
Ques40b	108.283	4	27.071	15.526	.000
VAR00001 *	6.051	4	1.513	.868	.483
Ques40b					
Error	1168.234	670	1.744		
Total	5335.000	680			
Corrected Total	1297.281	679			

with the same level of faith in the control group. In the tests of between-subjects effects for the faith question, ($F = 3.747$), ($df = 4$), ($p = .005$) (see Table 42). For teens in the program with the highest level of faith is ($N = 74$), ($M = 1.7838$), whereas for teens in the control group with the highest level of faith ($N = 41$), ($M = 1.9512$) (see Table A20). A similar pattern arose from those who reported they viewed faith as very or somewhat important; those in the treatment group had a lower mean, thus agreed more strongly that abstinence is the only definitive method to avoid pregnancy and STDs. Also notable is the finding that the more faithful the teen, regardless of program, the more strongly they viewed the value of abstinence. However, the lowest mean, or strongest support of abstinence, was among the most faithful teens who participated in the abstinence program.

Table 42

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Faith Importance and Abstinence Is Effective Against STDs and Pregnancy

Dependent Variable: Abstinence Against STDs and Pregnancy						
Source	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.	
Corrected Model	32.442	9	3.605	3.098	.001	
Intercept	2465.958	1	2465.958	2119.252	.000	
VAR00001	1.013	1	1.013	.871	.351	
Ques40b	17.440	4	4.360	3.747	.005	
VAR00001 * Ques40b	7.141	4	1.785	1.534	.191	
Error	764.484	657	1.164			
Total	3493.000	667				
Corrected Total	796.927	666				

Teens' personal faith was the focus of the first two questions and teens' religious practices were the focus of the next three questions. The first of the three questions is "In the past year, how often have you attended religious services, NOT counting weddings, baptisms, funerals or similar religious ceremonies?" Teens were instructed to select either *never*, *a few times*, *about once a month*, *2-3 times a month*, *once a week*, or *more than once a week*. As was the case with all five faith and religious practices questions, this question was not statistically significant for the combination of program/religious question and program question. Of the seven sexual behavior and attitude questions, only four were statistically significant for the religious question. The three sexual behavior and attitude questions not statistically significant were as follows: "Have you ever had sex?," "Have you had sex during the last 6 months?," and "No sex is the only sure way to not get pregnant. It is also the only sure way to avoid health problems like diseases people can get when having sex." Those three questions will not be included, since they were not statistically significant for the faith and religious question.

Attendance at Religious Services

When the questions, "How likely is it that you will have sex in the next 12 months?" and "In the past year, how often have you attended religious services?" were input into the univariate ANOVA test, an irregular pattern emerged. Just as with previous univariate ANOVAs, the teens who reported being the most observant were also the most likely to plan future abstinence, however, the pattern ended there. At some levels of religious observance, the treatment group was more likely to abstain, and at other levels the control group was more likely to abstain. The total mean for the treatment group was higher than that of the control group, indicating greater potential for abstinence among

the treatment participants. However the pattern was irregular for both programs. In the tests of between-subjects effects for the religious practices question, ($F = 3.913$), ($df = 5$), ($p = .002$) (see Table 43). The descriptive statistics at the highest level of observance, *more than once per week*, for teens in the abstinence program ($N = 38$), ($M = 4.4211$), but for teens in the control group ($N = 24$), ($M = 4.6250$) (see Table A21). This indicates the very observant teens in the control group were less likely to have sex in the next 12 months than the very observant teens in the treatment group. However, at the next level of religious practices, *once per week*, the opposite was true. For teens in the abstinence program ($N = 27$), ($M = 4.2593$), but for teens in the control group ($N = 19$), ($M = 4.1053$). This indicates, that, at this level of religiosity, teens in the treatment group were less likely than their counterparts in the control group to have sex within the year.

Though comparisons between treatment and control are unpredictable and erratic, more observant teens tended to expect future abstinence more than their less observant teens.

Table 43

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Religious Services Attendance and Sex in 12 Months

Dependent Variable: Sex in 12 Months						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Corrected Model	46.106	11	4.191	2.415	.006	
Intercept	5529.161	1	5529.161	3185.398	.000	
VAR00001	.834	1	.834	.480	.488	
Ques38af	33.960	5	6.792	3.913	.002	
VAR00001 * Ques38af	13.564	5	2.713	1.563	.168	
Error	1185.540	683	1.736			
Total	11869.000	695				
Corrected Total	1231.646	694				

When asked about plans for abstinence in a more distant timeframe, teens in the abstinence program with the highest frequency of attendance at religious services were quite likely to respond *yes* to the question: “Do you think you will abstain from sex from now until you complete high school?” In the tests of between-subjects effects for the religious practices question, ($F = 4.036$), ($df = 5$), ($p = .001$) (see Table 44). The mean response for teens in the treatment group who attend religious services more than once per week was ($N = 37$), ($M = .8919$), whereas for teens in the control group with the same level of attendance ($N = 22$) ($M = .7273$). This indicated though members of both groups were quite likely to abstain through high school graduation, those participating in an abstinence program were more likely to anticipate remaining abstinent. For those teens in the treatment group who indicated they never attend religious services ($N = 170$), ($M = .6000$), whereas for teens in the control group who never attend services ($N = 123$), ($M = .5366$) (see Table A22). This indicated both groups were less likely to abstain than more observant teens, but those participating in the abstinence program were more likely to anticipate remaining abstinent than teens in the control group. Participating in religious services and an abstinence program had an impact upon teens’ plans for future sexual abstinence in a positive manner.

“I intend to wait until I am older before I have sex with someone” is the next sexual attitude question and teens were asked to select how much they agreed with the statement. Just as previous univariate ANOVAs indicate, religious practices and participation in an abstinence program correlated with sexual abstinence. In the tests of between-subjects effects for the religious practices question, ($F = 3.813$), ($df = 5$),

Table 44

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Religious Services Attendance and Abstinence through High School

Dependent Variable: Abstain Through High School						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Corrected Model	5.763	11	.524	2.305	.009	
Intercept	163.149	1	163.149	717.642	.000	
VAR00001	.050	1	.050	.222	.638	
Ques38af	4.587	5	.917	4.036	.001	
VAR00001 * Ques38af	.454	5	.091	.399	.849	
Error	147.771	650	.227			
Total	420.000	662				
Corrected Total	153.535	661				

($p = .002$) (see Table 45). If teens selected *strongly agree* to remaining abstinent, it was coded 1 and those who selected *strongly disagree* was coded 5 with less strongly held opinions in between. In the descriptive statistics, for teens in the treatment group who attend church once per week ($N = 27$), ($M = 1.6296$) and for teens in the control group who attend church once per week ($N = 19$), ($M = 1.7895$). Whereas, for teens who indicated they never attend church services, but participated in the treatment group, ($N = 176$), ($M = 2.0795$) and for those who never attend church services, and were in the control group, ($N = 128$), ($M = 2.3359$) (see Table A23). This indicated the more frequently teens attended religious services, the stronger their intention to remain abstinent until they are older. Though both treatment and control groups have similar, positive patterns, participation in an abstinence program correlated with a stronger intention to remain sexual abstinent.

Table 45

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Religious Services Attendance and Wait Until Older

Dependent Variable: Wait Until Older						
Source	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.	
Corrected Model	34.351	11	3.123	2.212	.012	
Intercept	1319.987	1	1319.987	934.998	.000	
VAR00001	1.543	1	1.543	1.093	.296	
Ques38af	26.912	5	5.382	3.813	.002	
VAR00001 * Ques38af	1.284	5	.257	.182	.969	
Error	957.169	678	1.412			
Total	3951.000	690				
Corrected Total	991.520	689				

The final sexual attitude question input into a univariate ANOVA with the question about frequency of religious service attendance was “How important is it for you to not have sex until marriage?” The results suggest the more frequently teens attended religious services, the more important abstinence until marriage was to teens. This was true among teens in the treatment group and control group. In the tests of between-subjects effects for the religious practices question, ($F = 9.383$), ($df = 5$), ($p < .05$) (see Table 46). Descriptive statistics indicate teens in the abstinence program were increasingly likely to view abstinence as very important as their attendance in religious services increased. For example, for teens in the abstinence program who reported attending weekly services ($N = 28$), ($M = 1.7143$) and for teens in the control group who attended weekly ($N = 19$), ($M = 2.2105$). Whereas for teens in the abstinence program who attend services *a few times* in the past year, ($N = 118$), ($M = 2.4492$) and for

teens in the control group who attend *a few times* ($N = 82$), ($M = 2.6098$) (see Table A24). This indicates there was a positive correlation among participation in an abstinence program, attendance at religious services, and intention to remain abstinent until marriage.

Youth Group Participation

For the next religious practice question, “Are you currently involved in any religious youth group? By youth group we mean an organized group of young people that meets regularly for social time together and to learn more about their religious faith?,” merely two sexual behavior and attitude questions were found to be statistically significant for the religious question. Five questions were not statistically significant and will not be included in this analysis. Those five questions were: “Have you ever had sex?,” “Have you had sex during the last 6 months?,” “How likely is it that you will have

Table 46

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Religious Services Attendance and No Sex Until Marriage

Dependent Variable: No Sex Until Marriage						
Source	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.	
Corrected Model	99.394	11	9.036	5.091	.000	
Intercept	1792.994	1	1792.994	1010.149	.000	
VAR00001	6.325	1	6.325	3.563	.059	
Ques38af	83.274	5	16.655	9.383	.000	
VAR00001 * Ques38af	7.337	5	1.467	.827	.531	
Error	1210.536	682	1.775			
Total	5484.000	694				
Corrected Total	1309.931	693				

sex in the next 12 months?,” “Do you think you will abstain from sex from now until you complete high school?,” and “No sex is the only sure way to not get pregnant. It is also the only sure way to avoid health problems like diseases people can get when having sex.” The analysis of those questions found to be statistically significant will be detailed in the following pages.

Teens were asked how much they agreed with the statement, “I intend to wait until I am older before I have sex with someone.” If they indicated *strongly agree* it was coded 1 and if indicated they *strongly disagree* it was coded 5, with less affirmative beliefs in between. When input into the univariate ANOVA with the question asking if the teen participates in a youth group, the results showed participation in a youth group made a difference. In the tests of between-subjects effects for the religious practices question, ($F = 8.132$), ($df = 1$), and ($p = .004$) (see Table 47).

For teens in the treatment group and in a youth group ($N = 91$), ($M = 1.8462$), whereas for teens in the treatment group, but not a youth group ($N = 260$), ($M = 2.0154$). For comparison, for teens in the control group and in a youth group ($N = 59$), ($M = 1.7458$), whereas for teens in the control group, but not a youth group ($N = 199$), ($M = 2.2161$) (see Table A25). This indicated participation in a youth group correlated with stronger intentions to remain abstinent than non-participation. Also, participation in an abstinence program correlated with stronger intention to remain abstinent than non-participation. However, in this data analysis, the group with the strongest intention to remain abstinent was the control group and youth group. Perhaps participation in a youth group is the most important factor among these study participants.

Table 47

*Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Youth Group**Participation and Wait Until Older*

Dependent Variable: Wait Until Older						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Corrected Model	14.788	3	4.929	3.608	.013	
Intercept	1662.761	1	1662.761	1216.881	.000	
VAR00001	.273	1	.273	.200	.655	
Ques39ff	11.112	1	11.112	8.132	.004	
VAR00001 * Ques39ff	2.463	1	2.463	1.802	.180	
Error	826.680	605	1.366			
Total	3350.000	609				
Corrected Total	841.468	608				

For the question “How important is it for you to not have sex until marriage?” teens in a youth group tended to view abstinence until marriage as more important than teens not in a youth group. Also, both youth group participants and non-participants in the abstinence program valued abstinence more than their control group counterparts. In the tests of between-subjects effects for the religious practices question, ($F = 15.558$), ($df = 1$), ($p < .05$) (see Table 48). The coding for the sexual attitude question was from 1 to 5; teens who responded that abstinence is *very important* was coded as 1 and the response *not important at all* was coded at 5. Thus, higher medians indicate less value placed upon abstinence. For teens in the treatment group and a youth group ($N = 92$), ($M = 2.000$), whereas for teens in the control group and a youth group ($N = 60$), ($M = 2.1167$). Also, for teens in the treatment group, but not a youth group ($N = 262$), ($M = 2.4504$), whereas for teens in the control group, but not a youth group ($N = 198$),

($M = 2.6919$) (see Table A26). This showed a positive correlation among participation in a youth group, abstinence program, and intention to remain abstinent until marriage.

Table 48

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Youth Group Participation and No Sex Until Marriage

Dependent Variable: No Sex Until Marriage						
Source	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.	
Corrected Model	36.591	3	12.197	6.567	.000	
Intercept	2354.950	1	2354.950	1267.935	.000	
VAR00001	3.525	1	3.525	1.898	.169	
Ques39ff	28.896	1	28.896	15.558	.000	
VAR00001 * Ques39ff	.428	1	.428	.231	.631	
Error	1129.245	608	1.857			
Total	4774.000	612				
Corrected Total	1165.837	611				

Religious Training Decision

The next religious practice question is about how decisions are made in the family. When asked, “Whether you take part in religious training or education” teens were instructed to select either *my parent(s) decide*, *my parents decide after discussing it with me*, *we decide together*, *I decide after discussing it with my parents*, or *I decide by myself*. All sexual behavior and attitude questions except one were statistically significant for this final religious question. Thus, data analysis will not be included for teens’ agreement with “No sex is the only sure way to not get pregnant. It is also the only sure way to avoid health problems like diseases people can get when having sex.”

To determine teens’ sexual behaviors, respondents were asked “Have you ever had sex?” Input into the univariate ANOVA with the religious practices question about

how teens' families determine their participation in religious education, this yielded interesting results. For both the treatment and control groups, when it was reported that parents decide religious training themselves, their teen was most likely to be abstinent. When parents were reported to make the decision after discussing it with their teen, the teen was most likely to have had sex. In the tests of between-subjects effects for the religious practices question, ($F = 5.610$), ($df = 4$), ($p < .05$) (see Table 49).

The mean response value to the question for teens in the abstinence program with parents who reported to decide their religious education plans without teen input ($N = 90$), ($M = .0778$) and for teens in the control group with parents who were reported to decide their religious education plan without teen input ($N = 55$), ($M = .0727$); the closer the mean is to zero, the more likely the teen was to be abstinent. Most teens in these two groups reported being abstinent with the control group having slightly higher levels of abstinence. For parents who were reported to decide their teens' participation in religious training or education after discussion with parents and their teens were in the treatment group ($N = 34$), ($M = .2353$) and for teens in the control group with parents who were reported to decide their religious education plan after receiving teen input ($N = 16$), ($M = .3750$) (see Table A27). This indicated parenting styles correlated with teens' sexual activity. These results indicate more decisive, less collaborative parents have teens that are more likely to be abstinent. However, teens in the abstinence program were less likely than those in the control group to engage in sex for every level of parental involvement except for the most decisive parents. It seems participation in an abstinence program did affect teens' sexual behaviors. The next data analysis has similar findings.

Table 49

*Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Religious Training**Decision and Ever Had Sex*

Dependent Variable: Sex Ever						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Corrected Model	3.194	9	.355	2.725	.004	
Intercept	13.913	1	13.913	106.858	.000	
VAR00001	.195	1	.195	1.496	.222	
Ques33hf	2.922	4	.730	5.610	.000	
VAR00001 * Ques33hf	.254	4	.063	.487	.745	
Error	89.446	687	.130			
Total	110.000	697				
Corrected Total	92.640	696				

When teens were asked about their recent sexual behaviors, specifically, “Have you had sex during the last 6 months,” parents’ decision making and participation in an abstinence program seemed to play a role in the answer. In tests of between-subjects effects for the religious practices question, ($F = 5.292$), ($df = 4$), ($p < .05$) (see Table 50).

The response value mean for teens in the abstinence program with parents who were reported to decide their religious education participation without teen input ($N = 89$), ($M = .0337$) and for teens in the control group with parents who were reported to decide their religious education participation without teen input ($N = 56$), ($M = .0536$). Since the closer the mean is to zero the more likely the teen is to be abstinent, teens in the control group were found to be more likely to have been abstinent in the previous 6 months. For teens who reported their parents decided their participation in religious

education after discussion and who participated in an abstinence group ($N = 34$), ($M = .2941$) and for teens in the control group who reported their parents decided their religious education plan after receiving teen input ($N = 17$), ($M = .2353$) (see Table A28). These means are higher than for any other group. Thus, for teens who decided collaboratively with their parents, after discussing with their parents, or alone, each subgroup is less likely to have had sex recently than those with parents who decided after discussion. Just as with the previous data analysis, there seems to be a correlation between parents who were reported to decide whether a teen will participate in a religious education program after discussion and the teens' sexual behaviors. Parents with such decision making behaviors seem to be more likely to have sexually active teens.

Future sexual behavior was assessed when teens were asked, "How likely is it that you will have sex in the next 12 months?" For teens in the abstinence program with parents who were reported to decide their religious education by themselves, the mean

Table 50

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Religious Training Decision and Sex in Last 6 Months

Dependent Variable: Sex Last 6 Months					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.700	9	.300	3.186	.001
Intercept	7.525	1	7.525	79.926	.000
VAR00001	.004	1	.004	.040	.842
Ques33hf	1.993	4	.498	5.292	.000
VAR00001 * Ques33hf	.267	4	.067	.709	.586
Error	65.060	691	.094		
Total	76.000	701			
Corrected Total	67.760	700			

response was between *not very* and *not at all likely* to have sex within the year. This is a rather strong indication of planned future abstinence. In the tests of between-subjects effects for the religious practices question, ($F = 3.501$), ($df = 4$), ($p = .008$) (see Table 51).

The mean response value for teens in the treatment group with decisive parents ($N = 90$), ($M = 4.2778$); whereas for teens in the control group with decisive parents ($N = 56$), ($M = 4.0179$). This indicated both groups were likely to anticipate remaining abstinent, but those teens in the abstinence program were more likely to anticipate this. At the other end of the spectrum, for teens who reported they decided their participation in religious education themselves, a similar tendency was revealed. For these autonomous teens in the treatment group, ($N = 125$), ($M = 3.7440$) and for similarly autonomous teens in the control group, ($N = 116$), ($M = 3.7155$) (see Table A29). Thus for both groups, teens were less likely to anticipate remaining abstinent than those with more decisive parents. However, both sets of data reveal that teens in the abstinence program were more likely to plan abstinence than their counterparts in the control group.

The question “Do you think you will abstain from sex from now until you complete high school?” provided teens with the opportunity to express their future abstinence plans through graduation. It was found that teens that made their own decision about participating in religious education were more likely to abandon abstinence than those with parents who were reported to be more involved in such decision making. In the tests of between-subjects effects for the religious practices question, ($F = 5.548$), ($df = 4$), ($p < .05$) (see Table 52).

Table 51

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Religious Training

Decision and Sex in 12 Months

Dependent Variable: Sex in 12 Months					
Source	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Corrected Model	34.458	9	3.829	2.178	.022
Intercept	7315.891	1	7315.891	4161.328	.000
VAR00001	.352	1	.352	.200	.655
Ques33hf	24.620	4	6.155	3.501	.008
VAR00001 * Ques33hf	9.974	4	2.494	1.418	.226
Error	1225.372	697	1.758		
Total	11972.000	707			
Corrected Total	1259.830	706			

For teens in the treatment group who reported they decided their religious training participation themselves ($N = 118$), ($M = .5763$) and for teens in the control group with the same level of autonomy regarding religious training ($N = 109$), ($M = .4771$) (see Table A30). A *yes* response to the question about abstinence through graduation was coded 1, and a *no* answer was coded 0, therefore, the lower the mean, the more likely teens in that subgroup anticipated remaining abstinent. For both the treatment and control groups, teens with the most decision making autonomy were found to be more likely not to remain abstinent through high school. However, those in the program were more likely than their control group counterparts to plan future abstinence.

Table 52

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Religious Training Decision and Abstain Through High School

Dependent Variable: Abstain Through High School					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	7.025	9	.781	3.468	.000
Intercept	199.944	1	199.944	888.267	.000
VAR00001	.156	1	.156	.691	.406
Ques33hf	4.996	4	1.249	5.548	.000
VAR00001 * Ques33hf	1.864	4	.466	2.070	.083
Error	148.787	661	.225		
Total	425.000	671			
Corrected Total	155.812	670			

When asked how much they agree with the statement, "I intend to wait until I am older before I have sex with someone," in every type of decision making with one exception, teens in the treatment group were more likely to agree than their control group counterparts. In the tests of between-subjects effects for the religious question, ($F = 4.317$), ($df = 4$), ($p = .002$) (see Table 53).

The mean response value to this statement for teens in the treatment group who reported deciding on their own after discussing with their parents ($N = 55$), ($M = 1.7818$) and for teens in the control group with the same decision making strategy ($N = 36$), ($M = 1.8611$). This indicated both groups were between *agree* and *strongly agree* with the intention to wait until they are older before engaging in sexual intercourse; the lower the mean, the greater the level of agreement. For teens in the treatment group with parents who were reported to decide after discussion, ($N = 34$), ($M = 1.8529$) and for

teens in the control group with parents who were reported to decide after discussion, ($N = 17$), ($M = 1.9412$) (see Table A31). Though all four groups have means indicating their answers averaged between *agree* and *strongly agree* both groups in the treatment group had lower means, or more strongly agree, than their control group counterparts. Parental participation in deciding a teens' religious training is important as is teens' participation in an abstinence program. Both factors play a role in teens' future abstinence intentions.

The final univariate ANOVA inputs the following questions: "How important is it for you to not have sex until marriage?" and "How are decisions made in your family. Whether you take part in religious training or education." In the tests of between-subjects effects for the religious practices question, ($F = 4.159$), ($df = 4$), ($p = .002$) (see Table 54).

Teens in the treatment group with parents who were reported to decide their teens' religious training participation themselves were the most likely to view abstinence

Table 53

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Religious Training Decision and Wait Until Older

Dependent Variable: Wait Until Older						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Corrected Model	27.154	9	3.017	2.134	.025	
Intercept	1955.191	1	1955.191	1382.887	.000	
VAR00001	.792	1	.792	.560	.455	
Ques33hf	24.412	4	6.103	4.317	.002	
VAR00001 *	.439	4	.110	.078	.989	
Ques33hf						
Error	975.555	690	1.414			
Total	3998.000	700				
Corrected Total	1002.709	699				

until marriage as *very important*. For this group, ($N = 89$), ($M = 1.8315$). In contrast, the control group with the same decision making arrangement had ($N = 56$), ($M = 2.5536$) (see Table A32). This indicated teens who had parents involved in deciding their religious training and who participated in an abstinence program were more likely to plan to remain abstinent until their wedding day. The combination of parents' participation in their religious education and participation in an abstinence program affects teens' long-term plans for abstinence in a positive manner.

Parental Involvement Descriptive Statistics Comparing Baseline to Follow-Up

The third and final research question, "What is the relationship between parental involvement and teens' sexual behaviors and attitudes?," was addressed through 18 questions about parental involvement and the same seven questions about sexual behaviors and attitudes used with the other two research questions. The 18 questions about parental involvement were in three sets of questions with two of the sets repeating

Table 54

Univariate ANOVA: Follow-Up Tests of Between-Subjects Effects for Religious Training Decision and Abstain Until Marriage

Dependent Variable: No Sex Until Marriage						
Source	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.	
Corrected Model	58.264	9	6.474	3.534	.000	
Intercept	2786.718	1	2786.718	1521.311	.000	
VAR00001	1.548	1	1.548	.845	.358	
Ques33hf	30.475	4	7.619	4.159	.002	
VAR00001 *	15.135	4	3.784	2.066	.084	
Ques33hf						
Error	1278.587	698	1.832			
Total	5569.000	708				
Corrected Total	1336.852	707				

questions separately as they pertained to teens' mothers and their fathers.

One of the three sets of questions assessing parental involvement asked, "How much do your parents TRY to know . . ." Three possible responses are provided; *try a lot*, *try a little*, and *don't try* are the teens' choices for four different areas of their lives. The four areas in which parental involvement was assessed were "Who your friends are," "Where you go at night," "What you do with your free time," and "Where you are most afternoons after school." Each of the four areas was analyzed in order, and then they were compared with each other.

When teens were asked how much their parents were involved in knowing their friends, the vast majority, 85%, claimed their parents either *try a little* or a lot. At baseline, 11% indicated their parents *don't try* and in the follow-up that percentage increased by 4% to nearly 15%. Those saying their parents *try a little* also increased; while 45% responded that way in the baseline survey, in the follow-up survey, 6% more, or 51%, responded that way. Those who said their parents *try a lot* decreased during that same time span from 41% to 34% or by 7%.

How much parents try to know "Where you go at night" was also asked to determine parents' involvement in teens' lives. While the percentage of teens who said their parents *don't try* remained relatively constant from baseline to follow-up at 11% and 10% respectively, both *try a little* and *try a lot* had gains of 3% each. *Try a little* increased from 14% to 17% and *try a lot* increased from 70% to 73%. One reason for this was more than 5% did not answer the question in the baseline survey.

Parental involvement in regards to their attempts to know "What you do with your free time" was less than the previous two questions. While the majority of teens indicated

their parents make some attempt at knowing what they are doing during free time, of the four questions this is the area in which more parents made less effort. Twenty-nine percent were reported to not try at all in the baseline survey and this increased by 6% to 35% in the follow-up survey. Thirty-six percent of parents were reported to try a little in the baseline survey and just 2% more, 38%, were reported to try a little in the follow-up survey. Those teens who indicated their parents *try a lot* to know what they do during free time were not the majority. While 31.5% of teens reported their parents made great efforts to know how they spend their free time, this decreases by 5%, to 26.5%, in the follow-up.

The final area in this set is related to the previous question, “Where you are most afternoons after school.” Since this is teens’ free time, during which most parents work, teens are often not supervised for those hours between the end of the school day and their parents return home from their work day. This free time is an area in which the majority of parents show a great deal of involvement. Fifty-five percent of teens reported their parents *try a lot* to know the answer to the question. While 28% of teens reported their parents also try to get involved by trying a little to know their teen’s whereabouts after school. Just 14% of teens indicated their parents *don’t try* to know where they go at the end of the school day. For this question, these percentages shifted the most of this series of questions. While 6% fewer, or 49%, of teens reported their parents *try a lot* to get involved, 3% more, or 17% of teens reported their parents *don’t try* at all to know where they are after school. Those making some attempt increased by 6% from 28% to 34%. Despite these shifts in parental involvement, those parents making some attempts at

involvement remained stable, responding *try a little* or *try a lot* at 82.5% for both the baseline survey and follow-up survey.

Analyzing these four questions provided insight into parental involvement. In addition to looking at each question individually and how answers changed with time, it is noteworthy to look at which areas parents were reported to demonstrate the greatest concern and those for which they were reported to show the least concern. By far the most *don't try* replies were for “What you do with your free time” at a third of respondents. The question in this grouping with the second most number of *don't try* responses was for “Where you are most afternoons after school” with 14% then 17% of teens. The two questions with the highest percentage of *try a lot* responses were “Where you go at night” with 70% then 73%, and, also “Where you are most afternoons after school.” These two questions, for which more teens indicated their parents showed great interest, have elements of safety concerns too. Thus, it may not be surprising that the majority of parents show some or great interest and involvement in these aspects of their teens' lives.

The two areas in which the most parents were reported to show ambivalence were “Who your friends are” and “What you do with your free time.” Nearly the majority of teens, 45% then 51% of teens indicated their parents *try a little* to know their friends. When showing concern for their teens' pastimes, parents were the most evenly distributed with approximately one third of teens selecting each of the three responses. No majority emerged in either the baseline or follow-up surveys.

Parental Involvement ANOVAs

The third research question, “What is the relationship between parental involvement and teens’ sexual behaviors and attitudes?” had 16 questions to assess parents’ involvement. ANOVAs were completed for program (treatment, control) and gender (female, male) at baseline. With the significance level established at .05, two program questions and five gender questions were found to be statistically significant. The first two ANOVAs discussed included program as their dependent variable, and the following five ANOVAs included gender as their dependent variable.

Parental Involvement ANOVAs for Program

The ANOVA for “How much do your parents TRY to know . . . Who your friends are?” ($F = 6.396$), ($df = 1080$), ($p = .012$) (see Table 55).

“How much are your mother or someone who is like a mother involved in your education? . . . Knows how I am doing in school,” ($F = 8.344$), ($df = 1007$), ($p = .004$) (see Table 55).

Table 55

ANOVA: Baseline, Dependent Variable: Parental Involvement, Factor: Program

		Sum of Squares	df	Mean Square	F	Sig.
Try Know Friends	Between Groups	2.827	1	2.827	6.396	.012
	Within Groups	477.348	1080	.442		
	Total	480.175	1081			
Mom Knows Sch	Between Groups	3027.045	1	3027.045	8.344	.004
	Within Groups	365339.203	1007	362.800		
	Total	368366.248	1008			

Parental Involvement ANOVAs for Gender

The next question had the same introduction as the question above. The second half of the question asks “Helps with homework when I ask.” The one-way ANOVA found, ($F = 5.281$), ($df = 1049$), ($p = .022$) (see Table A33).

For “What do you think about these statements? They are about your mother or the person who is like a mother to you. For each, mark how true the statement is: It is easy to talk with her about things that happen in my life,” the ANOVA yielded, ($F = 6.433$), ($df = 1034$), ($p = .011$) (see Table A33).

This ANOVA was found to be parallel to the previous question. “What do you think about these statements? They are about your father or the person who is like a father to you. For each, mark how true the statement is: It is easy to talk with him about things that happen in school.” The one-way ANOVA had, ($F = 19.880$), ($df = 989$), ($p < .05$) (see Table A33).

The analysis of variance has the same premise as the previous question, but the second half reads “It is easy to talk with him (father) about things that happen in my life” provided ($F = 47.005$), ($df = 977$), ($p < .05$) (see Table A33).

The final statistically significant analysis of variance for parental communication and gender was for the question, “How much is your father or someone who is like a father to you involved in your education? Goes to school programs for parents.” The ANOVA yielded ($F = 5.061$), ($df = 913$), ($p = .025$) (see Table A33).

Parental Involvement Chi-Square Tests

From the ANOVAs, two parental involvement questions were statistically significant with the independent variable of program. Values for the responses to both

parental involvement questions were input into chi-square tests with seven questions assessing teens' sexual behaviors and attitudes. Thus, using baseline data, 14 chi-square tests were run, and, using follow-up data, an additional 14 chi-square tests were run, for a total of 28 chi-square tests for the responses to each of the two parental involvement questions. First, statistically significant chi-square tests from one parental involvement question will be explained using the baseline data and the follow-up data. Then, the same will be done for the second parental involvement question. The results are explained in the following pages.

Parents' Attempts to Know Friends

For the question "How much do your parents TRY to know . . . Who your friends are" teens were asked to select *don't try*, *try a little*, or *try a lot*. Six of the seven sets of questions yielded patterns at baseline, yet not at follow-up; of these six, five found the treatment statistically significant at follow-up. These results are noteworthy since within chi-square tests, we are looking for similar patterns at baseline to denote similarities between the control and treatment groups prior to the program. We are also looking for differences, no pattern, at follow-up to indicate the program produced a change in the teens' sexual behaviors and attitudes.

At baseline, four questions were not statistically significant. These questions were "Have you ever had sex?," "Have you had sex during the last 6 months?," "How likely is it that you will have sex in the next 12 months?," and "Do you think you will abstain from sex from now until you complete high school?" One question was statistically significant for the treatment group, but not the control group at baseline, and at follow-up, neither group was statistically significant. That question was, "No sex is the only sure

way to not get pregnant. It is also the only sure way to avoid health problems like diseases people can get when having sex.” The two questions for which both treatment and control groups were statistically significant at baseline, yet a different pattern occurs at follow-up, will be discussed in detail. These two sexual attitude questions were “How important is it for you to not have sex until marriage?” and “I intend to wait until I am older before I have sex with someone.”

When teens are asked their plans to abstain from sex until marriage, the results are notable at one end of the continuum; teens who responded it is *not important at all* to abstain until marriage, and whose parents *try a lot* to know their friends increased from baseline to follow-up. All other groups had stable percentages between baseline and follow-up. At baseline, both control and treatment groups were statistically significant. At baseline, the control group results were $X^2(8, N = 458) = 19.227, p = .014$ (see Tables 56 and A34). Also at baseline, for each of the three sets of parental involvement, teens who reported their parents *don't try*, *try a little*, and *try a lot* to know their teens' friends, and who responded waiting until marriage to have sex was *not important at all*, the percentages were relatively low. The range for this group was between 6 and 21%, with the tendency of percentages to be higher for teens with less involved parents.

After the implementation of the program, the percentages remained relatively stable and in one instance, stayed exactly the same. With one exception, a 3% increase was the most fluctuation between baseline and follow-up within each category. However, an 11% increase occurred among the teens who reported their parents who *try a lot* to know their friends, yet the teens indicated they believe it was *not at all important* to remain abstinent until they walk down the aisle. The chi-square test for the control group

at follow-up was not statistically significant, while the treatment group was statistically significant; the treatment group results were $X^2(8, N = 437) = 30.619, p < .05$ (see Tables 56 and A35). The increase within the group of teens whose parents make the greatest effort to be involved yet still do not value abstinence until marriage was from 6 to 17% within the control group. This indicated participation in an abstinence program may support involved parents' efforts toward staving off negative sexual attitudes. The next question pertains to a more ambiguous, yet attainable goal for teens, abstinence until they are older.

A question about future abstinence with a less definitive timeline asked teens how much they agree with the statement, "I intend to wait until I am older before I have sex with someone." The results are similar to those asking teens about their expected abstinence within the following year. At baseline, teens who indicated they *strongly agree* they intended to remain abstinent in the future ranged from 44 to 57%, with a higher percentage among teens who reported that their parents *try a lot*, as compared to teens who reported their parents *don't try* to know their friends. At baseline, both treatment and control were statistically significant; at baseline, the treatment group data yielded $X^2(8, N = 590) = 23.397, p = .003$ (see Tables 57 and A36).

The same set of questions at follow-up showed decreases in the percentages of teens who indicated *strongly agree* to a question about their future abstinence; again, however, there was one exception. Teens in the abstinence program who reported their parents *try a little* to know their friends and who indicated they *strongly agree* in their future abstinence increased from 44 to 49%. Though the increase is not a large

Table 56

Baseline Chi-Square Test for Parents Know Friends and Wait Until Marriage

TreatmentControl		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	19.227	8	.014
	Likelihood Ratio	17.634	8	.024
	Linear-by-Linear Association	6.629	1	.010
	N of Valid Cases	458		
1.00	Pearson Chi-Square	24.515	8	.002
	Likelihood Ratio	24.003	8	.002
	Linear-by-Linear Association	7.699	1	.006
	N of Valid Cases	598		
Total	Pearson Chi-Square	30.143	8	.000
	Likelihood Ratio	28.084	8	.000
	Linear-by-Linear Association	13.937	1	.000
	N of Valid Cases	1056		

Follow-Up Chi-Square Test for Parents Know Friends and Wait Until Marriage

Program		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	11.627	8	.169
	Likelihood Ratio	11.628	8	.169
	Linear-by-Linear Association	1.895	1	.169
	N of Valid Cases	290		
1.00	Pearson Chi-Square	30.619	8	.000
	Likelihood Ratio	30.329	8	.000
	Linear-by-Linear Association	13.491	1	.000
	N of Valid Cases	437		
Total	Pearson Chi-Square	36.068	8	.000
	Likelihood Ratio	35.956	8	.000
	Linear-by-Linear Association	14.203	1	.000
	N of Valid Cases	727		

percentage, its exception as the only group with an increase is noteworthy. These percentages reveal the combination of parents' effort to be involved and participation in an abstinence program affects teens' future plans to be abstinent. At follow-up, the chi-square tests had no pattern; the control group was not statistically significant, but at follow-up, the treatment group was with $X^2(8, N = 423) = 17.272, p = .027$ (see Tables 57 and A37).

Mother's Involvement in School

For the second parental involvement question for which chi-square tests were run, "How much is your mother involved in your education? Knows how I am doing in school" teens were instructed to answer *never, sometimes, always*, or *NA (Not Applicable)*.

Response to this parental involvement question was input into chi-square tests at baseline and follow-up with seven sexual behavior and attitude questions. Analyzing baseline and follow-up chi-square tests and comparing statistically significant and not statistically significant patterns yielded a variety of responses.

At follow-up, the following questions were not statistically significant for the treatment group, "Have you ever had sex?," "Have you had sex during the last 6 months?," and "No sex is the only sure way to not get pregnant. It is also the only sure way to avoid health problems like diseases people can get when having sex." However, the other four sexual attitude questions were statistically significant at follow-up for the treatment group and will be explained in detail in the following paragraphs.

Table 57

Baseline Chi-Square Test for Parents Know Friends and Wait Until Older

TreatmentControl		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	16.036	8	.042
	Likelihood Ratio	14.645	8	.066
	Linear-by-Linear Association	1.153	1	.283
	N of Valid Cases	457		
1.00	Pearson Chi-Square	23.397	8	.003
	Likelihood Ratio	22.604	8	.004
	Linear-by-Linear Association	5.362	1	.021
	N of Valid Cases	590		
Total	Pearson Chi-Square	27.064	8	.001
	Likelihood Ratio	24.762	8	.002
	Linear-by-Linear Association	6.319	1	.012
	N of Valid Cases	1047		

Follow-Up Chi-Square Test for Parents Know Friends and Wait Until Older

Program		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	11.685	8	.166
	Likelihood Ratio	9.995	8	.265
	Linear-by-Linear Association	3.049	1	.081
	N of Valid Cases	289		
1.00	Pearson Chi-Square	17.272	8	.027
	Likelihood Ratio	16.637	8	.034
	Linear-by-Linear Association	5.355	1	.021
	N of Valid Cases	423		
Total	Pearson Chi-Square	16.578	8	.035
	Likelihood Ratio	15.225	8	.055
	Linear-by-Linear Association	8.792	1	.003
	N of Valid Cases	712		

The first sexual attitude question to be discussed in relation to parental involvement is “How important is it for you to not have sex until marriage.” At baseline, neither the control nor treatment group was statistically significant; the chi-square test for the treatment group produced $(12, N = 581) = 16.307, p = .178$ (see Tables 58 and A38). Teens with the least active parents, those that responded their mother *never* knows their school performance, had lower percentages that find it *very important* to remain abstinent until marriage than teens with active parents. At baseline, there was a difference between control and treatment; 30% in the control group and 41% in the treatment group were found to highly value abstinence until marriage.

At follow-up, both control and treatment groups were statistically significant; for treatment $X^2 (16, N = 409) = 42.557, p < .05$ (see Tables 58 and A39). Though between baseline and follow-up every group had a decrease in the percentage of teens who indicated it was *very important*, among teens with the least active parents, those in the abstinence program had less of a decrease. Teens in the control group decreased from 30 to 17% for a drop of 13%; meanwhile, teens in the treatment group decreased from 41 to 33% for a drop of 8%. Parental involvement correlates with teens’ sexual behaviors and attitudes and, in this case, the independent variable of program has a positive effect upon teens who reported the least parental involvement and the least expectations for abstinence until marriage. Exposure to an abstinence program seems to make a difference.

When asked to predict their future sexual behavior, most teens responded it was *not at all likely* or *not very likely* that they would have sexual intercourse within the year. The question “How likely is it that you will have sex in the next 12 months” brought

Table 58

Baseline Chi-Square for Mother's Involvement in School and Wait Until Marriage

TreatmentControl		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	16.275	12	.179
	Likelihood Ratio	17.601	12	.128
	Linear-by-Linear Association	.528	1	.467
	N of Valid Cases	412		
1.00	Pearson Chi-Square	16.307	12	.178
	Likelihood Ratio	17.159	12	.144
	Linear-by-Linear Association	4.936	1	.026
	N of Valid Cases	581		
Total	Pearson Chi-Square	18.483	12	.102
	Likelihood Ratio	18.114	12	.112
	Linear-by-Linear Association	.627	1	.428
	N of Valid Cases	993		

Follow-Up Chi-Square for Mother's Involvement in School and Wait Until Marriage

Program		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	30.959	16	.014
	Likelihood Ratio	29.696	16	.020
	Linear-by-Linear Association	4.030	1	.045
	N of Valid Cases	287		
1.00	Pearson Chi-Square	42.557	16	.000
	Likelihood Ratio	40.786	16	.001
	Linear-by-Linear Association	.012	1	.913
	N of Valid Cases	409		
Total	Pearson Chi-Square	58.068	16	.000
	Likelihood Ratio	56.189	16	.000
	Linear-by-Linear Association	3.345	1	.067
	N of Valid Cases	696		

about an expected pattern in which teens who reported active parents tended to also respond that they were least likely to become sexually active within the year. The highest

percentage, 62%, was among teens who reported the most actively involved mothers in the treatment group at baseline. The chi-square test was not statistically significant for the control group, but was for the treatment group; at baseline, the treatment group had $X^2 (12, N = 575) = 28.788, p = .004$ (see Tables 59 and A40).

At follow-up, teens who reported the most actively involved mothers and who participated in the abstinence program remained the most likely group to not engage in sex within the year. Though the percentage planning to remain abstinent decreased, as did every other group, the decrease was 4%, from 62 to 58% of the group. At follow-up, just as the case at baseline, control was not statistically significant, but treatment was. Chi-square test for the treatment group at follow-up yielded, $X^2 (16, N = 408) = 47.746, p < .05$ (see Tables 59 and A41). It seems the combination of a mother who *always* knows how their teen is doing in school and teen exposure to an abstinence program correlates to planned sexual abstinence. Parental involvement and abstinence programs do have positive impacts.

“I intend to wait until I am older before I have sex with someone” was asked of all participants and the results were compared to those from the question, “How much is your mother involved in your education? Knows how I am doing in school.” The chi-square test was statistically significant for the control group, but not the treatment group; at baseline for treatment, $X^2 (12, N = 574) = 19.579, p = .075$ (see Tables 60 and A42). Within the crosstabs, at baseline, teens who responded that their mother *always* knew about their school performance were the highest percentages in both control and treatment with 55% and 52%, respectively.

Table 59

Baseline Chi-Square for Mother's Involvement in School and Sex in Next 12 Months

TreatmentControl		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	12.557	12	.402
	Likelihood Ratio	13.099	12	.362
	Linear-by-Linear Association	.129	1	.719
	N of Valid Cases	412		
1.00	Pearson Chi-Square	28.788	12	.004
	Likelihood Ratio	28.229	12	.005
	Linear-by-Linear Association	.117	1	.732
	N of Valid Cases	575		
Total	Pearson Chi-Square	30.106	12	.003
	Likelihood Ratio	29.575	12	.003
	Linear-by-Linear Association	.178	1	.673
	N of Valid Cases	987		

Follow-Up Chi-Square for Mother's Involvement in School and Sex in Next 12 Months

Program		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	19.774	16	.231
	Likelihood Ratio	15.052	16	.521
	Linear-by-Linear Association	.150	1	.698
	N of Valid Cases	289		
1.00	Pearson Chi-Square	47.746	16	.000
	Likelihood Ratio	44.033	16	.000
	Linear-by-Linear Association	.172	1	.679
	N of Valid Cases	408		
Total	Pearson Chi-Square	48.915	16	.000
	Likelihood Ratio	40.545	16	.001
	Linear-by-Linear Association	.365	1	.546
	N of Valid Cases	697		

In the follow-up survey, the percentages of teens who indicated *strongly agree* that they will wait until having sex decreased in every category with one exception.

Teens who reported their mothers *always* knew how they are doing in school and participated in the abstinence program had an increase in the percentage that *strongly agree* in their own future abstinence. Both control and treatment groups were statistically significant in the follow-up chi-square test; for treatment, the chi-square test was statistically significant for the control group, but not the treatment group at follow-up, $X^2(16, N = 405) = 54.903, p < .05$ (see Tables 60 and A43). It seems the combination of active parental involvement in teens' lives and participation in an abstinence program not only prevents teens from planning to become sexually active, but increases the percentage planning to remain abstinent.

The question "Do you think you will abstain from sex from now until you complete high school?" assessed a defined time frame for abstinence. At baseline, the crosstabs showed most teens, regardless of program or parental involvement, planned to remain abstinent at least through their high school graduation. Those planning abstinence ranged from 49 to 72% in each group. At baseline, the chi-square test was not statistically significant for the control group, but was statistically significant for the treatment group at baseline, $X^2(3, N = 549) = 11.961, p = .008$ (see Tables 61 and A44).

At follow-up, the treatment group chi-square test yielded $(4, N = 388) = 10.189, p = .037$ (see Tables 61 and A45) and the control group was statistically significant too. From baseline to follow-up, most groups saw a slight decrease in the percentage of teens planning abstinence through their high school careers. For example, for teens with the least involved parents, those who indicated parents *never* know how they are doing in school and are in the abstinence program had a decrease of 1% from 49 to 48%. A notable difference was for teens who reported the least active parents and not in the

Table 60

Baseline Chi-Square Test for Mother's Involvement in School and Wait Until Older

TreatmentControl		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	23.624	12	.023
	Likelihood Ratio	18.720	12	.096
	Linear-by-Linear Association	3.004	1	.083
	N of Valid Cases	409		
1.00	Pearson Chi-Square	19.579	12	.075
	Likelihood Ratio	17.744	12	.124
	Linear-by-Linear Association	3.326	1	.068
	N of Valid Cases	574		
Total	Pearson Chi-Square	30.344	12	.002
	Likelihood Ratio	24.252	12	.019
	Linear-by-Linear Association	5.605	1	.018
	N of Valid Cases	983		

Follow-Up Chi-Square for Mother's Involvement in School and Wait Until Older

Program		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	36.130	16	.003
	Likelihood Ratio	33.971	16	.005
	Linear-by-Linear Association	6.175	1	.013
	N of Valid Cases	286		
1.00	Pearson Chi-Square	54.903	16	.000
	Likelihood Ratio	40.926	16	.001
	Linear-by-Linear Association	4.862	1	.027
	N of Valid Cases	405		
Total	Pearson Chi-Square	67.698	16	.000
	Likelihood Ratio	62.480	16	.000
	Linear-by-Linear Association	11.855	1	.001
	N of Valid Cases	691		

abstinence program; though 61% of these teens reported planning to abstain from sex in the baseline survey, nearly half that percentage, 31%, reported they plan to abstain in the

follow-up survey. It seems the effect of a lack of parental involvement can be overcome through participation in an abstinence program.

The chi-square results will be summarized at the end of the chapter, and then synthesized with results from descriptive statistics, ANOVAs, and univariate ANOVAs.

Sexual Behaviors and Attitudes Descriptive Statistics

Comparing Baseline to Follow-Up

Seven questions assessed teens' sexual behaviors and attitudes. Two questions addressed teens' sexual behaviors; five questions addressed teens' sexual attitudes. Three questions require a *no* or *yes* answer. Three questions use a Likert scale, from which teens selected one of five answers. A final question asked respondents how much they agreed with a statement, and the choices were *agree a lot*, *agree a little*, *disagree a little*, or *disagree a lot*. Answers to the two behavioral questions will be explained first, and then explanations of the five attitude questions will be provided.

Table 61

Baseline Chi-Square for Mother's Involvement in School & Abstain through High School

Treatment	Control	Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	2.365	3	.500
	Likelihood Ratio	2.364	3	.500
	Linear-by-Linear Association	.209	1	.647
	N of Valid Cases	389		
1.00	Pearson Chi-Square	11.961	3	.008
	Likelihood Ratio	11.466	3	.009
	Linear-by-Linear Association	.891	1	.345
	N of Valid Cases	549		
Total	Pearson Chi-Square	12.201	3	.007
	Likelihood Ratio	11.999	3	.007
	Linear-by-Linear Association	.945	1	.331
	N of Valid Cases	938		

Table 61 continued

Follow-Up Chi-Square for Mother's Involvement in School & Abstain Through High School

Program		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	18.816	4	.001
	Likelihood Ratio	19.021	4	.001
	Linear-by-Linear Association	3.742	1	.053
	N of Valid Cases	272		
1.00	Pearson Chi-Square	10.189	4	.037
	Likelihood Ratio	9.880	4	.042
	Linear-by-Linear Association	1.192	1	.275
	N of Valid Cases	388		
Total	Pearson Chi-Square	25.966	4	.000
	Likelihood Ratio	25.389	4	.000
	Linear-by-Linear Association	5.169	1	.023
	N of Valid Cases	660		

The simplest question about sex required a *no* or *yes* answer; “Have you ever had sex?” was asked of respondents. For the baseline survey, 85% responded *no* and 10% responded *yes*. Thus, 5% of teens did not answer the question. For the follow-up survey, though slightly fewer teens responded *no*, at 84%, those not answering the question in the first survey, did so in the second. Nearly 16% of teens responded *yes* to the question “Have you ever had sex.”

The second sexual behavior question was “Have you had sex during the last 6 months.” A similar pattern emerged as that of the previous question. Though 90.5% of teens responded *no* and 5.5% of them responded *yes*, nearly 4% failed to answer the question on the baseline survey. Again, slightly fewer responded *no* for the follow-up survey at 89%, and those that did not answer on the baseline answered in the affirmative

on the follow-up at 11%. The cause for this shift in responses could be increased comfort due to maturity, the program, or other reasons.

The third and final sexual attitude question addressed expected future behavior, “How likely is it that you will have sex in the next 12 months.” Teens were asked to answer either *definitely likely*, *probably likely*, *somewhat likely*, *not very likely*, or *not at all likely*. While 5% of teens reported being rather certain in their future abstinence and answered *definitely likely*, 55% were at the other end of the spectrum and answered *not at all likely*. A total of 23% seemed confident in their future abstinence by answering that it was definitely, probably, or somewhat likely they would be abstinent for the next year. Thus, 74% reported that it was either not very or not at all likely they would abstain from sex. In the follow-up survey, teens tended to affirm more intention to be abstinent. Nearly 9% reported they were *definitely likely* to abstain and nearly 49% reported they were *not at all likely* to abstain during the year. An increase from 23% to 32.5% occurred from baseline to follow-up in terms of teens who answered they were definitely, probably, or somewhat likely to remain abstinent. Conversely, a decrease from 74% to 67% said they were not very or not at all likely to remain abstinent (see Table 62). Regarding future intentions of abstinence, the numbers are promising.

The first two questions assessing teens’ sexual attitudes, as compared to behaviors, also used Likert scales. The first question begins with, “Think about the future,” then proceeds with “How important is it for you to not have sex until marriage.” Seventy-seven percent of teens answered very, quite, or somewhat important, while 20% indicated it was not too or not important at all. Teens expressed less determination to remain abstinent until marriage in the follow-up survey. Nearly 76% of teens responded it

Table 62

Baseline Likelihood of Sex in 12 Months of Respondent Population

		Frequency	Valid Percent
Valid	Definitely Likely	55	4.9
	Probably Likely	86	7.7
	Somewhat Likely	116	10.4
	Not Very Likely	214	19.2
	Not At All Likely	610	54.7
	Error	1	.1
	No Answer	33	3.0
	Total	1115	100.0
Missing	System	113	
Total		1228	

Follow-Up Likelihood of Sex in 12 Months of Respondent Population

		Frequency	Valid Percent
Valid	Definitely Likely	64	8.6
	Probably Likely	77	10.4
	Somewhat Likely	100	13.5
	Not Very Likely	138	18.6
	Not At All Likely	361	48.8
	Total	740	100.0
Missing	System	488	
Total		1228	

was very, quite, or somewhat important for them to not have sex until marriage. This is a decrease of just 1%. However, the number of teens stating it was not too or not important at all for them to remain abstinent until marriage increased 4% from the baseline survey to 24% of teens.

The following question was similar in nature, but a bit more general. For the statement “I intend to wait until I am older before I have sex with someone” teens were asked how much they agree. The largest change was in the number of teens ambivalent about their intentions. At baseline, nearly 18% responded *in the middle*, while more than 23% responded in that manner in the follow-up. Those with the intention to wait until

they have sex decreased in numbers. Nearly 69% indicated *strongly agree* or *agree* with the statement at baseline, but that number decreased to just less than 65% in the follow-up survey. Changes were also seen with those who disagreed with the statement. Ten percent responded *disagree* or *strongly disagree* at baseline, and more than 12% felt that way during follow-up (see Table 63).

The final question is more specific since teens are asked about their abstinence intentions, but a simpler response is requested. "Do you think you will abstain from sex from now until you complete high school?" requires a *yes* or *no* response. The majority of teens responded *yes* within baseline and follow-up surveys. Shifts did occur between baseline and follow-up. Teens who reported intending to remain abstinent until at least high school graduation ranged from 61% at baseline to 63% in the follow-up. The number of teens responding *no* increased at follow-up. Thirty-one percent of teens indicated they did not intend to remain abstinent through high school, 6% more, 37%, answered that way in the follow-up survey. This question had a non-response rate of

Table 63

Baseline I Intend to Wait Until I Am Older Before I Have Sex of All Respondents

		Frequency	Valid Percent
Valid	Strongly Agree	534	47.9
	Agree	233	20.9
	In the Middle	198	17.8
	Disagree	60	5.4
	Strongly Disagree	51	4.6
	Error	1	.1
	No Answer	38	3.4
	Total	1115	100.0
Missing	System	113	
Total		1228	

Table 63 continued

Follow-Up for I Intend to Wait Until I Am Older Before I Have Sex of All Respondents

		Frequency	Valid Percent
Valid	Strongly Agree	329	45.0
	Agree	144	19.7
	In the Middle	169	23.1
	Disagree	45	6.2
	Strongly Disagree	44	6.0
	Total	731	100.0
Missing	System	497	
Total		1228	

approximately 8% in the baseline survey, but none in the follow-up survey. That missing percentage was divided between *yes* and *no* in the follow-up responses.

The only question used in the chi-square tests that addressed abstinence in relation to pregnancy and STDs was the following: “No sex is the only sure way to not get pregnant. It is also the only sure way to avoid health problems like diseases people can get when having sex.” Teens were asked their opinion about the statement; do they *agree a lot*, *agree a little*, *disagree a little*, or *disagree a lot*? In the survey, this is the sole question to assess teens’ views of abstinence in terms of both pregnancy and disease. Teens in agreement with the importance of abstinence, who either selected *agree a lot* or *agree a little* were the majority in both the baseline (66%) and the follow-up (70%). Those that indicated either *disagree a little* or *disagree a lot* remained steady at baseline (29%) and follow-up (30%). While 5.5% of teens failed to answer the question in the baseline survey, many of those became additional responders, agreeing with the importance of abstinence as indicated in the follow-up survey.

Thus, throughout the seven questions about sexual behaviors and attitudes, most teens seemed to practice and value sexual abstinence. They reported they currently

abstain from sexual intercourse and plan to continue to do so through high school and to a lesser degree, until marriage. However, the strength in numbers valuing and planning abstinence consistently decreases throughout the array of questions from the baseline to the follow-up surveys. Though fewer teens practice or plan to practice abstinence as indicated in the follow-up survey, those valuing abstinence remain the majority of teens.

Missing Values

Not all teens answered all survey questions. Thus, frequencies vary throughout the analysis. Missing values did not alter the statistical significance of the findings.

Summary of Research Findings and Discussion

The research questions posed as a basis for this study were answered using descriptive statistics, ANOVAs, chi-square analyses, and univariate ANOVAs. The first and third research questions were analyzed using the first three statistical techniques. The second question was not included in chi-square tests since not one program question was found to be statistically significant in the ANOVAs, but univariate ANOVAs were run and analyzed to help answer the second research question.

A summary of the most important and relevant findings is offered in the following pages.

Statistical Analyses Summary for Parental Communication

Teens with positive, regular communication with their parents will have healthier sexual behaviors and attitudes than teens with negative and/or little communication with their parents. This hypothesis was tested through a multitude of statistical analyses explained in detail earlier in the chapter. The strengths and weaknesses of this hypothesis are summarized in the following paragraphs.

The majority of teen participants in this study do not have difficulty communicating with their parents about issues relating to sex, sexual health, and intimate relationships. The combination of frequent parental communication and participation in an abstinence program resulted in a high percentage of teens remaining abstinent between the baseline and follow-up surveys. In many analyses, teens with the most frequent communication with their parents and exposed to the abstinence program had healthier sexual behaviors and attitudes than teens with less frequent communication and not participating in the program.

Communication about sexual health and physiological aspects of sex was quite common and frequent. For example, at baseline, within the 3 months prior to the survey, between 70 and 79% of all teen study participants had at least one conversation about how their body grows and changes, ramifications for teens that have sex, including STDs, with one or both parents. The ease of those conversations was relatively great too. More than 60% of teens found it a little or very easy to discuss sensitive topics with parents. In addition, over the course of the study, more parents discussed, and fewer ignored, topics such as why abstinence is important and reasons not to have sex. Over time, parents and teens had more conversations about negative aspects of sex; communication about general negative ramifications of teen sex rose in frequency among study participants.

Of the teens in the abstinence program who spoke to their parents in the 3 months prior to the survey about peer pressure 2 to 3 times or more, 72% indicated they would remain abstinent until at least their high school graduation. Between the baseline and follow-up survey, this percentage remained stable; however, teens with less frequent communication or not in the abstinence program saw decreases in planned abstinence.

Teens with the least amount of communication had the lowest rate of planned abstinence, regardless of participation in the program. Thus, recent parental communication about peer pressure correlates with planned abstinence and participation in an abstinence program seems to strengthen that correlation.

For another, related question, the combination of abstinence program participation and parental communication had a similar, yet somewhat different effect. Among teens with frequent parental communication about peer pressure of four times or more in the 3 months prior to the survey, 61% in the abstinence program indicated they intend to remain abstinent until they were older in the baseline and follow-up surveys. While 59% of teens with the same high level of parental communication in the control group indicated they would remain abstinent until they are older in the baseline survey, that percentage decreased by 6% in the follow-up survey. Despite a high level of communication with parents, if teens were not in an abstinence program, their plan to remain abstinent waned with time. The combination of a lot of conversations with their parents about peer pressure and participation in an abstinence program resulted in a consistently high level of planned abstinence.

The comfort level of such conversations also seemed to play a role in teens' sexual behaviors and attitudes. For teens participating in the abstinence program, the higher the comfort level in talking to their parents about sensitive topics related to a higher level of intention to remain abstinent for at least the following year. Also, at every communication comfort level, from never discussing sensitive topics to tremendous ease discussing such topics, more teens in the abstinence program intended to remain abstinent for the year than their counterparts in the control group. For a related sexual attitude

question, “Do you think you will abstain from sex from now until you complete high school” parental communication seemed to support teens’ plans for abstinence. For those in the abstinence program and who found it very easy to discuss sensitive issues with their parents, 73% planned abstinence until high school graduation in the baseline survey; nearly the same percentage, 71%, had the same personal expectations in the follow-up survey. While just 60% of teens in the program who never spoke to their parents about such issues plan abstinence until graduation, that percentage decreased to 52% by the end of the abstinence program. A high comfort level of parental communication correlates with a high level of planned abstinence and conversely, a low level of comfort correlates to a low and decreasing plan for abstinence.

Frequent and comfortable parental communication, combined with abstinence program participation, resulted in more positive sexual behaviors and attitudes for teens. Factors that parents, educators, and other stakeholders can affect, such as participation in abstinence programs and the frequency and comfort level of parental communication, can and do affect teens’ sexual behaviors and attitudes in positive ways.

Statistical Analyses Summary for Faith and Religious Practices

Teens with active faith and religious practices will have healthier sexual behaviors and attitudes than teens without active faith and religious practices. This second research hypothesis was tested through the use of numerous statistical analyses which were explained earlier in this chapter; the summary of the strengths and challenges of this hypothesis are explained in the following paragraphs.

Most teen study participants reported being faithful and valuing their faith, yet did not practice their religion regularly. In the baseline and follow-up surveys, between 78

and 72% of teens respectively, prayed a few times or more per month. Seventy-one percent viewed faith as somewhat to extremely important in how they live their lives; 69% placed the same high value on faith in making major decisions in their lives. Though faith played an important role in the lives of many of the study's teens, attending religious services did not. At baseline, 30% of teens reported attending services once a month or more; at follow-up, just 27% reported attending religious services within the past month.

When asked how important it was to remain abstinent until marriage, the frequency of personal prayer corresponded with the value level placed upon abstinence. Teens who pray more frequently are more likely to value abstinence at a higher level. In every category of prayer frequency, teens in the abstinence program valued abstinence until marriage more than teens in the control group. The combination of an abstinence program and viewing faith as extremely important in making major decisions resulted in also viewing abstinence until marriage as very important. The same was true for planning abstinence until the future, with no definitive event attached. The greater the role of the teen's faith in making decisions, the greater their belief they will remain abstinent until they are older. At every level of faith, teens in the abstinence program valued abstinence more than their peers in the control group, with just one exception. This combination was powerful and positive.

Regardless of program, the more important a teen valued faith in decision making, the less likely they will have sex within the year and the more likely they will abstain from sex until high school graduation. Also, when comparing teens in the abstinence program with those in the control group, at every level of faith, with once exception,

teens in the abstinence program were less likely to have sex within the year and until graduation.

Teens who pray at least one time per week were also less likely to have had sex during the 6 months previous to the survey and were more likely to wait until they are older to have sex than teens who do not pray; this was true among both the abstinence program participants and non-participants. The same pattern emerged for future planned abstinence; teens who reported praying once or more per week were either not very or not at all likely to have sex within the year, regardless of program.

According to responses in the follow-up survey, teens in the abstinence program were less likely to have ever had sex than those in the control group at every level of prayer frequency. While teens who more frequently pray were found to be less likely to have had sex, at every level with just one exception, there was a difference between those in the abstinence program and those not. Those in the program valued abstinence more.

The correlation between practicing religion and sexual behaviors and attitudes was explored as teens were asked about their attendance at religious services and youth groups. When asked how often they attended religious services within the month prior to the survey, in the follow-up survey, regardless of program, higher attendance rates correlated with higher value placed upon abstinence until marriage, lower rates of sexual intercourse ever and within the last 6 months, and lower rates of planned sexual intercourse within the next year. Especially after participation in an abstinence program, higher church attendance rates corresponded to stronger intention to remain abstinent until teens were older, graduate high school, and to their agreement that abstinence is the best way to avoid pregnancy and STDs. While attendance at religious services

corresponded to positive sexual behaviors and attitudes, when exposure to an abstinence program is added, teens were found to be likely to have an even wider range of healthy sexual behaviors and attitudes.

Youth group participation was rather low, with approximately 25% of teens involved in such activities. However, for those who do attend youth group events, it correlated with positive behaviors and attitudes. Teens in youth groups were found to be more likely to plan to wait until they were older before engaging in sex, regardless of participation in an abstinence program. While teens in the abstinence program were more likely to plan to be abstinent until high school graduation and until they are older and view abstinence as the most effective way to avoid pregnancy and STDs, regardless of their participation in a youth group. However, exposure to an abstinence program and a youth group did correspond to a greater likelihood of never having sex, as well as a greater likelihood of not having sex within the 6 months prior to the survey. While involvement in a youth group or an abstinence program seemed to both have positive affects, the combination is especially beneficial for teens.

Statistical Analyses Summary for Parental Involvement

Teens with parents who are involved in their lives will have healthier sexual behaviors and attitudes than teens without involved parents. This third and final hypothesis was explored through several statistical tests. A summary of the results are provided in the following paragraphs.

Survey results showed parental involvement differs a lot depending upon which parent the teen is considering and the type of involvement being considered. For example, while 83% of teens indicated a parent or parents try to know where they go

after school, just 70% of teens indicated a parent makes the same effort in knowing where they are at night. While more than half of mothers were reported to always know their teen's school performance, just 38% percent of fathers were reported to have such knowledge. Overall, parents were more likely to help with daily or common tasks than less frequent and less common tasks. Also, mothers were more involved than fathers in every aspect of teens' lives.

While the picture for teens without involved parents can be dismal, it is hopeful for teens with involved parents and in an abstinence program. Prior to beginning the abstinence program, 10% of teens who reported parents who did not try to know their friends have reported having had sex. After the program, 30% of teens with such uninvolved parents reported having had sex. Despite participation in an abstinence program, teens without involved parents made negative sexual decisions. In a similar manner, prior to the program, just 4% of teens who reported having parents who make no effort to know their friends had sex within the 6 months prior to the survey. After exposure to the abstinence program, 23% of teens without concerned parents had sex within the 6 months prior to the survey. Despite participation in a program promoting sexual abstinence, the correlation of uninvolved parents and teens' sexual behaviors is problematic.

On the other end of the continuum, parents who make some or a lot of effort to know their teen's friends corresponded to positive sexual attitudes. For example, 44% of teens who reported parents who try a little to know their friends and were about to participate in an abstinence program strongly intended to wait until they were older to have sex. After participation in the abstinence program, that percentage grew to nearly

50% of these teens. Nearly 60% of teens in the program who reported parents who try a lot to know their friends indicated they are not likely to have sex within the year; that percentage remained high and steady after the program. While other groups saw a decrease in planned abstinence, teens with involved parents and in an abstinence program were likely to plan abstinence.

Lack of parental involvement consistently correlated to lack of teens' enthusiasm for abstinence. When asked how much their mother was involved in their education, specifically, knows about their school performance, the more the mother was involved, the less likely the teen was to have had sex. However, it is noteworthy that while 16% of teens who reported mothers who always know their academic performance, but were in the control group, have had sex, just 12% of teens who reported very active mothers in the abstinence program have had sex. The difference was found among those in the abstinence program.

Teens in the abstinence program or control group who reported more involved mothers tended to have a higher percentage of abstinence within the 6 months prior to the survey than teens with less involved mothers. Though there was a difference between those in the program and those not. Between baseline and follow-up, teens in the abstinence program who reported mothers who always know their level of school achievement and have remained abstinent within the 6 months prior to the survey decreased from 95 to 92%. Also between baseline and follow-up, the corresponding teens in the control group who reported very involved mothers had a decrease in reported abstinence within the 6 months prior to the survey from 97 to 91%. While there were higher levels of abstinence before the program among teens with involved mothers, there

were lower levels of abstinence after the program among these teens, as compared to those in the abstinence program. Participation in the abstinence program resulted in less of a decrease in planned abstinence. It seems the combination of very involved and knowing parents and participation in an abstinence program results in positive, healthy sexual behaviors and attitudes for teens.

The following chapter offers recommendations so stakeholders can make effective policy and practice changes to better meet the needs of teens. It is hopeful these recommendations may assist teens, parents, community and educational leaders, health educators, health professionals, and policy makers. Through the use of the research findings, people can increase the efficacy of abstinence programs for the benefit of teens, their families, their communities, and society. Also, recommendations for policy improvements, best practices, and future studies will be presented in the next chapter.

CHAPTER V

POLICY IMPLICATIONS, PRACTICE IMPLICATIONS, AND FUTURE RESEARCH

Introduction

Teens' sexual behaviors and attitudes have ramifications both small and large. Research prior to and including this study can and should influence policies and practices toward more effective programs and thus, toward healthier teens, families, communities, and society. When teens' sexual behaviors and attitudes are beneficial to teens and reflect teens' best interests, both short and long term, then programs, families, and society are making sound policy and practice decisions. This chapter will offer policy and practice improvements toward such goals. Research beyond the scope of this study and building upon this study is also suggested in this chapter.

Purpose of the Study

The purpose of this study was to assess how teens' personal experiences and their relationships with their parents relate to their own sexual behaviors and attitudes. What impact do teens' communication with parents, faith and religious practices, and parental involvement have upon their most personal sexual behaviors and attitudes, including their perspectives about sexual abstinence? Through the application of the research findings, teens, parents, community and educational leaders, health educators, health professionals, and policy makers can affect teens' sexual behaviors and attitudes for the benefit of teens themselves, their families, their communities, and, consequently, society.

Statement of the Problem

How do teen experiences such as parental communication, their own faith and religious practices, and parental involvement in their lives affect their sexual behaviors

and attitudes? Studying the relationship between personal factors and teens' sexual behaviors and attitudes provides insight into teens' lives. Does active, positive parental communication affect teens' sexual behaviors and attitudes? Do teens with active faith and religious practices have more responsible sexual behaviors and attitudes than their less religious peers? Does parental involvement impact teens' sexual behaviors and attitude? These and other questions were explored throughout this study.

Research Questions

This study was guided by three research questions. These questions were developed to establish clarity of purpose and to maintain focus throughout the research process. They were also designed with the intention to provide teens, parents, community and educational leaders, health educators, health professionals, and policy makers insight into the relationship between teens' personal experiences with parents, faith, and teens' sexual behaviors and attitudes. The research questions are as follows:

1. What is the relationship between teens' communication with their parents and teens' sexual behaviors and attitudes?
2. What is the relationship between teens' faith and religious practices and teens' sexual behaviors and attitudes?
3. What is the relationship between parental involvement and teens' sexual behaviors and attitudes?

Research Methods

The data used in this study was obtained via a baseline survey and corresponding follow-up survey of middle school students from participant and control schools. Students from six participant schools, which received the FLAP program (abstinence

education) (treatment) and six other, comparable middle schools, which did not participate in the FLAP program (control), completed both surveys.

SPSS, statistical analysis software, was used to conduct descriptive, frequency, ANOVA, and chi-square analyses.

Through data analysis, findings were brought to light and clarification upon the research topics was achieved. This study furthers the understanding of the correlation between personal factors and participation or lack of participation in an abstinence program and teens' behaviors and attitudes about sexuality and abstinence. The collection, analysis, and comparison of data served to provide information to further understand the variables of the study.

Delimitations and Limitations of the Study

Since this study consists of data from public schools, it should be noted that recommendations considered by public school leaders may be limited to character or health education, not personal aspects of teens' lives, such as faith and religious practices. The administrative practice of inclusion or lack of inclusion, of a character education program is a matter of school leadership. Thus, educational leaders and policy makers may consider the study as part of public school leadership, specifically, as part of character or health education programs.

When considering the policy and practice recommendations which follow, the delimitations established by the participant population must be considered. This study examined data from students in grades 6 through 8 attending public middle schools in The Bronx, New York. Most participants were between 11 and 14 years old and were from working-class families. The majority of participants, 73%, were of Hispanic or

Latino origin. Teens in other grades, age groups, communities, socio-economic groups, or ethnic backgrounds were not represented by this study.

Summary of the Study

Chapter I offered the problem to be studied and its context. Chapter II provided a review of the literature focusing on the history of abstinence and comprehensive programs, critique of programs, qualities of effective programs, teachers', peers' and parents' impact, and teens' personal factors as they relate to teens' sexual behaviors and attitudes. Chapter III described the methodology used in this study to collect and analyze the data as it relates to the research questions. A descriptive approach was the analytic strategy used in this study, aimed at discovering the complex relation between teens' communication with their parents, their own faith and religious practices, and parental involvement and teens' various sexual behaviors and attitudes. Varied methods and descriptive statistical analyses were used for summarizing, analyzing, and reporting the data as found in Chapter IV. Finally, Chapter V offers a summary of findings, conclusions, and recommendations for policy, practice, and future research.

Summary of Research Findings and Discussion

Guided by the research questions, the study's major results are highlighted in the following section.

Parental Communication Findings and Discussion

The first research question, "What is the relationship between teens' communication with their parents and teens' sexual behaviors and attitudes," led to findings about the relationship between communication frequency about peer pressure and comfort level of communication between teens and their parents.

Regardless of the communication comfort level teens feel with their parents, participation in an abstinence program promotes abstinence more than non-participation. However, the combination of frequent parental communication and participation in an abstinence program results in a high percentage of teens remaining abstinent. Specifically, there is a correlation between teens who speak to their parents about peer pressure and their plan to remain abstinent through high school graduation. This supports aspects of Aseltine's (2010) research which showed positive teen and parent communication can have numerous effects, such as a delay in sexual initiation, less frequent sexual activity, and fewer sexual partners if and when a teen decides to become sexually active. This study supports the correlations between parent communication and teens' planned delay in their own sexual initiation.

Frequent, common conversations between teens and parents about peer pressure and participation in an abstinence program results in consistently high levels of planned abstinence in the near and more distant future. The more comfortable a teen feels discussing sensitive topics with their parents, the more strongly they plan to remain sexually abstinent.

Faith and Religious Practices Findings and Discussion

The second research question, "What is the relationship between teens' faith and religious practices and teens' sexual behaviors and attitudes," offers insight into the complex relationship between faith, religious practices, and sexuality.

Teens who pray more frequently are more likely to value abstinence at a higher level than teens who do not pray. The greater teens' personal faith plays a role in making major, life decisions, the greater their own belief they will be abstinent until they are

older. Regarding prayer and abstinence programs, teens who pray are not likely to have sex within the following year, regardless of participation in a program.

However, when comparing teens in an abstinence program and those in a control group, at every level of prayer frequency, teens in the program are less likely to have had sex and more likely to value abstinence than their control group counterparts. This supports the findings of Manlove (2008) that teens' religiosity seems to delay sexual initiation.

Burdette's (2009) research found attendance at religious services and family religiosity seemed to be correlated to later sexual initiation. Whereas this study found high attendance rates at religious services to correlate to positive behaviors and attitudes toward abstinence (see Table 8). When these teens were exposed to an abstinence program, they consistently supported an even wider range of healthy sexual behaviors and attitudes in support of abstinence. Participation in a youth group or participation in an abstinence program seems to correlate with positive effects; the combination of both is especially beneficial.

Parental Involvement Findings and Discussion

The third and final research question, "What is the relationship between parental involvement and teens' sexual behaviors and attitudes," offers insight into the vital role parents play in their teens' lives.

From the positive perspective, parents who make the effort to know their teens' friends correlate with teens with positive sexual attitudes. Teens with involved parents and in an abstinence program were likely to plan future abstinence. Teens with more involved mothers are more likely to plan abstinence than those with less involved

mothers, regardless of participation in a program. This supports the research of Manlove (2008) that found parents with positive, engaged, interactive relationships with their teens were more likely to have teens who abstained from sex until later.

From the negative perspective, despite exposure to an abstinence program, teens without involved parents made unhealthy sexual decisions. Also, lack of parental involvement consistently correlated to lack of teens' enthusiasm for abstinence. Without involved, knowing parents, the efforts of an abstinence program seem to be meaningless.

However, the combination of very involved and knowing parents and involvement in an abstinence program correlates with teens' healthy behaviors and attitudes towards abstinence.

Recommendations for Policy

Teens, parents, community and educational leaders, health educators and health professionals, and policy makers may consider policy recommendations to improve teens' sexual behaviors and attitudes which are based upon the context of this study.

1. A clear, attainable goal of abstinence programs should be teens remaining abstinent until high school graduation. At that time, teens may choose to select another attainable abstinence goal and should be better equipped to make sound health and personal decisions due to maturity, knowledge, and experience.
2. Parental components should be part of abstinence programs. Goals of such components should be encouraging parents to discuss topics relevant to teen sexuality, such as peer pressure, on a regular basis while increasing the comfort level of such communication.

3. Collaboration between abstinence programs and religious organizations should be encouraged. Since attendance at religious services, participation in a youth group, and an abstinence program correlate with healthy sexual behaviors and attitudes, building relationships and avenues of collaboration between teens' personal religious affiliations and their abstinence programs may be beneficial.
4. Abstinence programs should make parental involvement a priority. Through the use of new technologies, parents can stay informed and involved; educators must keep parents' perspectives in mind as they encourage involvement in meaningful and attainable ways.

Recommendations for Practice

Stakeholders may consider the following recommendations based upon this study:

1. Programs should promote abstinence until at least high school graduation as a primary goal; the benefits of abstinence beyond that stage should be included.
2. Educators should determine how to best implement teen-parent communication components into their specific programs. The teen, family, and community needs and strengths should be considered when developing such parental components.
3. Programs should include a parent education component to ensure parents know the content of teens' lessons and term definitions are consistent for clarity of parent-teen communication. According to a study by Brown, Steele, and Walsh-Childers (2002), parents frequently find it very difficult to provide accurate and clear information about sexuality to teens. The inclusion of parent education components in abstinence programs would provide several important benefits.

4. Educators should include time for personal reflection and prayer into their programs. Including into programs how personal faith may play a role in making decisions may also help support the efficacy of abstinence programs. Abstinence programs in public schools must ensure they follow state and local regulations and policies regarding the issues of religion and faith.

5. Educators and administrators should encourage and support parental involvement as integral to program success. Parents' needs and strengths should be considered as parental involvement components are tailored for specific programs.

Recommendations for Future Research

Based on the findings of this study, the following recommendations for future research are made:

1. Due to limited resources of time and money, the cost-effectiveness of programs would be important to study further. This may require the assessment of programs' long-term sustainability and effectiveness. Balancing the cost of effective programs compared to the societal costs of a lack of such programs in the areas of teen pregnancy and healthcare, is complex and crucial.
2. More qualitative studies evaluating abstinence programs would add to the abundance of quantitative studies in this area for a richer assessment of our nation's abstinence programs, their strengths, and their challenges.
3. Many studies of abstinence programs focus upon teens of color. Much of the research, including this study, provides insights into the experiences of Hispanic

and African-American teens. It may be interesting to compare and contrast the experiences of Caucasian and Asian teens with teens of other racial backgrounds.

4. This study examines data which was self-reported, not direct outcomes. For increased objectivity, future studies may consider direct outcomes, such as pregnancy or STD rates, as they relate to teens' personal life experiences. Also, since between 10 and 16% of participants, at baseline and follow-up respectively, have had sex, most have remained abstinent. With a limited population of teens who have had sexual intercourse included in this study, future studies may include more sexually active teens and older teens for different insight into teens' lives.

Conclusion

After conducting research for this study, it is the belief of this researcher that abstinence education can and does play a paramount role in the lives of teens. However, due to their own personal experiences, such as their communication with their parents, faith and religious practices, and parents' involvement in their lives, such education varies tremendously in its effectiveness. All stakeholders should value and understand the relationship between teens' personal experiences and the efficacy of educational programs in order to positively impact teens' lives. Through greater understanding of these relationships, programs can be more effective and teens' sexual lives will be healthier now and as they become adults.

These topics which pique interest and concern, teens and sex, should no longer be sources of concern and fear. We have abundant studies to help address issues of teen sexuality with sensitivity and competence. Now, there is one more to add to the cadre of research.

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Appendix

Table A1

ANOVA: Baseline, Dependent Variable: Parental Communication, Factor: Gender

		Sum of Squares	df	Mean Square	F	Sig.
3m Dating Behavior that is OK	Between Groups	16.300	1	16.300	13.825	.000
	Within Groups	1279.277	1085	1.179		
	Total	1295.577	1086			
3m How Father Feels About Sex	Between Groups	15.064	1	15.064	13.255	.000
	Within Groups	1193.258	1050	1.136		
	Total	1208.322	1051			
3m Reasons for Not Having Sex	Between Groups	25.149	1	25.149	16.655	.000
	Within Groups	1602.158	1061	1.510		
	Total	1627.308	1062			
3m Things that Happen to Teens Who Have Sex	Between Groups	28.380	1	28.380	19.585	.000
	Within Groups	1557.737	1075	1.449		
	Total	1586.117	1076			
3m Why Not Having Sex Is Important	Between Groups	27.549	1	27.549	19.918	.000
	Within Groups	1482.716	1072	1.383		
	Total	1510.264	1073			
3m How Your Body Grows and Changes	Between Groups	36.174	1	36.174	27.779	.000
	Within Groups	1407.688	1081	1.302		
	Total	1443.861	1082			
3m Peer Pressure	Between Groups	6.194	1	6.194	4.521	.034
	Within Groups	1460.573	1066	1.370		
	Total	1466.767	1067			

Table A2

Baseline Chi-Square Test for Peer Pressure and Wait Until Older Crosstab

				3 Months Peer Pressure				Total
TreatmentControl				.00	1.00	2.00	3.00	
.00	Wait Until Older	1.00	Count	86	39	50	58	233
			% w/in pp	50.9%	42.4%	53.8%	59.2%	51.5%
		2.00	Count	35	24	22	9	90
			% w/in pp	20.7%	26.1%	23.7%	9.2%	19.9%
		3.00	Count	30	23	15	21	89
			% w/in pp	17.8%	25.0%	16.1%	21.4%	19.7%
		4.00	Count	9	6	5	3	23
			% w/in pp	5.3%	6.5%	5.4%	3.1%	5.1%
		5.00	Count	9	0	1	7	17
			% w/in pp	5.3%	0.0%	1.1%	7.1%	3.8%
		Total	Count	169	92	93	98	452
			% w/in pp	100.0%	100.0%	100.0%	100.0%	100.0%
1.00	Wait Until Older	1.00	Count	129	46	46	66	287
			% w/in pp	46.2%	43.8%	47.4%	61.1%	48.7%
		2.00	Count	68	25	23	16	132
			% w/in pp	24.4%	23.8%	23.7%	14.8%	22.4%
		3.00	Count	48	28	15	17	108
			% w/in pp	17.2%	26.7%	15.5%	15.7%	18.3%
		4.00	Count	17	3	6	4	30
			% w/in pp	6.1%	2.9%	6.2%	3.7%	5.1%
		5.00	Count	17	3	7	5	32
			% w/in pp	6.1%	2.9%	7.2%	4.6%	5.4%
		Total	Count	279	105	97	108	589
			% w/in pp	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Wait Until Older	1.00	Count	215	85	96	124	520
			% w/in pp	48.0%	43.1%	50.5%	60.2%	50.0%
		2.00	Count	103	49	45	25	222
			% w/in pp	23.0%	24.9%	23.7%	12.1%	21.3%
		3.00	Count	78	51	30	38	197
			% w/in pp	17.4%	25.9%	15.8%	18.4%	18.9%
		4.00	Count	26	9	11	7	53
			% w/in pp	5.8%	4.6%	5.8%	3.4%	5.1%
		5.00	Count	26	3	8	12	49
			% w/in pp	5.8%	1.5%	4.2%	5.8%	4.7%
		Total	Count	448	197	190	206	1041
			% w/in pp	100.0%	100.0%	100.0%	100.0%	100.0%

Table A3

Follow-Up Chi-Square Test for Peer Pressure and Wait Until Older Crosstab

				3 Months Peer Pressure				Total
Program				.00	1.00	2.00	3.00	
.00	Wait	1.00	Count	47	27	23	28	125
			% w/in pp	46.1%	40.3%	34.8%	52.8%	43.4%
	Until	2.00	Count	16	13	14	11	54
			% w/in pp	15.7%	19.4%	21.2%	20.8%	18.8%
	Older	3.00	Count	23	17	21	8	69
			% w/in pp	22.5%	25.4%	31.8%	15.1%	24.0%
		4.00	Count	8	7	4	3	22
			% w/in pp	7.8%	10.4%	6.1%	5.7%	7.6%
		5.00	Count	8	3	4	3	18
			% w/in pp	7.8%	4.5%	6.1%	5.7%	6.3%
	Total		Count	102	67	66	53	288
			% w/in pp	100.0%	100.0%	100.0%	100.0%	100.0%
1.00	Wait	1.00	Count	83	28	39	43	193
			% w/in pp	43.7%	35.4%	54.2%	59.7%	46.7%
	Until	2.00	Count	30	27	14	14	85
			% w/in pp	15.8%	34.2%	19.4%	19.4%	20.6%
	Older	3.00	Count	51	14	15	11	91
			% w/in pp	26.8%	17.7%	20.8%	15.3%	22.0%
		4.00	Count	11	5	3	2	21
			% w/in pp	5.8%	6.3%	4.2%	2.8%	5.1%
		5.00	Count	15	5	1	2	23
			% w/in pp	7.9%	6.3%	1.4%	2.8%	5.6%
	Total		Count	190	79	72	72	413
			% w/in pp	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Wait	1.00	Count	130	55	62	71	318
			% w/in pp	44.5%	37.7%	44.9%	56.8%	45.4%
	Until	2.00	Count	46	40	28	25	139
			% w/in pp	15.8%	27.4%	20.3%	20.0%	19.8%
	Older	3.00	Count	74	31	36	19	160
			% w/in pp	25.3%	21.2%	26.1%	15.2%	22.8%
		4.00	Count	19	12	7	5	43
			% w/in pp	6.5%	8.2%	5.1%	4.0%	6.1%
		5.00	Count	23	8	5	5	41
			% w/in pp	7.9%	5.5%	3.6%	4.0%	5.8%
	Total		Count	292	146	138	125	701
			% w/in pp	100.0%	100.0%	100.0%	100.0%	100.0%

Table A4

Baseline Chi-Square Test for Peer Pressure and No Sex Until Marriage Crosstab

				3m Peer Pressure				
Treatment		Control		.00	1.00	2.00	3.00	Total
.00	No Sex Until Marr- iage	1.00	Count	67	32	40	47	186
			% w/in pp	39.9%	34.0%	42.1%	48.5%	41.0%
		2.00	Count	34	19	19	19	91
			% w/in pp	20.2%	20.2%	20.0%	19.6%	20.0%
		3.00	Count	30	24	19	12	85
			% w/in pp	17.9%	25.5%	20.0%	12.4%	18.7%
		4.00	Count	17	12	12	11	52
			% w/in pp	10.1%	12.8%	12.6%	11.3%	11.5%
	5.00	Count	20	7	5	8	40	
		% w/in pp	11.9%	7.4%	5.3%	8.2%	8.8%	
Total			Count	168	94	95	97	454
			% w/in pp	100.0%	100.0%	100.0%	100.0%	100.0%
1.0	No Sex Until Marr- iage	1.00	Count	125	52	37	55	269
			% w/in pp	43.7%	49.5%	37.8%	50.9%	45.1%
		2.00	Count	38	18	23	21	100
			% w/in pp	13.3%	17.1%	23.5%	19.4%	16.8%
		3.00	Count	53	14	17	18	102
			% w/in pp	18.5%	13.3%	17.3%	16.7%	17.1%
		4.00	Count	35	12	12	8	67
			% w/in pp	12.2%	11.4%	12.2%	7.4%	11.2%
	5.00	Count	35	9	9	6	59	
		% w/in pp	12.2%	8.6%	9.2%	5.6%	9.9%	
Total			Count	286	105	98	108	597
			% w/in pp	100.0%	100.0%	100.0%	100.0%	100.0%
Tot -al	No Sex Until Marr- iage	1.00	Count	192	84	77	102	455
			% w/in pp	42.3%	42.2%	39.9%	49.8%	43.3%
		2.00	Count	72	37	42	40	191
			% w/in pp	15.9%	18.6%	21.8%	19.5%	18.2%
		3.00	Count	83	38	36	30	187
			% w/in pp	18.3%	19.1%	18.7%	14.6%	17.8%
		4.00	Count	52	24	24	19	119
			% w/in pp	11.5%	12.1%	12.4%	9.3%	11.3%
	5.00	Count	55	16	14	14	99	
		% w/in pp	12.1%	8.0%	7.3%	6.8%	9.4%	
Total			Count	454	199	193	205	1051
				100.0%	100.0%	100.0%	100.0%	100.0%

Table A5

Follow-Up Chi-Square Test for Peer Pressure and No Sex Until Marriage Crosstab

				3 Months Peer Pressure				Total
Program				.00	1.00	2.00	3.00	
.00	No Sex Until Marriage	1.00	Count	33	19	23	21	96
			% w/in pp	32.7%	28.4%	34.3%	39.6%	33.3%
		2.00	Count	11	12	22	10	55
			% w/in pp	10.9%	17.9%	32.8%	18.9%	19.1%
		3.00	Count	25	10	7	7	49
			% w/in pp	24.8%	14.9%	10.4%	13.2%	17.0%
		4.00	Count	15	15	9	8	47
			% w/in pp	14.9%	22.4%	13.4%	15.1%	16.3%
		5.00	Count	17	11	6	7	41
			% w/in pp	16.8%	16.4%	9.0%	13.2%	14.2%
		Total	Count	101	67	67	53	288
			% w/in pp	100.0%	100.0%	100.0%	100.0%	100.0%
1.00	No Sex Until Marriage	1.00	Count	68	27	28	29	152
			% w/in pp	36.0%	32.5%	35.9%	39.7%	35.9%
		2.00	Count	29	18	21	21	89
			% w/in pp	15.3%	21.7%	26.9%	28.8%	21.0%
		3.00	Count	38	24	18	15	95
			% w/in pp	20.1%	28.9%	23.1%	20.5%	22.5%
		4.00	Count	28	9	6	3	46
			% w/in pp	14.8%	10.8%	7.7%	4.1%	10.9%
		5.00	Count	26	5	5	5	41
			% w/in pp	13.8%	6.0%	6.4%	6.8%	9.7%
		Total	Count	189	83	78	73	423
			% w/in pp	100.0%	100.0%	100.0%	100.0%	100.0%
Total	No Sex Until Marriage	1.00	Count	101	46	51	50	248
			% w/in pp	34.8%	30.7%	35.2%	39.7%	34.9%
		2.00	Count	40	30	43	31	144
			% w/in pp	13.8%	20.0%	29.7%	24.6%	20.3%
		3.00	Count	63	34	25	22	144
			% w/in pp	21.7%	22.7%	17.2%	17.5%	20.3%
		4.00	Count	43	24	15	11	93
			% w/in pp	14.8%	16.0%	10.3%	8.7%	13.1%
		5.00	Count	43	16	11	12	82
			% w/in pp	14.8%	10.7%	7.6%	9.5%	11.5%
		Total	Count	290	150	145	126	711
			% w/in pp	100.0%	100.0%	100.0%	100.0%	100.0%

Table A6

*Baseline Chi-Square Test for Ease of Communication and Abstain Through High School**Crosstab*

				Ease of Communication				Total
TreatmentControl				.00	1.00	2.00	3.00	
.00	Abstain thru HS	.00	Count	32	23	60	38	153
			% w/in Com	45.1%	28.4%	36.8%	31.9%	35.3%
		1.00	Count	39	58	103	81	281
			% w/in Com	54.9%	71.6%	63.2%	68.1%	64.7%
	Total		Count	71	81	163	119	434
			% w/in Com	100.0%	100.0%	100.0%	100.0%	100.0%
1.00	Abstain thru HS	.00	Count	45	39	67	33	184
			% w/in Com	40.2%	33.3%	29.6%	27.3%	31.9%
		1.00	Count	67	78	159	88	392
			% w/in Com	59.8%	66.7%	70.4%	72.7%	68.1%
	Total		Count	112	117	226	121	576
			% w/in Com	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Abstain thru HS	.00	Count	77	62	127	71	337
			% w/in Com	42.1%	31.3%	32.6%	29.6%	33.4%
		1.00	Count	106	136	262	169	673
			% w/in Com	57.9%	68.7%	67.4%	70.4%	66.6%
	Total		Count	183	198	389	240	1010
			% w/in Com	100.0%	100.0%	100.0%	100.0%	100.0%

Table A7

*Follow-Up Chi-Square Test for Ease of Communication and Abstain through High**School Crosstab*

				Ease of Communication				Total
Program				.00	1.00	2.00	3.00	
.00	Abstain through High School	.00	Count	25	33	31	19	108
			% w/in com	52.1%	52.4%	30.1%	35.2%	40.3%
	Total	1.00	Count	23	30	72	35	160
			% w/in com	47.9%	47.6%	69.9%	64.8%	59.7%
	Total		Count	48	63	103	54	268
			% w/in com	100.0%	100.0%	100.0%	100.0%	100.0%
1.00	Abstain through High School	.00	Count	45	19	43	24	131
			% w/in com	47.9%	29.2%	28.5%	29.3%	33.4%
	Total	1.00	Count	49	46	108	58	261
			% w/in com	52.1%	70.8%	71.5%	70.7%	66.6%
	Total		Count	94	65	151	82	392
			% w/in com	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Abstain through High School	.00	Count	70	52	74	43	239
			% w/in com	49.3%	40.6%	29.1%	31.6%	36.2%
	Total	1.00	Count	72	76	180	93	421
			% w/in com	50.7%	59.4%	70.9%	68.4%	63.8%
	Total		Count	142	128	254	136	660
			% w/in com	100.0%	100.0%	100.0%	100.0%	100.0%

Table A8

*Univariate ANOVA: Follow-Up Descriptive Statistics**Prayer Frequency and Ever Had Sex*

Dependent Variable: Sex Ever				
Program	Pray Alone	Mean	Std. Deviation	N
.00	1.00	.2286	.42294	70
	2.00	.1509	.35969	106
	3.00	.0769	.27735	13
	4.00	.2727	.45584	22
	5.00	.0952	.30079	21
	6.00	.1273	.33635	55
	Total	.1672	.37385	287
1.00	1.00	.2444	.43216	90
	2.00	.1507	.35897	146
	3.00	.0625	.25000	16
	4.00	.1923	.40192	26
	5.00	.0000	.00000	24
	6.00	.0891	.28632	101
	Total	.1464	.35395	403
Total	1.00	.2375	.42689	160
	2.00	.1508	.35856	252
	3.00	.0690	.25788	29
	4.00	.2292	.42474	48
	5.00	.0444	.20841	45
	6.00	.1026	.30437	156
	Total	.1551	.36224	690

Table A9

*Univariate ANOVA: Follow-Up Descriptive Statistics**Prayer Frequency and Sex in Last 6 Months*

Dependent Variable: Sex in Last 6 Months				
Program	Pray Alone	Mean	Std. Deviation	N
.00	1.00	.1268	.33507	71
	2.00	.1028	.30513	107
	3.00	.0769	.27735	13
	4.00	.1304	.34435	23
	5.00	.0476	.21822	21
	6.00	.0545	.22918	55
	Total	.0966	.29586	290
1.00	1.00	.1319	.34022	91
	2.00	.1111	.31537	144
	3.00	.1250	.34157	16
	4.00	.2963	.46532	27
	5.00	.0400	.20000	25
	6.00	.0396	.19600	101
	Total	.1064	.30878	404
Total	1.00	.1296	.33694	162
	2.00	.1076	.31046	251
	3.00	.1034	.30993	29
	4.00	.2200	.41845	50
	5.00	.0435	.20618	46
	6.00	.0449	.20769	156
	Total	.1023	.30327	694

Table A10

Univariate ANOVA: Follow-Up Descriptive Statistics Prayer Frequency and

Sex in 12 Months

Dependent Variable: Sex in 12 Months				
Program	Pray Alone	Mean	Std. Deviation	N
.00	1.00	3.6143	1.46745	70
	2.00	3.8318	1.35623	107
	3.00	3.6154	1.26085	13
	4.00	3.4783	1.41001	23
	5.00	4.3810	1.11697	21
	6.00	4.3636	1.07778	55
	Total	3.8824	1.34629	289
1.00	1.00	3.8913	1.23552	92
	2.00	3.7500	1.39910	148
	3.00	3.4118	1.46026	17
	4.00	3.7037	1.35348	27
	5.00	4.2400	1.20000	25
	6.00	4.3465	1.14399	101
	Total	3.9415	1.31253	410
Total	1.00	3.7716	1.34337	162
	2.00	3.7843	1.37917	255
	3.00	3.5000	1.35824	30
	4.00	3.6000	1.37024	50
	5.00	4.3043	1.15219	46
	6.00	4.3526	1.11763	156
	Total	3.9170	1.32595	699

Table A11

Univariate ANOVA: Follow-Up Descriptive Statistics Prayer Frequency and

Abstain Through High School

Dependent Variable: Abstain Through High School				
Program	Pray Alone	Mean	Std. Deviation	N
.00	1.00	.4219	.49776	64
	2.00	.6058	.49105	104
	3.00	.9167	.28868	12
	4.00	.6818	.47673	22
	5.00	.7000	.47016	20
	6.00	.6800	.47121	50
	Total	.6029	.49019	272
1.00	1.00	.5465	.50075	86
	2.00	.6138	.48857	145
	3.00	.5000	.51450	18
	4.00	.6400	.48990	25
	5.00	.7917	.41485	24
	6.00	.7895	.40985	95
	Total	.6489	.47794	393
Total	1.00	.4933	.50163	150
	2.00	.6104	.48863	249
	3.00	.6667	.47946	30
	4.00	.6596	.47898	47
	5.00	.7500	.43802	44
	6.00	.7517	.43351	145
	Total	.6301	.48315	665

Table A12

Univariate ANOVA: Follow-Up Descriptive Statistics Prayer Frequency and

Wait Until Older

Dependent Variable: Wait Until Older				
Program	Pray Alone	Mean	Std. Deviation	N
.00	1.00	2.6143	1.32198	70
	2.00	2.1415	1.15006	106
	3.00	2.0769	1.03775	13
	4.00	2.3636	1.36436	22
	5.00	1.7143	.95618	21
	6.00	1.6364	1.06046	55
	Total	2.1429	1.21923	287
1.00	1.00	2.2637	1.25464	91
	2.00	2.1565	1.20331	147
	3.00	2.1765	1.28624	17
	4.00	2.2308	1.17670	26
	5.00	1.4583	.77903	24
	6.00	1.5588	.94997	102
	Total	1.9951	1.17233	407
Total	1.00	2.4161	1.29209	161
	2.00	2.1502	1.17900	253
	3.00	2.1333	1.16658	30
	4.00	2.2917	1.25407	48
	5.00	1.5778	.86573	45
	6.00	1.5860	.98739	157
	Total	2.0562	1.19330	694

Table A13

Univariate ANOVA: Follow-Up Descriptive Statistics Prayer Frequency and

No Sex Until Marriage

Dependent Variable: No Sex Until Marriage				
Program	Pray Alone	Mean	Std. Deviation	N
.00	1.00	3.1159	1.46062	69
	2.00	2.5566	1.40801	106
	3.00	2.7692	1.48064	13
	4.00	2.7826	1.53613	23
	5.00	2.2857	1.23056	21
	6.00	1.8727	1.12307	55
	Total	2.5679	1.42459	287
1.00	1.00	2.8261	1.37967	92
	2.00	2.5235	1.39295	149
	3.00	2.4444	1.29352	18
	4.00	2.3846	1.13409	26
	5.00	1.8800	.92736	25
	6.00	1.8627	1.16924	102
	Total	2.3762	1.33700	412
Total	1.00	2.9503	1.41775	161
	2.00	2.5373	1.39656	255
	3.00	2.5806	1.36074	31
	4.00	2.5714	1.33853	49
	5.00	2.0652	1.08325	46
	6.00	1.8662	1.14967	157
	Total	2.4549	1.37587	699

Table A14

Univariate ANOVA: Follow-Up Descriptive Statistics Prayer Frequency and Abstinence Is Effective Against STDs and Pregnancy

Dependent Variable: Abstinence Only Effective				
Program	Pray Alone	Mean	Std. Deviation	N
.00	1.00	2.1739	1.16261	69
	2.00	2.0583	1.04624	103
	3.00	2.2308	1.01274	13
	4.00	2.2500	1.20852	20
	5.00	1.8889	1.23140	18
	6.00	1.9444	1.10602	54
	Total	2.0758	1.10566	277
1.00	1.00	2.2857	1.14781	91
	2.00	1.8639	.96967	147
	3.00	2.2941	1.15999	17
	4.00	2.3077	1.15825	26
	5.00	1.6800	1.02956	25
	6.00	1.7475	1.09118	99
	Total	1.9654	1.08491	405
Total	1.00	2.2375	1.15191	160
	2.00	1.9440	1.00444	250
	3.00	2.2667	1.08066	30
	4.00	2.2826	1.16739	46
	5.00	1.7674	1.10921	43
	6.00	1.8170	1.09687	153
	Total	2.0103	1.09392	682

Table A15

Univariate ANOVA: Follow-Up Descriptive Statistics Faith Importance and Ever Had Sex

Dependent Variable: Sex Ever				
Program	Faith Importance	Mean	Std. Deviation	N
.00	1.00	.2381	.43108	42
	2.00	.2222	.41964	54
	3.00	.1569	.36547	102
	4.00	.0476	.21554	42
	5.00	.1707	.38095	41
	Total	.1673	.37387	281
1.00	1.00	.2203	.41803	59
	2.00	.1622	.37112	74
	3.00	.1121	.31704	107
	4.00	.1139	.31975	79
	5.00	.1233	.33104	73
	Total	.1403	.34775	392
Total	1.00	.2277	.42145	101
	2.00	.1875	.39185	128
	3.00	.1340	.34144	209
	4.00	.0909	.28868	121
	5.00	.1404	.34888	114
	Total	.1516	.35886	673

Table A16

Univariate ANOVA: Follow-Up Descriptive Statistics Faith Importance and

Sex in 12 Months

Dependent Variable: Sex in 12 Months				
Program	Faith Importance	Mean	Std. Deviation	N
.00	1.00	3.3023	1.52026	43
	2.00	3.7091	1.39673	55
	3.00	3.8922	1.27355	102
	4.00	4.3488	1.11021	43
	5.00	4.2195	1.33252	41
	Total	3.8838	1.35444	284
1.00	1.00	3.7833	1.30308	60
	2.00	3.7162	1.39981	74
	3.00	3.9633	1.26876	109
	4.00	4.1125	1.35939	80
	5.00	4.2973	1.00314	74
	Total	3.9824	1.28401	397
Total	1.00	3.5825	1.41091	103
	2.00	3.7132	1.39303	129
	3.00	3.9289	1.26855	211
	4.00	4.1951	1.27818	123
	5.00	4.2696	1.12641	115
	Total	3.9413	1.31376	681

Table A17

Univariate ANOVA: Follow-Up Descriptive Statistics Faith Importance and

Abstain Through High School

Dependent Variable: Abstain Through High School				
Program	Faith Importance	Mean	Std. Deviation	N
.00	1.00	.3846	.49286	39
	2.00	.5000	.50469	54
	3.00	.6632	.47514	95
	4.00	.7750	.42290	40
	5.00	.6579	.48078	38
	Total	.6053	.48972	266
1.00	1.00	.5614	.50063	57
	2.00	.5833	.49647	72
	3.00	.6058	.49105	104
	4.00	.7692	.42405	78
	5.00	.8143	.39168	70
	Total	.6667	.47202	381
Total	1.00	.4896	.50252	96
	2.00	.5476	.49971	126
	3.00	.6332	.48316	199
	4.00	.7712	.42186	118
	5.00	.7593	.42953	108
	Total	.6414	.47995	647

Table A18

Univariate ANOVA: Follow-Up Descriptive Statistics Faith Importance and Wait Until Older

Dependent Variable: Wait Until Older				
Program	Faith Importance	Mean	Std. Deviation	N
.00	1.00	3.0238	1.33413	42
	2.00	2.2857	1.18650	56
	3.00	2.0000	1.04881	101
	4.00	1.8293	1.18115	41
	5.00	1.6829	1.17130	41
	Total	2.1388	1.22414	281
1.00	1.00	2.4667	1.35880	60
	2.00	2.1333	1.09462	75
	3.00	2.0642	1.19625	109
	4.00	1.7722	1.04941	79
	5.00	1.5616	.92776	73
	Total	1.9874	1.16155	396
Total	1.00	2.6961	1.37004	102
	2.00	2.1985	1.13286	131
	3.00	2.0333	1.12553	210
	4.00	1.7917	1.09157	120
	5.00	1.6053	1.01857	114
	Total	2.0502	1.18938	677

Table A19

Univariate ANOVA: Follow-Up Descriptive Statistics Faith Importance and Abstain Until Marriage

Dependent Variable: No Sex Until Marriage				
Program	Faith Importance	Mean	Std. Deviation	N
.00	1.00	3.2143	1.57008	42
	2.00	2.8929	1.47314	56
	3.00	2.5294	1.22439	102
	4.00	1.9762	1.47314	42
	5.00	2.1000	1.33589	40
	Total	2.5603	1.43355	282
1.00	1.00	3.0000	1.48438	60
	2.00	2.5395	1.34105	76
	3.00	2.5556	1.30659	108
	4.00	2.0253	1.19802	79
	5.00	1.6800	1.02878	75
	Total	2.3492	1.33963	398
Total	1.00	3.0882	1.51627	102
	2.00	2.6894	1.40410	132
	3.00	2.5429	1.26437	210
	4.00	2.0083	1.29419	121
	5.00	1.8261	1.15668	115
	Total	2.4368	1.38224	680

Table A20

Univariate ANOVA: Follow-Up Descriptive Statistics Faith Importance and Abstinence Effective Against STDs, etc.

Dependent Variable: Abstinence Effective				
Faith				
Program	Importance	Mean	Std. Deviation	N
.00	1.00	2.2439	1.13535	41
	2.00	2.0000	.89020	54
	3.00	2.1031	1.15004	97
	4.00	2.0714	1.09082	42
	5.00	1.9512	1.28357	41
	Total	2.0764	1.10967	275
1.00	1.00	2.5085	1.20877	59
	2.00	2.0676	1.01132	74
	3.00	1.9439	1.08011	107
	4.00	1.6538	.88018	78
	5.00	1.7838	1.08880	74
	Total	1.9643	1.08170	392
Total	1.00	2.4000	1.18065	100
	2.00	2.0391	.95902	128
	3.00	2.0196	1.11400	204
	4.00	1.8000	.97533	120
	5.00	1.8435	1.15918	115
	Total	2.0105	1.09389	667

Table A21

*Univariate ANOVA: Follow-Up Descriptive Statistics for Religious Services**Attendance and Sex in 12 Months*

Dependent Variable: Sex in 12 Months				
Program	Services 1 yr	Mean	Std. Deviation	N
.00	1.00	3.6328	1.46815	128
	2.00	3.9036	1.31237	83
	3.00	3.7692	1.42325	13
	4.00	4.0000	1.23443	22
	5.00	4.1053	1.24252	19
	6.00	4.6250	1.01350	24
	Total	3.8581	1.37586	289
1.00	1.00	3.9545	1.24588	176
	2.00	3.8803	1.34653	117
	3.00	3.7500	1.45912	32
	4.00	3.1875	1.47054	16
	5.00	4.2593	1.22765	27
	6.00	4.4211	1.08133	38
	Total	3.9507	1.30054	406
Total	1.00	3.8191	1.35102	304
	2.00	3.8900	1.32919	200
	3.00	3.7556	1.43266	45
	4.00	3.6579	1.38088	38
	5.00	4.1957	1.22238	46
	6.00	4.5000	1.05193	62
	Total	3.9122	1.33218	695

Table A22

*Univariate ANOVA: Follow-Up Descriptive Statistics for Religious Services**Attendance and Abstinence Through High School*

Dependent Variable: Abstain Through High School				
Program	Services 1 yr	Mean	Std. Deviation	N
.00	1.00	.5366	.50070	123
	2.00	.5844	.49605	77
	3.00	.8462	.37553	13
	4.00	.7000	.47016	20
	5.00	.7222	.46089	18
	6.00	.7273	.45584	22
	Total	.6044	.48988	273
1.00	1.00	.6000	.49135	170
	2.00	.6161	.48853	112
	3.00	.7586	.43549	29
	4.00	.6667	.48795	15
	5.00	.7308	.45234	26
	6.00	.8919	.31480	37
	Total	.6555	.47581	389
Total	1.00	.5734	.49543	293
	2.00	.6032	.49054	189
	3.00	.7857	.41530	42
	4.00	.6857	.47101	35
	5.00	.7273	.45051	44
	6.00	.8305	.37841	59
	Total	.6344	.48195	662

Table A23

*Univariate ANOVA: Follow-Up Descriptive Statistics for Religious Services**Attendance and Wait Until Older*

Dependent Variable: Wait Until Older				
Program	Services 1 yr	Mean	Std. Deviation	N
.00	1.00	2.3359	1.32972	128
	2.00	2.2099	1.18021	81
	3.00	2.0769	1.11516	13
	4.00	1.9545	1.17422	22
	5.00	1.7895	.97633	19
	6.00	1.7083	1.16018	24
	Total	2.1707	1.24124	287
1.00	1.00	2.0795	1.24874	176
	2.00	2.1207	1.12795	116
	3.00	2.0938	1.14608	32
	4.00	1.8667	1.12546	15
	5.00	1.6296	.88353	27
	6.00	1.4865	.93159	37
	Total	2.0000	1.16542	403
Total	1.00	2.1875	1.28755	304
	2.00	2.1574	1.14758	197
	3.00	2.0889	1.12457	45
	4.00	1.9189	1.13965	37
	5.00	1.6957	.91578	46
	6.00	1.5738	1.02403	61
	Total	2.0710	1.19961	690

Table A24

*Univariate ANOVA: Follow-Up Descriptive Statistics for Religious Services**Attendance and No Sex Until Marriage*

Dependent Variable: No Sex Until Marriage				
Program	Services 1 yr	Mean	Std. Deviation	N
.00	1.00	2.7874	1.57172	127
	2.00	2.6098	1.27421	82
	3.00	2.8462	1.14354	13
	4.00	2.4091	1.40269	22
	5.00	2.2105	1.08418	19
	6.00	1.4583	.97709	24
	Total	2.5610	1.42736	287
1.00	1.00	2.6705	1.42003	176
	2.00	2.4492	1.24446	118
	3.00	2.0000	.96609	31
	4.00	2.2500	1.18322	16
	5.00	1.7143	1.15011	28
	6.00	1.6316	1.14894	38
	Total	2.3759	1.33306	407
Total	1.00	2.7195	1.48408	303
	2.00	2.5150	1.25605	200
	3.00	2.2500	1.08102	44
	4.00	2.3421	1.30024	38
	5.00	1.9149	1.13884	47
	6.00	1.5645	1.08069	62
	Total	2.4524	1.37486	694

Table A25

Univariate ANOVA: Follow-Up Descriptive Statistics for Youth Group

Participation and Wait Until Older

Dependent Variable: Wait Until Older				
Program	Youth Group	Mean	Std. Deviation	N
.00	.00	2.2161	1.23850	199
	1.00	1.7458	1.02710	59
	Total	2.1085	1.20789	258
1.00	.00	2.0154	1.18214	260
	1.00	1.8462	1.05328	91
	Total	1.9715	1.15104	351
Total	.00	2.1024	1.20967	459
	1.00	1.8067	1.04076	150
	Total	2.0296	1.17643	609

Table A26

*Univariate ANOVA: Follow-Up Descriptive Statistics for Youth Group
Participation and No Sex Until Marriage*

Dependent Variable: No Sex Until Marriage				
Program	Youth Group	Mean	Std. Deviation	N
.00	.00	2.6919	1.46396	198
	1.00	2.1167	1.26346	60
	Total	2.5581	1.43826	258
1.00	.00	2.4504	1.35168	262
	1.00	2.0000	1.22250	92
	Total	2.3333	1.33239	354
Total	.00	2.5543	1.40466	460
	1.00	2.0461	1.23599	152
	Total	2.4281	1.38133	612

Table A27

Univariate ANOVA: Follow-Up Descriptive Statistics for Religious

Training Decision and Ever Had Sex

Dependent Variable: Sex Ever				
Program	Educ. Train	Mean	Std. Deviation	N
.00	1.00	.0727	.26208	55
	2.00	.3750	.50000	16
	3.00	.1746	.38268	63
	4.00	.1111	.31873	36
	5.00	.2193	.41560	114
	Total	.1761	.38154	284
1.00	1.00	.0778	.26932	90
	2.00	.2353	.43056	34
	3.00	.1161	.32175	112
	4.00	.1071	.31209	56
	5.00	.2149	.41244	121
	Total	.1453	.35281	413
Total	1.00	.0759	.26570	145
	2.00	.2800	.45356	50
	3.00	.1371	.34499	175
	4.00	.1087	.31296	92
	5.00	.2170	.41310	235
	Total	.1578	.36483	697

Table A28

Univariate ANOVA: Follow-Up Descriptive Statistics for Religious

Training Decision and Sex in Last 6 Months

Dependent Variable: Sex Last 6 Months				
Program	Educ. Train	Mean	Std. Deviation	N
.00	1.00	.0536	.22721	56
	2.00	.2353	.43724	17
	3.00	.0952	.29590	63
	4.00	.1111	.31873	36
	5.00	.1121	.31682	116
	Total	.1042	.30601	288
1.00	1.00	.0337	.18150	89
	2.00	.2941	.46250	34
	3.00	.0877	.28414	114
	4.00	.0556	.23121	54
	5.00	.1639	.37174	122
	Total	.1114	.31498	413
Total	1.00	.0414	.19986	145
	2.00	.2745	.45071	51
	3.00	.0904	.28756	177
	4.00	.0778	.26932	90
	5.00	.1387	.34631	238
	Total	.1084	.31113	701

Table A29

*Univariate ANOVA: Follow-Up Descriptive Statistics for Religious
Training Decision and Sex in 12 Months*

Dependent Variable: Sex in 12 Months				
Program	Educ. Train	Mean	Std. Deviation	N
.00	1.00	4.0179	1.35501	56
	2.00	3.2353	1.56243	17
	3.00	3.9683	1.25683	63
	4.00	4.2500	1.10518	36
	5.00	3.7155	1.38191	116
	Total	3.8681	1.34214	288
1.00	1.00	4.2778	1.14193	90
	2.00	3.7353	1.56300	34
	3.00	3.9123	1.30052	114
	4.00	3.7857	1.27514	56
	5.00	3.7440	1.41367	125
	Total	3.9093	1.33283	419
Total	1.00	4.1781	1.23000	146
	2.00	3.5686	1.56531	51
	3.00	3.9322	1.28184	177
	4.00	3.9674	1.22655	92
	5.00	3.7303	1.39563	241
	Total	3.8925	1.33584	707

Table A30

Univariate ANOVA: Follow-Up Descriptive Statistics for Religious

Training Decision and Abstain Through High School

Dependent Variable: Abstain Through High School				
Program	Educ. Train	Mean	Std. Deviation	N
.00	1.00	.7308	.44789	52
	2.00	.5333	.51640	15
	3.00	.6500	.48099	60
	4.00	.8235	.38695	34
	5.00	.4771	.50178	109
	Total	.6111	.48840	270
1.00	1.00	.7262	.44859	84
	2.00	.8182	.39167	33
	3.00	.6000	.49214	110
	4.00	.6786	.47125	56
	5.00	.5763	.49626	118
	Total	.6484	.47807	401
Total	1.00	.7279	.44667	136
	2.00	.7292	.44909	48
	3.00	.6176	.48740	170
	4.00	.7333	.44469	90
	5.00	.5286	.50028	227
	Total	.6334	.48224	671

Table A31

Univariate ANOVA: Follow-Up Descriptive Statistics for Religious

Training Decision and Wait Until Older

Dependent Variable: Wait Until Older				
Program	Educ. Train	Mean	Std. Deviation	N
.00	1.00	1.8929	1.09010	56
	2.00	1.9412	1.14404	17
	3.00	2.1452	1.17133	62
	4.00	1.8611	1.26836	36
	5.00	2.3739	1.28049	115
	Total	2.1399	1.22318	286
1.00	1.00	1.8989	1.09798	89
	2.00	1.8529	1.20937	34
	3.00	2.0357	1.19253	112
	4.00	1.7818	1.04865	55
	5.00	2.2419	1.24529	124
	Total	2.0193	1.17875	414
Total	1.00	1.8966	1.09115	145
	2.00	1.8824	1.17724	51
	3.00	2.0747	1.18280	174
	4.00	1.8132	1.13443	91
	5.00	2.3054	1.26142	239
	Total	2.0686	1.19770	700

Table A32

*Univariate ANOVA: Follow-Up Descriptive Statistics for Religious**Training Decision and Abstain Until Marriage*

Dependent Variable: No Sex Until Marriage				
Program	Educ. Train	Mean	Std. Deviation	N
.00	1.00	2.5536	1.36074	56
	2.00	2.1250	1.31022	16
	3.00	2.4921	1.26839	63
	4.00	2.3514	1.41845	37
	5.00	2.7565	1.55367	115
	Total	2.5714	1.42932	287
1.00	1.00	1.8315	1.16029	89
	2.00	2.4118	1.35104	34
	3.00	2.3246	1.24443	114
	4.00	2.4310	1.25813	58
	5.00	2.7143	1.44143	126
	Total	2.3587	1.33170	421
Total	1.00	2.1103	1.28624	145
	2.00	2.3200	1.33156	50
	3.00	2.3842	1.25199	177
	4.00	2.4000	1.31602	95
	5.00	2.7344	1.49305	241
	Total	2.4449	1.37509	708

Table A33

ANOVA: Baseline, Dependent Variable: Parental Involvement, Factor: Gender

		Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Mom Help HW	Between Groups	1267.825	1	1267.825	5.281	.022
	Within Groups	251832.942	1049	240.070		
	Total	253100.767	1050			
Mom Talk Life	Between Groups	3.492	1	3.492	6.433	.011
	Within Groups	561.345	1034	.543		
	Total	564.837	1035			
Dad Talk School	Between Groups	11.545	1	11.545	19.880	.000
	Within Groups	574.330	989	.581		
	Total	585.875	990			
Dad Talk Life	Between Groups	28.479	1	28.479	47.005	.000
	Within Groups	591.936	977	.606		
	Total	620.415	978			
Dad Go School Programs	Between Groups	3531.797	1	3531.797	5.061	.025
	Within Groups	637088.360	913	697.797		
	Total	640620.157	914			

Table A34

Baseline Chi-Square Test for Parents Know Friends and Wait Until Marriage Crosstab

TreatmentControl				Parents Know Friends			Total
				1.00	2.00	3.00	
.00	No Sex Marriage	1.00	Count	15	76	98	189
			% within Know Friends	.3	.4	.5	.4
		2.00	Count	7	43	42	92
			% within Know Friends	.2	.2	.2	.2
		3.00	Count	9	47	29	85
			% within Know Friends	.2	.2	.1	.2
		4.00	Count	3	21	28	52
			% within Know Friends	.1	.1	.1	.1
		5.00	Count	9	19	12	40
			% within Know Friends	.2	.1	.1	.1
		Total	Count	43	206	209	458
			% within Know Friends	1.0	1.0	1.0	1.0
1.00	No Sex Marriage	1.00	Count	29	118	127	274
			% within Know Friends	.4	.4	.5	.5
		2.00	Count	10	63	26	99
			% within Know Friends	.1	.2	.1	.2
		3.00	Count	17	47	36	100
			% within Know Friends	.2	.2	.2	.2
		4.00	Count	11	35	21	67
			% within Know Friends	.1	.1	.1	.1
		5.00	Count	13	22	23	58
			% within Know Friends	.2	.1	.1	.1
		Total	Count	80	285	233	598
			% within Know Friends	1.0	1.0	1.0	1.0
Total	No Sex Marriage	1.00	Count	44	194	225	463
			% within Know Friends	.4	.4	.5	.4
		2.00	Count	17	106	68	191
			% within Know Friends	.1	.2	.2	.2
		3.00	Count	26	94	65	185
			% within Know Friends	.2	.2	.1	.2
		4.00	Count	14	56	49	119
			% within Know Friends	.1	.1	.1	.1
		5.00	Count	22	41	35	98
			% within Know Friends	.2	.1	.1	.1
		Total	Count	123	491	442	1056
			% within Know Friends	1.0	1.0	1.0	1.0

Table A35

Follow-Up Chi-Square for Parents Know Friends and Wait Until Marriage Crosstab

				Parents Know Friends			Total
Program				1.00	2.00	3.00	
.00	No Sex	1.00	Count	11	53	33	97
			% within know friends	.3	.3	.4	.3
	Until Marriage	2.00	Count	6	33	16	55
			% within know friends	.1	.2	.2	.2
		3.00	Count	8	28	16	52
			% within know friends	.2	.2	.2	.2
		4.00	Count	7	31	9	47
			% within know friends	.2	.2	.1	.2
		5.00	Count	10	14	15	39
			% within know friends	.2	.1	.2	.1
	Total		Count	42	159	89	290
			% within know friends	1.0	1.0	1.0	1.0
1.00	No Sex	1.00	Count	15	67	81	163
			% within know friends	.2	.3	.5	.4
	Until Marriage	2.00	Count	9	55	26	90
			% within know friends	.1	.3	.2	.2
		3.00	Count	20	53	25	98
			% within know friends	.3	.2	.2	.2
		4.00	Count	10	24	12	46
			% within know friends	.2	.1	.1	.1
		5.00	Count	9	15	16	40
			% within know friends	.1	.1	.1	.1
	Total		Count	63	214	160	437
			% within know friends	1.0	1.0	1.0	1.0
Total	No Sex	1.00	Count	26	120	114	260
			% within know friends	.2	.3	.5	.4
	Until Marriage	2.00	Count	15	88	42	145
			% within know friends	.1	.2	.2	.2
		3.00	Count	28	81	41	150
			% within know friends	.3	.2	.2	.2
		4.00	Count	17	55	21	93
			% within know friends	.2	.1	.1	.1
		5.00	Count	19	29	31	79
			% within know friends	.2	.1	.1	.1
	Total		Count	105	373	249	727
			% within know friends	1.0	1.0	1.0	1.0

Table A36

Baseline Chi-Square Test for Parents Know Friends and Wait Until Older Crosstab

TreatmentControl				Parents Know Friends			Total
				1.00	2.00	3.00	
.00	Wait	1.00	Count	21	101	115	237
			% within Know Friends	.5	.5	.5	.5
	Older	2.00	Count	9	44	37	90
			% within Know Friends	.2	.2	.2	.2
		3.00	Count	7	42	37	86
			% within Know Friends	.2	.2	.2	.2
		4.00	Count	0	11	14	25
			% within Know Friends	.0	.1	.1	.1
		5.00	Count	6	6	7	19
			% within Know Friends	.1	.0	.0	.0
	Total		Count	43	204	210	457
			% within Know Friends	1.0	1.0	1.0	1.0
1.00	Wait	1.00	Count	34	126	128	288
			% within Know Friends	.4	.4	.6	.5
	Older	2.00	Count	13	80	42	135
			% within Know Friends	.2	.3	.2	.2
		3.00	Count	15	59	31	105
			% within Know Friends	.2	.2	.1	.2
		4.00	Count	8	13	11	32
			% within Know Friends	.1	.0	.0	.1
		5.00	Count	7	9	14	30
			% within Know Friends	.1	.0	.1	.1
	Total		Count	77	287	226	590
			% within Know Friends	1.0	1.0	1.0	1.0
Total	Wait	1.00	Count	55	227	243	525
			% within Know Friends	.5	.5	.6	.5
	Older	2.00	Count	22	124	79	225
			% within Know Friends	.2	.3	.2	.2
		3.00	Count	22	101	68	191
			% within Know Friends	.2	.2	.2	.2
		4.00	Count	8	24	25	57
			% within Know Friends	.1	.0	.1	.1
		5.00	Count	13	15	21	49
			% within Know Friends	.1	.0	.0	.0
	Total		Count	120	491	436	1047
			% within Know Friends	1.0	1.0	1.0	1.0

Table A37

Follow-Up Chi-Square Test for Parents Know Friends and Wait Until Older Crosstab

Program				Parents Know Friends			Total
				1.00	2.00	3.00	
.00	Wait	1.00	Count	15	65	41	121
			% within Know Friends	.4	.4	.5	.4
	Older	2.00	Count	7	31	15	53
			% within Know Friends	.2	.2	.2	.2
		3.00	Count	10	41	24	75
			% within Know Friends	.2	.3	.3	.3
		4.00	Count	2	12	8	22
			% within Know Friends	.0	.1	.1	.1
		5.00	Count	7	9	2	18
			% within Know Friends	.2	.1	.0	.1
	Total		Count	41	158	90	289
			% within Know Friends	1.0	1.0	1.0	1.0
1.00	Wait	1.00	Count	20	99	82	201
			% within Know Friends	.3	.5	.5	.5
	Older	2.00	Count	9	43	32	84
			% within Know Friends	.1	.2	.2	.2
		3.00	Count	23	41	28	92
			% within Know Friends	.4	.2	.2	.2
		4.00	Count	4	13	5	22
			% within Know Friends	.1	.1	.0	.1
		5.00	Count	5	8	11	24
			% within Know Friends	.1	.0	.1	.1
	Total		Count	61	204	158	423
			% within Know Friends	1.0	1.0	1.0	1.0
Total	Wait	1.00	Count	35	164	123	322
			% within Know Friends	.3	.5	.5	.5
	Older	2.00	Count	16	74	47	137
			% within Know Friends	.2	.2	.2	.2
		3.00	Count	33	82	52	167
			% within Know Friends	.3	.2	.2	.2
		4.00	Count	6	25	13	44
			% within Know Friends	.1	.1	.1	.1
		5.00	Count	12	17	13	42
			% within Know Friends	.1	.0	.1	.1
	Total		Count	102	362	248	712
			% within Know Friends	1.0	1.0	1.0	1.0

Table A38

*Baseline Chi-Square for Mother's Involvement in School and Wait Until Marriage**Crosstab*

				Mom Knows School				Total
TreatmentControl				1.00	2.00	3.00	97.00	
.00	No	1.00	Count	24	51	85	11	171
	Sex		% w/in Mom	.3	.4	.4	.4	.4
	Marr- iage	2.00	Count	15	22	42	5	84
			% w/in Mom	.2	.2	.2	.2	.2
		3.00	Count	20	22	30	9	81
			% w/in Mom	.2	.2	.2	.3	.2
		4.00	Count	11	11	20	2	44
			% w/in Mom	.1	.1	.1	.1	.1
		5.00	Count	11	9	12	0	32
			% w/in Mom	.1	.1	.1	.0	.1
	Total		Count	81	115	189	27	412
			% w/in Mom	1.0	1.0	1.0	1.0	1.0
1.00	No	1.00	Count	18	52	186	5	261
	Sex		% w/in Mom	.4	.4	.5	.3	.4
	Marr- iage	2.00	Count	8	22	66	0	96
			% w/in Mom	.2	.2	.2	.0	.2
		3.00	Count	8	31	55	3	97
			% w/in Mom	.2	.2	.1	.2	.2
		4.00	Count	4	15	46	3	68
			% w/in Mom	.1	.1	.1	.2	.1
		5.00	Count	6	14	35	4	59
			% w/in Mom	.1	.1	.1	.3	.1
	Total		Count	44	134	388	15	581
			% w/in Mom	1.0	1.0	1.0	1.0	1.0
Total	No	1.00	Count	42	103	271	16	432
	Sex		% w/in Mom	.3	.4	.5	.4	.4
	Marr- iage	2.00	Count	23	44	108	5	180
			% w/in Mom	.2	.2	.2	.1	.2
		3.00	Count	28	53	85	12	178
			% w/in Mom	.2	.2	.1	.3	.2
		4.00	Count	15	26	66	5	112
			% w/in Mom	.1	.1	.1	.1	.1
		5.00	Count	17	23	47	4	91
			% w/in Mom	.1	.1	.1	.1	.1
	Total		Count	125	249	577	42	993
			% w/in Mom	1.0	1.0	1.0	1.0	1.0

Table A39

*Follow-Up Chi-Square for Mother's Involvement in School and Wait Until Marriage**Crosstab*

				Mom Knows School Performance					
Program				1.00	2.00	3.00	9.00	97.00	Total
.00	Wait	1.0	Count	3	21	71	0	1	96
			% w/in Mom Knows	.2	.3	.4	.0	.1	.3
	Until								
	Marr	2.0	Count	3	12	41	1	0	57
			% w/in Mom Knows	.2	.2	.2	1.0	.0	.2
	-iage								
		3.0	Count	1	11	34	0	4	50
			% w/in Mom Knows	.1	.2	.2	.0	.4	.2
		4.0	Count	6	17	22	0	1	46
			% w/in Mom Knows	.3	.2	.1	.0	.1	.2
	5.0	Count	5	9	21	0	3	38	
		% w/in Mom Knows	.3	.1	.1	.0	.3	.1	
	Total								
		Count	18	70	189	1	9	287	
		% w/in Mom Knows	1.0	1.0	1.0	1.0	1.0	1.0	
1.00	Wait	1.0	Count	9	24	113	2	2	150
			% w/in Mom Knows	.3	.2	.4	.5	.4	.4
	Until								
	Marr	2.0	Count	4	28	51	0	0	83
			% w/in Mom Knows	.1	.3	.2	.0	.0	.2
	-iage								
		3.0	Count	2	28	54	2	2	88
			% w/in Mom Knows	.1	.3	.2	.5	.4	.2
		4.0	Count	3	20	24	0	0	47
			% w/in Mom Knows	.1	.2	.1	.0	.0	.1
	5.0	Count	9	10	21	0	1	41	
		% w/in Mom Knows	.3	.1	.1	.0	.2	.1	
	Total								
		Count	27	110	263	4	5	409	
		% w/in Mom Knows	1.0	1.0	1.0	1.0	1.0	1.0	
Total	Wait	1.0	Count	12	45	184	2	3	246
			% w/in Mom Knows	.3	.3	.4	.4	.2	.4
	Until								
	Marr	2.0	Count	7	40	92	1	0	140
			% w/in Mom Knows	.2	.2	.2	.2	.0	.2
	-iage								
		3.0	Count	3	39	88	2	6	138
			% w/in Mom Knows	.1	.2	.2	.4	.4	.2
		4.0	Count	9	37	46	0	1	93
			% w/in Mom Knows	.2	.2	.1	.0	.1	.1
	5.0	Count	14	19	42	0	4	79	
		% w/in Mom Knows	.3	.1	.1	.0	.3	.1	
	Total								
		Count	45	180	452	5	14	696	
		% w/in Mom Knows	1.0	1.0	1.0	1.0	1.0	1.0	

Table A40

*Baseline Chi-Square for Mother's Involvement in School and Sex in Next 12 Months**Crosstab*

				Mom Knows School				
Treatment	Control			1.00	2.00	3.00	97.00	Total
.00	Sex in 12m	1.00	Count	7	4	8	0	19
			% w/in Mom Knows	.1	.0	.0	.0	.0
		2.00	Count	10	6	15	4	35
			% w/in Mom Knows	.1	.1	.1	.1	.1
		3.00	Count	8	18	19	2	47
			% w/in Mom Knows	.1	.2	.1	.1	.1
		4.00	Count	13	20	38	6	77
			% w/in Mom Knows	.2	.2	.2	.2	.2
		5.00	Count	42	70	106	16	234
			% w/in Mom Knows	.5	.6	.6	.6	.6
		Total	Count	80	118	186	28	412
			% w/in Mom Knows	1.0	1.0	1.0	1.0	1.0
1.00	Sex in 12m	1.00	Count	4	8	14	0	26
			% w/in Mom Knows	.1	.1	.0	.0	.0
		2.00	Count	2	9	25	3	39
			% w/in Mom Knows	.0	.1	.1	.2	.1
		3.00	Count	8	23	28	0	59
			% w/in Mom Knows	.2	.2	.1	.0	.1
		4.00	Count	8	32	77	2	119
			% w/in Mom Knows	.2	.2	.2	.1	.2
		5.00	Count	22	61	239	10	332
			% w/in Mom Knows	.5	.5	.6	.7	.6
		Total	Count	44	133	383	15	575
			% w/in Mom Knows	1.0	1.0	1.0	1.0	1.0
Total	Sex in 12m	1.00	Count	11	12	22	0	45
			% w/in Mom Knows	.1	.0	.0	.0	.0
		2.00	Count	12	15	40	7	74
			% w/in Mom Knows	.1	.1	.1	.2	.1
		3.00	Count	16	41	47	2	106
			% w/in Mom Knows	.1	.2	.1	.0	.1
		4.00	Count	21	52	115	8	196
			% w/in Mom Knows	.2	.2	.2	.2	.2
		5.00	Count	64	131	345	26	566
			% w/in Mom Knows	.5	.5	.6	.6	.6
		Total	Count	124	251	569	43	987
			% w/in Mom Knows	1.0	1.0	1.0	1.0	1.0

Table A41

*Follow-Up Chi-Square for Mother's Involvement in School and Sex in Next 12 Months**Crosstab*

				Mom Knows School Performance					Total
Program				1.00	2.00	3.00	9.00	97.00	
.00	Sex in 12 m	1.0	Count	4	10	12	0	1	27
			% w/in Mom Knows	.2	.1	.1	.0	.1	.1
		2.0	Count	1	7	21	1	1	31
			% w/in Mom Knows	.1	.1	.1	1.0	.1	.1
		3.0	Count	4	10	23	0	1	38
			% w/in Mom Knows	.2	.1	.1	.0	.1	.1
		4.0	Count	3	10	36	0	3	52
			% w/in Mom Knows	.2	.1	.2	.0	.3	.2
		5.0	Count	7	33	98	0	3	141
			% w/in Mom Knows	.4	.5	.5	.0	.3	.5
		Total	Count	19	70	190	1	9	289
			% w/in Mom Knows	1.0	1.0	1.0	1.0	1.0	1.0
1.0	Sex in 12 m	1.0	Count	5	10	17	0	0	32
			% w/in Mom Knows	.2	.1	.1	.0	.0	.1
		2.0	Count	3	16	18	2	1	40
			% w/in Mom Knows	.1	.1	.1	.5	.2	.1
		3.0	Count	3	20	32	0	0	55
			% w/in Mom Knows	.1	.2	.1	.0	.0	.1
		4.0	Count	3	28	43	1	4	79
			% w/in Mom Knows	.1	.3	.2	.3	.8	.2
		5.0	Count	13	36	152	1	0	202
			% w/in Mom Knows	.5	.3	.6	.3	.0	.5
		Total	Count	27	110	262	4	5	408
			% w/in Mom Knows	1.0	1.0	1.0	1.0	1.0	1.0
Tot -al	Sex in 12 m	1.0	Count	9	20	29	0	1	59
			% w/in Mom Knows	.2	.1	.1	.0	.1	.1
		2.0	Count	4	23	39	3	2	71
			% w/in Mom Knows	.1	.1	.1	.6	.1	.1
		3.0	Count	7	30	55	0	1	93
			% w/in Mom Knows	.2	.2	.1	.0	.1	.1
		4.0	Count	6	38	79	1	7	131
			% w/in Mom Knows	.1	.2	.2	.2	.5	.2
		5.0	Count	20	69	250	1	3	343
			% w/in Mom Knows	.4	.4	.6	.2	.2	.5
		Total	Count	46	180	452	5	14	697
			% w/in Mom Knows	1.0	1.0	1.0	1.0	1.0	1.0

Table A42

Baseline Chi-Square for Mother's Involvement in School and Wait Until Older Crosstab

				Mom Knows School				
Treatment		Control		1.00	2.00	3.00	97.00	Total
.00	Wait	1.00	Count	38	62	101	13	214
			% within Mom Knows	.5	.5	.5	.5	.5
	Until	2.00	Count	15	20	40	4	79
			% within Mom Knows	.2	.2	.2	.1	.2
	Older	3.00	Count	18	27	31	2	78
			% within Mom Knows	.2	.2	.2	.1	.2
		4.00	Count	5	5	8	6	24
			% within Mom Knows	.1	.0	.0	.2	.1
		5.00	Count	5	2	5	2	14
			% within Mom Knows	.1	.0	.0	.1	.0
Total		Count	81	116	185	27	409	
		% within Mom Knows	1.0	1.0	1.0	1.0	1.0	
1.00	Wait	1.00	Count	20	53	199	4	276
			% within Mom Knows	.5	.4	.5	.3	.5
	Until	2.00	Count	9	32	90	3	134
			% within Mom Knows	.2	.2	.2	.2	.2
	Older	3.00	Count	8	33	58	5	104
			% within Mom Knows	.2	.2	.2	.3	.2
		4.00	Count	5	6	16	2	29
			% within Mom Knows	.1	.0	.0	.1	.1
		5.00	Count	2	10	18	1	31
			% within Mom Knows	.0	.1	.0	.1	.1
Total		Count	44	134	381	15	574	
		% within Mom Knows	1.0	1.0	1.0	1.0	1.0	
Total	Wait	1.00	Count	58	115	300	17	490
			% within Mom Knows	.5	.5	.5	.4	.5
	Until	2.00	Count	24	52	130	7	213
			% within Mom Knows	.2	.2	.2	.2	.2
	Older	3.00	Count	26	60	89	7	182
			% within Mom Knows	.2	.2	.2	.2	.2
		4.00	Count	10	11	24	8	53
			% within Mom Knows	.1	.0	.0	.2	.1
		5.00	Count	7	12	23	3	45
			% within Mom Knows	.1	.0	.0	.1	.0
Total		Count	125	250	566	42	983	
		% within Mom Knows	1.0	1.0	1.0	1.0	1.0	

Table A43

*Follow-Up Chi-Square for Mother's Involvement in School and Wait Until Older**Crosstab*

				Mom Knows School Performance					Total
Program				1.00	2.00	3.00	9.00	97.00	
.00	Wait Until Older	1.0	Count	3	24	95	0	0	122
			% w/in Mom	.2	.3	.5	.0	.0	.4
		2.0	Count	3	13	33	1	1	51
			% w/in Mom	.2	.2	.2	1.0	.1	.2
		3.0	Count	5	22	41	0	6	74
			% w/in Mom	.3	.3	.2	.0	.7	.3
		4.0	Count	5	6	10	0	1	22
			% w/in Mom	.3	.1	.1	.0	.1	.1
		5.0	Count	2	5	9	0	1	17
			% w/in Mom	.1	.1	.0	.0	.1	.1
		Total	Count	18	70	188	1	9	286
			% w/in Mom	1.0	1.0	1.0	1.0	1.0	1.0
1.0	Wait Until Older	1.	Count	8	40	141	3	0	192
			% w/in Mom	.3	.4	.5	.8	.0	.5
		2.	Count	3	27	52	0	0	82
			% w/in Mom	.1	.3	.2	.0	.0	.2
		3.	Count	7	30	50	1	2	90
			% w/in Mom	.3	.3	.2	.3	.5	.2
		4.	Count	3	3	11	0	2	19
			% w/in Mom	.1	.0	.0	.0	.5	.0
		5.	Count	6	7	9	0	0	22
			% w/in Mom	.2	.1	.0	.0	.0	.1
		Total	Count	27	107	263	4	4	405
			% w/in Mom	1.0	1.0	1.0	1.0	1.0	1.0
To -tal	Wait Until Older	1.	Count	11	64	236	3	0	314
			% w/in Mom	.2	.4	.5	.6	.0	.5
		2.	Count	6	40	85	1	1	133
			% w/in Mom	.1	.2	.2	.2	.1	.2
		3.	Count	12	52	91	1	8	164
			% w/in Mom	.3	.3	.2	.2	.6	.2
		4.	Count	8	9	21	0	3	41
			% w/in Mom	.2	.1	.0	.0	.2	.1
		5.	Count	8	12	18	0	1	39
			% w/in Mom	.2	.1	.0	.0	.1	.1
		Total	Count	45	177	451	5	13	691
			% w/in Mom	1.0	1.0	1.0	1.0	1.0	1.0

Table A44

*Baseline Chi-Square Tests for Mother's Involvement in School and Abstain Through**High School Crosstab*

				Mom Knows School				Total
Treatment		Control		1.00	2.00	3.00	97.00	
.00	Abstain thru HS	.00	Count	30	39	53	10	132
			% within Mom Knows	.4	.4	.3	.4	.3
		1.0	Count	47	71	123	16	257
			% within Mom Knows	.6	.6	.7	.6	.7
	Total		Count	77	110	176	26	389
			% within Mom Knows	1.0	1.0	1.0	1.0	1.0
1.0	Abstain thru HS	.00	Count	22	47	102	6	177
			% within Mom Knows	.5	.4	.3	.5	.3
		1.0	Count	21	83	261	7	372
			% within Mom Knows	.5	.6	.7	.5	.7
	Total		Count	43	130	363	13	549
			% within Mom Knows	1.0	1.0	1.0	1.0	1.0
Total	Abstain thru HS	.00	Count	52	86	155	16	309
			% within Mom Knows	.4	.4	.3	.4	.3
		1.0	Count	68	154	384	23	629
			% within Mom Knows	.6	.6	.7	.6	.7
	Total		Count	120	240	539	39	938
			% within Mom Knows	1.0	1.0	1.0	1.0	1.0

Table A45

Follow-Up Chi-Square Test for Mother's Involvement in School and Abstain through High School Crosstab

				Mom Knows School					Total
Program				1.00	2.00	3.00	9.00	97.00	
.00	Abstain thru HS	.00	Count	11	34	56	0	6	107
			% within Mom Knows	.7	.5	.3	.0	.8	.4
		1.00	Count	5	34	123	1	2	165
			% within Mom Knows	.3	.5	.7	1.0	.3	.6
	Total		Count	16	68	179	1	8	272
			% within Mom Knows	1.0	1.0	1.0	1.0	1.0	1.0
1.00	Abstain thru HS	.00	Count	14	41	75	2	3	135
			% within Mom Knows	.5	.4	.3	.7	.6	.3
		1.00	Count	13	61	176	1	2	253
			% within Mom Knows	.5	.6	.7	.3	.4	.7
	Total		Count	27	102	251	3	5	388
			% within Mom Knows	1.0	1.0	1.0	1.0	1.0	1.0
Total	Abstain thru HS	.00	Count	25	75	131	2	9	242
			% within Mom Knows	.6	.4	.3	.5	.7	.4
		1.00	Count	18	95	299	2	4	418
			% within Mom Knows	.4	.6	.7	.5	.3	.6
	Total		Count	43	170	430	4	13	660
			% within Mom Knows	1.0	1.0	1.0	1.0	1.0	1.0