

WHAT IS THE RELATIONSHIP BETWEEN RELIGIOSITY, SEXUAL  
KNOWLEDGE, AND RISKY SEXUAL BEHAVIOR?

THESIS

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## **CHAPTER I**

### **INTRODUCTION**

Evidence has shown that religious involvement promotes healthy behavior (George, Ellison, and Larson, 2002; Oman and Thoresen, 2002; Zaleski, Levey-Thors, and Schiaffino, 1998). However, there is a lack of informative sex education programs in religious institutions. Also, parents who attend church regularly and other influential religious figures are less open in sharing direct information about sex with their children (Berne and Huberman, 2000; Regnerus, 2005). This can leave adolescents curious about sex, leading to the exploration of certain risky sexual behavior. It is necessary to inform adolescents of the risks they might be subjecting themselves to because of their lack of knowledge. The articles reviewed examine research on the links of religion to general health, sexual knowledge and education, parent-child communication, and sexual behavior.

#### **Religion and General Health**

Religious involvement has been shown to be linked to fewer illnesses, a better recovery from illnesses, and a more positive way of coping with an illness (George, et al., 2002; Oman and Thoresen, 2002; Zaleski, et al., 1998). George and colleagues (2002) reviewed the social and psychological factors (i.e. socioeconomic status, stress level, social support, self-esteem, and self-efficacy) that seem to be involved in how religious participation promoted good health. The general belief system within religious

guidelines promotes good health and specifically prohibits sex outside of marriage. Research (George, et al., 2002; Oman and Thoresen, 2002; Zaleski, et al., 1998) has found that social support within the religious context allows people to develop social ties with others, and higher levels of social support tend to help promote good health and help individuals cope with current health problems (George, et al., 2002).

Oman and Thoresen (2002) presented a conceptual analysis of the factors that connect religion and health. They present the notion that religion causally influences health via social support, positive psychological states (hope and inner peace), psychological strength for adhering to positive health behaviors as encouraged by a religion, and super empirical influences (i.e. prayer as a coping mechanism that gives one hope). Social support and the encouragement of maintaining good health as a respect for the body and God (in some religions) are mediating factors of the relationship between religion and health. The factors reviewed (George, et al., Oman and Thoresen, 2002) support the idea that religion influences how an individual copes with an illness and promotes healthy behavior.

### Sexual Knowledge

#### *Abstinence-Only Programs and Comprehensive Sex Education Programs*

Two of the ways in which sexual education is approached is abstinence-only education and abstinence-plus or Responsible Sexuality Education (“Just Say Know,” 2005; Mabray and Labauve, 2002). Abstinence-only education teaches abstinence from all sexual activity. It is explained as the only option for unmarried people who want to demonstrate correct moral actions. This program censors any information on contraception and disease prevention (“Just Say Know,” 2005) and is advocated by most

schools because it is funded by the state (Mabray and Labauve, 2002). Although teen pregnancy rates are declining, rates in the United States are still higher than most Western countries. These statistics indicate that there is a population of adolescents that are not being reached with this type of curricula (Mabray and Labauve, 2002).

The second type of education is the Responsible Sexuality Education, or abstinence-plus curriculum, that is a comprehensive approach to sex education. This program emphasizes the benefits of abstinence until marriage, but also teaches the importance of contraception and disease prevention. This approach is used to inform the teens who are already sexually active about ways to protect themselves from disease and pregnancy. This program provides developmentally appropriate information on topics such as sexual development, interpersonal relationships, reproductive health ("Just Say Know," 2005), and community service influences, (i.e., role models and interventions; Mabray and Labauve, 2002).

Berne and Huberman (2000) evaluated media campaigns, social marketing strategies, sexual health services, sex education, and the impact that family, community, and religion had on adolescent sexual health in France, Germany, and the Netherlands. The purpose of the study was to review how the three countries approached the topic of sex education with adolescents. Compared to the U.S., the countries selected for the review all show lower rates of negative consequences, such as pregnancy and sexually transmitted diseases, as a result of risky sexual behavior in youth. Literature and findings from the study tours were later reviewed so that the helpful techniques used in France, Germany, and the Netherlands could be applied to teens of the United States when approaching the topic of sex with adolescents (Berne and Huberman, 2000).

European experts were asked about reproductive and sexual health services, sex education, the mass media, and social influence on sexual behavior (family, community, and religion) in their country. Berne and Huberman (2000) found that the media campaigns, sexual education programs in schools, and access to reproductive and sexual health services in the Netherlands, Germany, and France promote healthy sexual behavior by openly presenting sexuality as a normal biological process. The United States was described as not openly presenting the topic of sex to youth and as a provider of inadequate information on healthy sexual behavior (Berne and Huberman, 2000).

Parents in the United States have been found (Berne and Huberman, 2000) to usually feel uncomfortable and unprepared when discussing sexual behavior with their children, but when they speak on the matter in a direct and supportive manner, the children are five times less likely to participate in risky behavior. Furthermore, religious institutions provide minimal information and guidance on sexuality especially in preventing risky sexual behavior in the United States. In contrast, the religious institutions of the European countries involved in the study remain neutral or quietly support programs set out to improve sexual health of their citizens (Berne and Huberman, 2000).

Based on the collected comparative information (Berne and Huberman, 2000), the researchers formulated several recommendations for sex education in the United States that incorporated the various approaches and lessons learned from the four European countries involved in the study. First, sex education should include the promotion of abstinent behavior (specifically for young and middle-aged adolescents), as well as promote protective sexual behavior in all sexually active people. Secondly, services and



resources should be developed and modified to help adolescents in maintaining sexual health and protective sexual behavior. Furthermore, sex education should be age appropriate to children in schools and annual national media campaigns should be continuous to promote protective behaviors in sexually active people of all ages.

Families and communities should learn how to communicate with young people about sex and related issues. The final recommendation was that national proactive agendas should be developed to reconcile religious doctrine with sexuality as a human quality (Berne and Huberman, 2000).

#### *Parent-Child Communication about Sex*

A study was performed to determine the characteristics of parents that speak with their children about sexuality (Fisher, 1990). College students (194 females and 88 males) between the ages of 18 and 23 years of age and their parents completed questionnaires about psychological, family, and demographic variables, which included sexual attitudes, sexual knowledge, erotophobia-erotophilia, social desirability responses, religiosity, education level, income, sex of child, quality of general family communication, and amount of discussion pertaining to sex between the students and parents. The results of the research suggested that the factors for mothers to communicate with their children about sex was openness in general family communication, the sex of the child, and the degree to which the mother's own mother talked about sex and sexuality with her. The predictors for the fathers were openness in general family communication, degree to which the father's own father discussed sex and sexuality with him, and his education level (Fisher, 1990).

Regnerus (2005) conducted a study to investigate the correlation between religion and the patterns of parent-child communication about sex and birth control. Data were collected from interviewing adolescents, their parents, siblings, friends, romantic partners, fellow students, and school administrators twice with a one-year interval between interviews. Results found that about 22% of parents who attended church at least once a week never spoke with their adolescent children about birth control, and 15% of parents that attended church services less often never talked with their children about birth control. Over 47% of parents who regularly attended church talked “a great deal” about the moral concerns of sex and 32% of parents who attended church less frequently talked about the moral concerns of sex. The parents who affiliated themselves with traditional Black Protestant churches seemed to talk with their adolescents the most about sex-related issues. In contrast, mainline Protestants showed the smallest percentage of parents who frequently communicated and communicated with ease about sex (Regnerus, 2005).

Regnerus’ results suggest that parents are talking about sex and birth control with their adolescent children; however, the content of what the parents are communicating seems to be less clear. These parents may only be discussing the moral concerns of sex as opposed to teaching the facts and the importance of contraception. Highly religious parents, defined by church attendance, seem to be less likely to talk to their children about sex and birth control and report having more difficulty talking about this subject. Furthermore, these parents are more apt to communicate their own sexual values instead of providing education. In reference to religious affiliations when compared with Black Protestants, mainline Protestants, Roman Catholic, and respondents from other religions

reported a significantly lower amount of communication about sex. Regarding ethnicity, African-American parents reported more communication about sex and birth control as compared to parents from any other ethnic group (Regnerus, 2005). However, when religiosity was measured by the importance of religious faith in one's personal life, regardless of the amount of church attendance, the more frequently the parent talked to their child about sex and birth control. This interesting difference is difficult to explain; however, Regnerus concludes that those who identify with:

public religiosity may emphasize parent-child value similarity and outward obedience, and thus relate primarily to sharing moral values about appropriate sexual behavior. More inwardly religious parents may be apt to believe that more frequent conversations about sex in general is not only profitable for its value transmission opportunities but also corresponds with a more well-rounded sexual socialization of their adolescent children. (Regnerus, 2005, p. 101).

### Religion and Views Toward Sex Education

#### *Christian View of Sex*

Religious individuals strongly support the idea of providing youth with accurate information about sexuality in order to make responsible choices (Miller, 2004). A national poll of 900 voters commissioned by the Religious Coalition for Reproductive Choice found that Americans of faith desire responsible sexuality education taught in schools. Of the 900 voters, the majority were Catholic and Christian fundamentalists. Furthermore, the American Baptist Church, the Episcopal Church, the Presbyterian Church, the United Church of Christ, and the United Methodist Church Reform have

passed resolutions insisting on the need for sex education within their own faiths and in public schools (Miller, 2004).

Smith (2005) explained the Christian approach to sexuality as more of a source of wisdom than of sexual repression. Christians' opinion that sex should be saved for marriage has led to the promotion of abstinence before marriage and the promotion of faithful monogamous marriages as a practical wisdom for life. Smith suggests that instead of making contraceptives more available to individuals as a solution to risky sexual behavior, a better understanding of the intimacy of sex, love, marriage, and children should be emphasized. Teaching teens the truth about sex and the context that it was meant for is necessary instead of avoiding the topic (Smith, 2005).

The Religious Coalition for Reproductive Choice declared in an article written about the role of religious congregations in adolescent sexual health ("The Role of Religious Congregations," 2005) that people of faith should claim responsibility for sex education, the attitudes formed about sexuality, and value the explanation of sexuality issues instead of allowing the media, peers, and schools to take on that duty. Presented were four ways in which religious congregations could promote better sexual health in adolescents: be open about the subject, teach critical thinking on related subject matters, provide tools and resources for complete sex education, and help youth face prejudices that will aid in the development of character and identity. Presenting sexuality in a healthy manner in a religious environment could help religious individuals gain accurate knowledge and feel less ashamed of the subject ("The Role of Religious Congregations," 2005).

### *Church-Based Sexual Education*

Powell and Jorgensen (1985) evaluated a church-based sex education program that provided participants with accurate information on sex. The goals of the evaluated program were to provide knowledge about sexual issues, to enhance self-esteem and in turn influence sexual attitudes, and increase clarity of one's own personal values about sex. The purpose of evaluating a program in a church setting was to provide an environment that allowed the discussion of controversial topics in an environment of "values and moral decision-making" (p. 479) that a school-based program could not provide. Having this program in a church setting allowed youth and adult members of church groups, who are sometimes confused or lack accurate information about sexual values and behavior, to be educated (Powell and Jorgensen, 1985).

Adolescents were given a pretest and posttest on sexual knowledge, self-esteem, clarity of personal sexual values, and level of religiosity. The experimental group (the teens who went through the program) was predicted to score higher on all three variables on the posttest than the control group. The experimental group included 74 adolescents between the ages of 14 and 18 who attended a large Protestant church. The average age of the adolescents was 15. The control group was selected from a church of the same denomination, location, and size, with an average age of 15.5 (Powell and Jorgensen, 1985).

Powell and Jorgensen (1985) found that sexual knowledge increased and the clarity of personal sexual values improved among teens who participated in the program as compared to control group. Self-esteem scores showed no significant change or difference between groups. The result could be explained because, according to the

researchers, change in self-esteem occurs gradually, not suddenly. These results support the notion that a church-based sexual education program can positively promote sexual knowledge in adolescents in a way that is informative and beneficial for the youth participating in the program. The reasons given for such positive results were that it provided accurate information to the adolescents, it addressed self-esteem issues, and it helped the individuals to clarify their personal values (Powell and Jorgensen, 1985).

### Risky Sexual Behavior

#### *Risky Sexual Behavior in Males and Females*

Gil (2005) researched the differences in risky sexual behavior between males and females and the role of personality traits and coping styles in this type of behavior. One-hundred eighty undergraduate students' personalities, coping styles, and sexual behaviors were evaluated. Approximately 80% of male students had participated in some form of risky sexual behavior at least once during the prior year, while 62% of female students had not participated in risky sexual behavior the prior year. Males also were more likely to have a novelty-seeking personality style and an avoidance coping style (Gil, 2005), which both have been classified as motivators for sexual activity among males (Horowitz, 2002). Furthermore, the high rates of risky sexual behavior reported by males may also indicate that this gender is more likely to be risk takers (Gil, 2005).

Beadnell and colleagues (Beadnell, et al., 2005) performed a study that classified students into subgroups based on the consistency of condom use, number of sexual partners, and sex frequency (Beadnell, et al., 2005). A total of 1,084 students completed the study that consisted of annual interviews from the eighth grade to the twelfth grade. Among the participants, 605 of the adolescents were placed in the risk taking subgroups.

Females were heavily represented in the Few Partners subgroup during grades eighth through tenth, and One Partner and Two Partner subgroups in grades eleven and twelve. The Risk-Takers group had more males than females. In some grades, the Risk-Takers group showed significant dependence on withdrawal as a birth control method.

Furthermore, results found that consistent condom users were not as dependent on female-controlled methods, such as contraceptive pills, especially when the frequency of sex increased during the older grades. The results suggest that identifying teens who are at a higher level of risk from those who are a lower level of risk can be helpful in future intervention development. The high-risk groups should be targeted for additional customized interventions, such as increased condom use or decreased numbers of sexual partners (Beadnell, et al., 2005).

#### *Religiosity and Risky Sexual Behavior*

A study by Zaleski, and colleagues (1998) looked at 95 college freshmen to examine personal beliefs and social support in relation to stress in college and its influence on unhealthy behaviors and physical illness. As predicted, religiosity was negatively correlated with sexual risk and positively correlated with family social support. Also, students of higher social status, who had experienced a decrease in their sense of religious identification and who perceived less support from family, were more likely to place themselves at risk sexually (i.e. show high frequency of intercourse, sex without a condom, engaging in sex after drinking alcohol or using drugs, and a high number of sexual partners). It was suggested that the loss of family support might be related to the decrease in these individuals' sense of religious identification (Zaleski, et al., 1998).

Rostosky and colleagues researched adolescent religiosity and sex attitudes as a predictor for later coital debut (Rostosky, Regenrus, and Wright, 2003). Data were obtained from 3,691 adolescents between the ages of 15 and 21. Coital debut was measured by participants responding to the question, "Have you ever had sexual intercourse." Religiosity was measured based on their responses to a religiosity scale that included the frequency of attendance at religious services attendance, frequency of attendance at religious youth activities, and self reported importance of religion. Sex attitudes were measured by asking respondents to answer questions about their perceptions of the likely outcomes of participating in sexual intercourse. Results found significant gender differences in religiosity and sexual attitudes. Adolescent females reported being more religious and expecting more negative emotional results from participating in sexual intercourse. Adolescent males reported expecting more positive emotional results, but perceived more negative health outcomes from participating in sexual intercourse. Furthermore, the effect of religiosity and expectance of negative emotional outcomes of sexual intercourse reduced the odds of coital debut by 30 percent. The results of the study indicates that religiosity directly reduces the likelihood of coital debut and indirectly affects coital debut through a belief system that negative consequences could occur from engaging in sexual intercourse (Rostosky, et al., 2003).

A study by Mahoney (1980) looked at the relationship between religiosity and late adolescent sexual behavior as well as gender differences in this relationship. The study used 441 volunteers who were first or second year college students. The students were given a 96 item questionnaire assessing past and present sexual behaviors, frequency of behavior, sexual activity preferences, and interpersonal features of sexuality (Mahoney,



1980).

The data examined included cumulative percentages; the patterns of each individual were not analyzed. Mahoney (1980) found that the combined index of religiosity in females was significantly negatively correlated with the number of sexual partners, the frequency of light and heavy petting, the extensiveness of sexual experiences, and the frequency of thinking about sex (Mahoney, 1980). Females who had engaged in sexual intercourse were less religious than females who had not had sexual intercourse (Mahoney, 1980).

Mahoney (1980) stated that males are expected to be more sexually active, while females are looked at negatively if they are highly sexually active. It appears that religious males probably find themselves more conflicted between their religious values and sexual socialization than females because sexual socialization expects them to be more sexually active, while their religious values expect them to not be sexually active before marriage. Therefore, religious males were found to engage in other sexual experiences instead of intercourse to maintain their technical virginity; however this was still considered a sexual encounter (Mahoney, 1980). Although research has found that the more religious a person is the less he or she will participate in sexual activities (Zaleski, et al., 1998), religious males are conflicted and may be engaging in alternative sexual activities (i.e. oral-genital behaviors and heavy petting), in order to comply with the expectations of sexual socialization but still maintain technical virginity. The research suggested that religion is more influential than gender on sexual experience (Mahoney, 1980).

*Virginity Pledges and Sexual Behavior*

Over 2.5 million adolescents have declared public “virginity” pledges; this is a promise to abstain from sex until marriage. An organized social movement sponsored by the Southern Baptist Church in 1993 has been a booming success. It includes hundreds of churches, schools, and college chapters (Bearman and Bruckner, 2001). Bearman and Bruckner (2001) explored the effect of the pledge on the transition to the first intercourse experience. The research examined American adolescents in grades 7 through 12. The information was collected by using in-home interviews, in-school interviews, parent interviews, and school administrator surveys. Adolescents’ religiosity was measured by frequency of praying, church attendance, and importance of religion. Results indicate that pledgers’ risk of sexual initiation is about 34% lower than nonpledgers. In addition, pledgers were found to be significantly more religious than others, and there was a decrease in the risk of sexual debut in highly religious individuals. Pledging was also found to not work for adolescents who want to have sex. Also, pledging does not work in some situations when pledgers want to have sex. This is the case when pledgers attend a school that is focused on social relationships. Unfortunately, if pledgers do have sex, they are less likely to be prepared with contraception than nonpledgers, which increases their risk of pregnancy and sexually transmitted infections (Bearman and Bruckner, 2001).

Bruckner and Bearman (2005) examined the effectiveness of virginity pledges in reducing sexually transmitted infection rates among individuals between the ages of 18 and 24. Participants provided urine samples that were tested for human papilloma virus, chlamydia, gonorrhea, and trichomoniasis. Results found that pledgers were less likely to

be exposed to sexual risk factors, but their STD rate was not significantly different from nonpledgers. Bruckner and Bearman (2005) explained that this result was found because pledgers are less likely to use condoms at sexual debut and to also be tested and diagnosed with an STD. Bruckner concluded that virginity pledges do not necessarily prevent STD infection among young people (Bruckner and Bearman, 2005).

## **CHAPTER II**

### **PROPOSED RESEARCH**

Previous research has found religiosity to be positively correlated with general health (George, et al., 2002; Oman and Thoresen, 2002; Zaleski, et al., 1998); however, if some religions advocate abstinence-only sex education, youth associated with these denominations may have less sexual knowledge (Mabray and Labauve, 2002). Perhaps some religious individuals may be engaging in risky sexual behavior due to ignorance. Further study on the sexual experiences of those who consider themselves religious is an important issue because although highly religious individuals are engaging in sexual intercourse less frequently as compared to non-religious, unmarried adolescents, they might still be participating in what could be risky sexual behavior, such as oral-genital behaviors, that might put them at danger for diseases.

There are certain risks (i.e. sexually transmitted diseases like HIV, herpes, and gonorrhea) that religious individuals might be unknowingly exposing themselves to that could be harmful to them. They may not realize that they too are engaging in risky sexual behavior even if their sexual behaviors do not include vaginal intercourse. Questioning adolescent participants on their sexual knowledge, religious intensity, and sexual experience could help to inform researchers regarding whether or not adolescents are aware of certain risks involved in their personal sexual experiences and may provide

information on the relationships among sexual knowledge, religiosity, and sexual experience, which could aid in discovering how well highly religious individuals are educated on this matter. Research findings may lead to the development of ideas for the prevention of risky sexual behavior and how to adequately educate adolescents.

The purpose of the proposed research project was, therefore, to investigate the correlations among religiosity, accuracy of sexual knowledge, and frequency of risky sexual behavior. Since religious individuals tend to advocate abstinence prior to marriage, I predicted that religiosity would be negatively correlated to accuracy of knowledge. Although much research does not support my second prediction, I expected that religiosity would also be positively correlated with frequency of risky sexual behavior. There is some evidence that religious people are engaging in risky sexual behavior. For instance, individuals who take virginity pledges and break their promise are less prepared with protection against disease and pregnancy for their first intercourse experience; and for this reason, these individuals have been found to be more at risk for STDs (Bearman and Bruckner, 2005; Bruckner and Bearman, 2005). Mahoney (1980) found that some religious males engage in sexual activities, excluding intercourse, that are risky (oral sex, heavy petting, partner masturbation) in order to maintain their technical virginity.

Furthermore, I predicted that those whose sexual knowledge is based on the abstinence-only sexual education curriculum would have less accurate sexual knowledge compared to those who have experienced the abstinence-plus curriculum. Previous research has investigated it but there have not been consistent and significant findings. George and colleagues (1999) examined the effect of three levels of the “Sex Can Wait”

curriculum including students' knowledge, attitudes, and beliefs concerning sexual behavior. Fifteen school districts were involved and there were a total of 2,335 student participants in upper elementary, middle school, and high school. The program involved 23-24 abstinence-based lessons distributed over five weeks. Eight school districts implemented the "Sex Can Wait" curriculum, while the other seven did not and served as the comparison group. Every student was given a pretest and a posttest. The results showed that the upper elementary and middle school programs increased knowledge and had more positive attitudes toward abstinence. At the high school level, there was a greater decrease in knowledge for the "Sex Can Wait" group compared to the control group. However, the difference was not statistically significant (George, 1999). Although this study does not explore the knowledge acquired through the abstinence-plus curriculum, it does explore the lack of knowledge gained from the abstinence-only curriculum.

## Method

### *Participants*

Participants consisted of a total of 106 students, 23 males and 83 females, enrolled in several sections of a sophomore-level psychology course at Texas State University. Approximately 58% were between 20 years old or younger, about 26% were between 21 and 22 years old, 11% were between 22 and 25 years old, and 5% were older than 25 years old. About 69% of the students were Caucasian, 21% were Hispanic, 5% were African American, and 6% classified themselves in other ethnic groups. Most students (87%) described themselves as upper-middle or middle class and as heterosexual (94%).

*Design and Procedure*

Students in a psychology class at Texas State University-San Marcos were asked to volunteer to be part of the research study following a class examination in order to receive extra credit points in that particular class. However, if students found it too difficult to participate in the research, they were given an alternative option to receive extra credit points for the class. Each volunteer was asked to sign a consent form (Appendix A p. 31) upon their decision to participate in the study; however their names were not connected to their responses. Information disclosed by the participants remained confidential, and the general results found from the study were provided to students upon request.

The examiner explained the procedure for participation before the students began their class examination. The information about the research, including assurances of anonymity, and the instructions for the surveys were given at this time. After the students completed their class examination they approached the researcher to receive the surveys. The students were given one consent form to sign and one to keep. The consent form described the information requested during the study, the precautions taken in order to maintain confidentiality, and provided further contact information if students were interested in learning about the results found. They were also given one packet containing demographic questions, the Spiritual Well-Being survey (Paloutzian and Ellison, 1982), and the Sexual History Questionnaire (Davis, Yarber, Bauserman, Schreer, and Davis, 1998), and a separate packet containing the Sexual Knowledge Survey (Gough, 1974; Hyde and DeLamater, 2006). The students were each given two scantrons, one to use for each packet of questions. Once they were finished with each

packet of questions, they returned the questionnaires and the scantrons to the experimenter. The students were allowed to leave the room after they finished.

### *Materials*

Participants completed a 42-item questionnaire as well as a separate instrument assessing sexual knowledge. The first questionnaire contained demographic questions, items assessing religious affiliation, how religious participants perceived themselves to be, sexual orientation, primary sex information source, type of sex education, parental contribution to their sexual knowledge, a measure of religiosity/spirituality, and a measure of sexual behavior (Appendix B, p. 32).

For the purpose of this research, religiosity or spirituality was defined as the expression of spiritual health maturity and meaning in life (Slater, Hall, and Edwards, 2001). Religiosity was measured using the Spiritual Well Being Scale (Paloutzian and Ellison, 1982) (Appendix B, p. 32). Paloutzian and Ellison found that people who score high on this scale seem to be less lonely, have more social skills, a higher self-esteem, and are more genuine. The Spiritual Well-Being Scale has been used with various populations and has shown high levels of reliability and internal consistency. The test-retest reliability for the original scale was found to be .93 and the coefficient alpha reflecting internal consistency was .89. The Spiritual Well Being Scale contains two subscales, Religious Well-Being (RWB) and Existential Well-Being (EWB) (Paloutzian and Ellison, 1982). The RWB measures well-being in relation to God while the EWB refers to a sense of purpose and satisfaction in life (Slater, et al., 2001). For my thesis I modified the scale by using a four-point Likert scale rather than a six-point Likert scale ranging from “strongly disagree” to “strongly agree.” The modified version is included



in Appendix B.

Sexual experience was measured using a modified Sexual History Questionnaire (Davis, et al., 1998; Appendix B. p. 32). This questionnaire assesses an individual's sexual behavior and whether this behavior is putting the person at risk for being infected with sexually transmitted diseases. The test-retest reliability for the original scale was found to be above 0.80, signifying high reliability. The majority of the questions are considered to have "high face validity" (Davis, et al., 1998).

The original questionnaire asks the respondent to record behaviors that have occurred within the last month, but for this study, I asked for behaviors that have occurred within the past 12 months to provide more diversity in the responses. In addition, the original scale includes a combination of multiple-choice questions, yes and no questions, 5-point scale questions, and numerical questions; all questions in this study were presented in a multiple choice format. Some questions such as "How long ago was your last sexual encounter?" and "What kind of sex did you have?" were dropped because they were not relevant for this research. Several other modifications were also made such as dividing the questions regarding number of sexual partners and use of protection into three different questions specifying information about the oral, vaginal, and anal sexual partners and use of protection during these experiences. Finally, two questions were added to the survey that asked about the perceived risk of other sexually transmitted diseases and perceived risk of unwanted pregnancy (Appendix B).

Sexual knowledge was measured using the 24-Item Version of the Miller-Fisk Sexual Knowledge Questionnaire (Gough, 1974; Appendix C, p. 38), which included questions pertaining to sexual activity, contraception, menstruation, anatomy, and

fertility. Twelve questions were drawn from a human sexuality test bank (Hyde and DeLamater, 2006) and added to assess knowledge regarding sexually transmitted diseases. Questions 1 through 24 were collected from the 24-Item Version of the Miller-Fisk Sexual Knowledge Questionnaire, and questions 25 through 36 were selected from the human sexuality test bank. A copy of the modified version is included in Appendix C.

## Results

The majority of students (about 35%) classified themselves under the “other” category for religious affiliation. Approximately 21% said they were not religious, 20% indicated they were Catholic, 12% described themselves as conservative Protestant, and 12% described themselves as liberal Protestant. Over a quarter of the students (28%) perceived religion as being a small part of their lives, while 26% said they were moderately religious, 22% described themselves as religious, 16% said they were not at all religious, and 8% perceived themselves as very religious.

Approximately 74% of the students disclosed that their primary source for sex information when they were growing up came from their peers. Seventeen percent said that their primary source was from the media, and 9% of the students said they got their sex information from a sex education class in high school. The majority of students (67%) received abstinence-plus curriculum sex education, 27% were not involved in any type of sex education class, and 6% received abstinence-only curriculum in their sex education class in high school. As for parental contribution to sexual knowledge when the students were growing up, 50% said that their parents were moderately involved, 31% disclosed that their parents were not at all involved, and 19% said that their parents were

very involved. The mean score of the sexual knowledge questionnaire was about 23 items answered correctly out of 36 items.

The items comprising the two subscale scores from the Spiritual Well Being Scale were totaled and recorded for each participant. For the religious well-being subscale the lowest scores represented low religiosity, or no influence of religion on life, and the highest scores represented high religiosity, or high influence of religion on life. Similarly, regarding the existential well-being subscale the lowest scores represented low satisfaction of self with the world and the highest scores represented high satisfaction with self in the world.

To reduce the potential numbers of analyses performed, a principle components factor analysis with a varimax rotation was performed on 10 of the 12 items on the sexual history measure. Two items were not included in the factor analysis because of their qualitative, rather than quantitative, nature. Three factors emerged accounting for 69% of the variance. The first sexual risk factor (SRF1) was composed of six items; the number of oral sex partners in the last 12 months, number of vaginal sex partners in the last 12 months, number of times participants had unprotected vaginal sex during the past 12 months, number of times participants had unprotected oral sex during the past 12 months, number of times participants were tested for HIV or an STI, and the perception of risk for themselves or their partner for an unwanted pregnancy. The second sexual risk factor (SRF2) included two items: participants' perceived risk for HIV/AIDS and perceived risk for other sexually transmitted diseases. The third sexual risk factor (SRF3) was composed of participants' number of anal sex partners in the last 12 months as well as the number of times participants had unprotected anal sex in the last 12 months.

Correlation analyses were performed to identify the relations among sexual knowledge, sexual behavior, and religiosity. The correlations are given in Table 1 (p.25). Religious well-being was negatively correlated with sexual knowledge and positively correlated with parental involvement in sex knowledge of the participants. A positive correlation was also found between the participants' religious perception of themselves and parental involvement in sexual knowledge. SRF3 was negatively correlated with existential well-being.

A three-way (participant sex, religious affiliation, and sex education curriculum) ANOVA was performed on sexual knowledge. To reduce the number of categories of religious affiliation and to create categories with approximately equal numbers of participants, liberal Protestants and those not religious were grouped together as were conservative Protestants and Catholics. Similarly, for the sex education variable, participants (only six) having abstinence-only curriculum were grouped with those not having a sex education class. Regarding sexual knowledge, results showed a significant difference in the level of sexual knowledge between genders,  $F(1,89)=5.39, p<.05$ . Females had a significantly higher average sexual knowledge score than the males.

Similar three-way ANOVAs were also performed on the three sexual risk factors. No significant main or interaction effects were found on SRF1. For SRF2 religious affiliation was significant,  $F(2,95)=3.38, p<.05$ . Post-hoc analyses were done to compare religious affiliation and the difference in perceived sexual risk. Using Tukey's HSD, this comparison indicated that Catholics and conservative Protestants had a significantly lower perception of risk on this sexual risk factor than participants who identified themselves as "other" in terms of religious affiliation. For SRF3 a significant three-way

Table 1

Correlations among sexual knowledge, sexual behavior, religiosity, and parental involvement.

Item(s)	RWB	EWB	PI	SK	RPS	SRF1	SRF2	SRF3
RWB								
EWB	.31**							
PI	.24*	.14						
SK	-.27**	-.01	-.02					
RPS	.74**	.14	.24*	-.14	1.0			
SRF1	-.01	.03	.02	.15	.04			
SRF2	-.13	-.09	.01	.05	-.14	.311**		
SRF3	-.05	-.21*	.01	.06	.07	.31**	-.05	

Note. RWB = religious well-being or influence of religion on life; EWB = existential well-being or satisfaction of self in the world; PI = parents involvement in participant's sexual knowledge; SK = accuracy of sexual knowledge; RPS = religious perception of themselves; SRF1- includes sexual risk including number of oral sex partners, number of vaginal sex partners, frequency of unprotected oral sex, frequency of unprotected vaginal sex, number of times tested for HIV or STI, perception of unwanted pregnancy risk; SRF2- includes sexual risk including perceived risk for HIV/AIDS and other STIs; SRF3- sexual risk including anal sex partners and frequency of unprotected anal sex  
 $p < .05$ , two-tailed \*\* $p < .01$ , two-tailed

interaction was found between gender, religious affiliation, and sex education curriculum,  $F(1,95)=4.46, p<.05$ . Interpretation of this interaction is difficult due to the large numbers of means (12) as well as the small numbers of participants in some of the cells involving males.

### Discussion

Results indicated that there is a negative relationship between religiosity and accuracy of sexual knowledge, supporting my original hypothesis that sexual knowledge would be oppositely related to religious involvement. Powell and Jorgenson (1985) found that if religious teens were taught sex information in a religious setting that incorporated their beliefs as well as clarified the teens' values about sex, their sexual knowledge would increase, as would their clarity of sexual values. Perhaps the participants of the recent study should have been taught accurate sex information in their religious environment in order to have a higher score of sexual knowledge. This suggests that churches and religious families need to become more involved in the sexual knowledge of their youth.

On the contrary, the data found show that there is a positive relationship with the single-item religiosity rating and parental contribution to sexual knowledge. These data are supported by research performed by Regnerus (2005). He found that the more important religion was to the parent, the more frequently the parent talked to their adolescent child about sex and birth control (Regnerus, 2005). Perhaps parents in more religious households are more involved in the sexual education and knowledge compared to those who are less religious in order to instill certain sexual values.

Furthermore, Catholics and conservative Protestants perceived their risk for HIV/AIDS and other STIs as significantly lower than those who indicated other religious affiliations. This finding does not support my original hypothesis that those who are more religious will have a higher frequency of risky sexual behavior based on the idea that highly religious people would be more at risk because of their lack of knowledge and failure to use condoms. Previous research, however, supports this lesser risk among those who are more religious. A study by Mahoney (1980) found that religiosity of females was negatively correlated with risky sexual behavior, including number of partners, frequency of light and heavy petting, and sexual experiences. However, religious males were found to be somewhat conflicted in terms of their religious views and sexual socialization. His research suggests that religious males might be participating in other sexual experiences instead of intercourse to maintain their technical virginity, but these activities still put them at risk. Unfortunately, my research had an under representation of religious males to confirm this finding. Perhaps the conservative Protestant and Catholic individuals are not as sexually active as persons grouped in the “other” religious affiliation category; therefore, they perceive themselves to be less at risk for HIV/AIDS and other STIs. However, the risk described in this study is perceived risk and the actual risk for HIV/AIDS or other STIs may be greater. This is supported by the research conducted by Bruckner and Bearman (2005) which found less exposure to sexual risk factors does not always mean a smaller risk for STIs.

Existential well-being, or satisfaction of self in the world was negatively correlated to SRF3. This suggests that those who participate in anal sex may have less satisfaction with themselves in society. Further research is needed to verify this

correlation and interpretation.

Furthermore, there were no significant findings regarding sex education curriculum and accuracy of sexual knowledge. In this sample very few students reported having abstinence-only school curricula. Therefore, my hypothesis regarding sex education curriculum and sexual knowledge accuracy could not be confirmed by this study. Berne and Huberman (2000) reported that sex education should be taught in the format of the abstinence-plus curriculum. This statement was based on their investigation of European countries' approach to the subject using the abstinence-plus curriculum, which has resulted in lower rates of negative consequences to sex, such as pregnancy and sexually transmitted diseases as compared to the United States. Fortunately most students (67%) reported having this form of sex education.

Limitations of this study are worth noting. These findings require further research. There was limited variability in the participants that were included in this study. Religious denominations, male participants, and various ethnic groups were under represented. Further research should strive toward including more participants from varying backgrounds in order to better generalize from these findings. Also, additional research is needed in developing more appropriate measures to obtain data of this nature. It was difficult to find measurements for sexual knowledge and sexual history that included all of the variables needed to collect information about the participants' behaviors related to preventing sexually transmitted infections and pregnancies as well as their knowledge of information related to the transmission of sexually transmitted infections and pregnancy prevention. Current measurements included various combinations of these variables, but there was not a measurement that tested all of these



variables. Further research is needed to develop more effective assessments of sexual knowledge and sexual history.

In conclusion, the data should be of particular interest to religious leaders, educators, and parents. My findings suggest that religiously influenced individuals have lesser accuracy of sexual knowledge compared to those that are not religiously influenced. Furthermore, my results indicate that individuals influenced by religion also have parents that are more involved in their sexual knowledge. Therefore, the study implies that religious individuals will absorb accurate sexual knowledge from those they respect, such as their parents and those involved in their personal religious environment because they approach them in a way that is in agreement with their beliefs. This finding is also suggested in the study by Powell and Jorgenson (1985). Although results do not show that religious individuals are participating in risky sexual behavior, their lack of sexual knowledge and conflicting views of sexual socialization may lead to risky sexual behavior in the future as supported by the research of Mahoney (1980). Data show that individuals who make virginity pledges tend to be significantly more religious and have a decreased risk of sexual debut (Bearman and Bruckner, 2001). However, virginity pledges do not seem to always protect an individual from STD infection because pledgers are less likely to be prepared with contraception upon engaging in sexual activity. They are also less likely to be tested for infection. These factors put particular individuals at an increased risk when engaging in any type of sexual activity. This evidence should be researched further (Bruckner and Bearman, 2005).

Churches and religious organizations should become more involved in the teachings of sexual information to their youth. It is important that religious leaders look

at this information to improve their views of sex education within their establishments because it can help the sexual health of their youth. Evidence suggests that religiosity negatively affects sexual knowledge, and religious people are less prepared when faced with sexual activity. These factors put this group at a higher risk for disease. So increasing the communication of sexual health among this population will help them to be more knowledgeable and prepared.

## APPENDIX A

### Consent Form

You are invited to participate in a study that is looking at the correlation between religion, sexual knowledge, and risky sexual behavior. You were selected as a possible participant in this study because of your enrollment in this psychology class.

If you decide to participate you will be asked to complete surveys containing questions about your religious views, your sexual knowledge, and your sexual behavior. You will also be asked for your demographic information. Your participation will take no more than 1 hour. While I do not anticipate that you will find participation difficult or disagreeable, you may discontinue participation at any time and still receive extra credit. The alternative extra credit can be earned by reading the article entitled *Use of a sexual abstinence-only curriculum with sexually active youths* (Zanis, 2005) and writing a one page summary. The article is on reserve in the library under Dr. Ogletree's name.

If you choose to participate, your name will not be connected to your responses in any way so your anonymity is secure. After our study is completed you will be given more information about our hypothesis and the results found.

If you have any questions please ask the administrator of the surveys. Contact Candice Fraser ([cs1307@txstate.edu](mailto:cs1307@txstate.edu)) or Dr. Ogletree ([so01@txstate.edu](mailto:so01@txstate.edu)) if you have any questions at a later time.

If you wish, you are welcome to keep a copy of this form.

You are making a decision whether or not to participate. Your signature indicates that you have read the information provided above and have decided to participate.

---

Signature of Participant

---

Date

FEDERAL OFFICIALS HAVE THE RIGHT TO INSPECT RESEARCH RECORDS, INCLUDING CONSENT FORMS AND INDIVIDUAL MEDICAL RECORDS, TO INSURE COMPLIANCE WITH THE RULES AND STANDARDS OF THEIR PROGRAM.

THIS PROJECT HAS BEEN REVIEWED BY TEXAS STATE UNIVERSITY'S INSTITUTIONAL REVIEW BOARD (IRB) (PHONE: 512-245-2314).

## APPENDIX B

### Demographics Survey

Please fill in your scantron with the appropriate letter.

1. Your sex:
  - a. male
  - b. female
2. Your age:
  - a. Younger than 18
  - b. 19-20
  - c. 21-22
  - d. 22-25
  - e. Older than 25
3. Your ethnicity:
  - a. Hispanic
  - b. Caucasian
  - c. African-American
  - d. Asian
  - e. Other
4. How would you describe your socioeconomic status?
  - a. upper class
  - b. upper-middle class
  - c. middle class
  - d. lower-middle class
  - e. lower class
5. Your religious affiliation:
  - a. Liberal Protestant
  - b. Conservative Protestant
  - c. Catholic
  - d. Not religious
  - e. Other

6. How religious do you perceive yourself to be?
  - a. not at all religious
  - b. a small part of my life is religious
  - c. moderately religious
  - d. religious
  - e. very religious
7. Describe your sexuality:
  - a. Heterosexual
  - b. Homosexual
  - c. Bisexual
  - d. Other
8. Your primary source for sex information as you were growing up?:
  - a. Peers
  - b. Media
  - c. Sex education class in high school
9. The sex education class you had in high school was:
  - a. Abstinence-only curriculum (focusing on having no sexual activity before marriage)
  - b. Abstinence-plus curriculum (emphasizing no sexual intercourse before marriage, but also teaching about contraception methods and disease prevention.)
  - c. Did not have a sex education class.
10. To what extent did your parents contribute to your sexual knowledge while you were growing up?
  - a. Not at all involved
  - b. Moderately involved
  - c. Very involved

### SWBS

Please fill in your scantron with the appropriate letter, according to the scale below that best represents your beliefs.

- |                            |                   |                |                         |
|----------------------------|-------------------|----------------|-------------------------|
| <b>a.</b>                  | <b>b.</b>         | <b>c.</b>      | <b>d.</b>               |
| <b>I strongly disagree</b> | <b>I disagree</b> | <b>I agree</b> | <b>I strongly agree</b> |

Relationship with God (religious well-being):

11. I don't find much satisfaction in private prayers.
12. I believe there is a God.

13. God loves me and cares about me.
14. God is impersonal and not interested in my daily situations.
15. I have a personally meaningful relationship with God.
16. I don't get much personal support from God.
17. God is concerned about my problems.
18. I don't have a personally satisfying relationship with God.
19. My relationship with God helps me not to feel lonely.
20. I am most fulfilled when I'm in close fellowship with a higher power.
21. My relationship with God contributes to my sense of well-being.

Satisfaction with self in the world (existential well-being):

22. I understand my place in the world.
23. Life is a positive experience.
24. I am unsettled about my future.
25. I am satisfied with life.
26. I have a sense of well being about the direction my life is headed in.
27. I don't enjoy much about life.
28. I feel good about my future.
29. Life doesn't have much meaning.
30. I am satisfied with the relationship I have with others.

**SHQ**

Instructions: This questionnaire asks questions about your recent sexual history. Your answers are entirely confidential.

Please fill in the answer that most applies to you on the scantron.

31. Who do you have sex with?
- a. only men
  - b. mostly men
  - c. equally men and women
  - d. mostly women
  - e. only women
32. In the last 12 months how many oral sex partners have you had?
- a. none
  - b. 1
  - c. 2
  - d. 3
  - e. 4 or more
33. In the last 12 months how many anal sex partners have you had?
- a. none
  - b. 1
  - c. 2
  - d. 3
  - e. 4 or more
34. In the last 12 months how many vaginal sex partners have you had?
- a. none
  - b. 1
  - c. 2
  - d. 3
  - e. 4 or more
35. In the last 12 months, how many times have you had oral sex without using a condom or dental dam?
- a. never did this sexual activity
  - b. have always used a condom or dental dam
  - c. once
  - d. 2-4 times
  - e. 5 or more times
36. In the last 12 months, how many times have you had anal sex without using a condom?
- a. never did this sexual activity
  - b. have always used a condom

- c. once
- d. 2-4 times
- e. 5 or more times

37. In the last 12 months, how many times have you had vaginal sex without using a condom?

- a. never did this sexual activity
- b. have always used a condom
- c. once
- d. 2-4 times
- e. 5 or more times

38. What is the primary method you or your partners have used to prevent pregnancy?

- a. never had vaginal sex
- b. condoms
- c. other forms of contraception, including birth control pills or Depo Provera
- d. withdrawal
- e. nothing

39. How much at risk do you consider yourself from HIV/AIDS?

- a. Not at all
- b. Not as much as people
- c. Neutral
- d. More than other people
- e. Much more than other people

40. How much at risk do you consider yourself from other sexually transmitted diseases (STDs)?

- a. Not at all
- b. Not as much as other people
- c. Neutral
- d. More than other people
- e. Much more than other people

41. How many times have you been tested for HIV or a different STI?

- a. 0
- b. 1-3
- c. 4-6
- d. 7-10
- e. 11 or more



42. How much do you consider yourself or your sexual partner at risk for an unwanted pregnancy?

- a. Not at all
- b. Not as much as other people
- c. Neutral
- d. More than other people
- e. Much more than other people

## APPENDIX C

### MFSK Questionnaire

Instructions: For each item, please fill in the best answer on the scantron.

1. The single most important factor in achieving pregnancy is:
  - a. time of exposure in the cycle
  - b. female's desire or wish to become pregnant
  - c. frequency of intercourse
  - d. female's overall state of health
2. Which of the following methods is the most dependable (effective) method of contraception?
  - a. condom
  - b. diaphragm
  - c. rhythm method
  - d. pill
3. Following the release from the ovary the human ovum (egg) is capable of being fertilized for:
  - a. 6-12 hours
  - b. 24 hours
  - c. 48 hours
  - d. 4-6 days
4. A good index of a female's relative fertility (ability to achieve pregnancy) is:
  - a. her overall health
  - b. the regularity of her periods
  - c. the level of intensity of her sex drive
  - d. her ability to orgasm
5. Which of the following methods of contraception is most effective?
  - a. condom
  - b. rhythm method
  - c. diaphragm plus spermicide jelly
  - d. intrauterine device (IUD)

6. The average female most often ovulates (releases egg):
  - a. 2 weeks before the onset of menstruation
  - b. just prior to menstruation
  - c. immediately following menstruation
  - d. at unpredictable times throughout the cycle
7. Infertility (inability to achieve pregnancy) is:
  - a. familial or inherited
  - b. a male problem in one-third of cases
  - c. a female problem in 90% of the cases
  - d. easily diagnosed after six months of marriage
8. Which of the following is the poorest or least dependable method of contraception?
  - a. condom
  - b. diaphragm with spermicide jelly
  - c. post-intercourse douching
  - d. rhythm method
9. A normal human ovum (egg) is approximately the same size as:
  - a. a pinhead
  - b. a small pearl
  - c. a dime
  - d. none of the above
10. Fertilization (union of sperm and egg) normally occurs in which of the following anatomical locations:
  - a. the uterus
  - b. the cervix
  - c. the fallopian tube
  - d. the vagina
11. Menopause is a time of:
  - a. diminished sexual desire
  - b. absolute infertility
  - c. rapid aging
  - d. altered reproductive and menstrual functioning
12. The rhythm method of contraception is:
  - a. always effective
  - b. avoidance of intercourse during unsafe (or fertile) times
  - c. a technique of intercourse
  - d. none of the above

13. Pregnancy would be impossible in early adolescence when menstruation has not yet even begun or is not at all regularly scheduled.

- a. true
- b. false

14. Menstrual blood is similar to a body “poison” or toxin that must be eliminated in order for a woman to remain healthy.

- a. true
- b. false

15. A woman who begins to menstruate on the first Wednesday of every month is “as regular as clock.”

- a. true
- b. false

16. In order to have a normal period there must be a moderate to heavy flow in terms of amount of blood and/or duration of flow.

- a. true
- b. false

17. The loss of one ovary through disease or surgery diminishes a woman’s fertility little if at all.

- a. true
- b. false

18. Anatomical differences (i.e., size, shape, capacity, etc) of the genital organs have a great bearing on sexual compatibility or satisfaction.

- a. true
- b. false

19. Unplanned or undesired pregnancies have a greater likelihood of miscarrying than do planned pregnancies.

- a. true
- b. false

20. Failure to have an orgasm on the part of the female eliminates or substantially reduces the likelihood of becoming pregnant.

- a. true
- b. false

21. Withdrawal is an effective means of contraception.

- a. true
- b. false

22. Birth control pills directly increase the sex drive in most women.
- true
  - false
23. Sperm retain their ability to fertilize for one to two days following ejaculation.
- true
  - false
24. Most women are more fertile during one particular season of the year than another.
- true
  - false
25. Of the following, the most common form of contraceptive used in the U.S. today is
- the condom
  - some type of contraceptive pill
  - the diaphragm
  - withdrawal
26. To help protect against the transmission of most STDs, you should use a condom that is made of:
- latex
  - animal skin
  - silk
  - a mix of ethanol and methanol (alcohol)
27. For the condom to be most effective, users should:
- carefully roll it onto the penis just before ejaculation.
  - wait until the man's erection has entirely subsided before withdrawing the penis after ejaculation
  - put the condom on the penis before the penis enters the vagina.
  - use spermicide-coated condoms, which help change the vaginal environment to be more alkaline which is harmful to the sperm.
28. Chlamydia is most prevalent among:
- university students
  - inner-city youths
  - retired persons
  - lesbians
29. One of the most common STDs in individuals of college age is:
- pubic lice
  - syphilis
  - chlamydia
  - AIDS

30. Which of the following is NOT a bacterial sexually transmitted disease?

- a. chlamydia
- b. gonorrhea
- c. syphilis
- d. genital warts

31. HPV, human papilloma virus, usually appears around the urethral opening of the penis, on the cervix of the female, and/or on the anus. They are not painful. In everyday language, we call this virus:

- a. genital warts
- b. genital herpes
- c. HIV infection
- d. crabs

32. A woman's chances of contracting cervical cancer increase greatly if she has had:

- a. pediculosis pubis
- b. herpes simplex I
- c. Chlamydia
- d. genital warts

33. This STD can be transmitted by oral-genital sex and results in painful blisters on the genitals of either men or women. Most individuals who have this STD are asymptomatic and spread it without knowing it. This STD is:

- a. genital warts
- b. genital herpes
- c. HIV infection
- d. monilia

34. Which of the following has been shown NOT to be a transmission route for HIV infection?

- a. insects
- b. needle sticks
- c. needle sharing
- d. oral-genital contact

35. If you are sexually active with more than one partner, health experts agree that you should:

- a. always use any kind of condom
- b. always use a latex condom
- c. not have intercourse with someone who has had many previous partners
- d. avoid intercourse with someone who has had many previous partners and always use a latex condom when you have intercourse.

36. Although chlamydia is one of the most common STDs in the United States, it does not have any major long-term consequences.
- a. true
  - b. false

#### Answers

- 1. a. time of exposure in the cycle
- 2. d. pill
- 3. b. 24 hours
- 4. b. the regularity of her periods
- 5. d. intrauterine device (IUD)
- 6. a. 2 weeks before the onset of menstruation
- 7. b. a male problem in one-third of cases
- 8. c. post-intercourse douching
- 9. a. a pinhead
- 10. c. the fallopian tube
- 11. d. altered reproductive and menstrual functioning
- 12. b. avoidance of intercourse during unsafe (or fertile) times
- 13. b. false
- 14. b. false
- 15. b. false
- 16. b. false
- 17. a. true
- 18. b. false
- 19. b. false
- 20. b. false
- 21. b. false
- 22. b. false
- 23. a. true
- 24. b. false
- 25. b. some type of contraceptive pill
- 26. a. latex
- 27. c. put the condom on the penis before the penis enters the vagina
- 28. a. university students
- 29. c. chlamydia
- 30. d. genital warts
- 31. a. genital warts
- 32. d. genital warts
- 33. b. genital herpes
- 34. a. insects
- 35. d. avoid intercourse with someone who has had many previous partners and always use a latex condom when you have intercourse.
- 36. b. false

## REFERENCES

- Beadnell, B., Morrison, D.M., Wilsdon, A., Wells, E.A., Murowchick, E., Hoppe, M., et al. (2005). Condom use, frequency of sex, and number of partners: multidimensional characterization of adolescent sexual risk-taking. *The Journal of Sex Research*, 42, 192-202.
- Bearman, P.S. & Bruckner, H. (2001). Promising the future: virginity pledges and first intercourse. *American Journal of Sociology*, 106, 859-912.
- Berne, L. & Huberman, B. (2000). Lessons learned: European approaches to adolescent sexual behavior and responsibility. *Journal of Sex Education & Therapy*, 25, 189-200.
- Bruckner, H. & Bearman, P.S. (2005). After the promise: the STD consequences of adolescent virginity pledges. *Journal of Adolescent Health*, 36, 271-278.
- Davis, C.M., Yarber, W.L., Bauserman, R., Schreer, G., & Davis, S.L. (Eds.) (1998). *Handbook of sexuality-related measures*. (Volume 1, pp. 106-108,). Thousand Oaks, CA: SAGE Publications, Inc.
- Fisher, T.D. (1990). Characteristics of mothers and fathers who talk to their adolescent children about sexuality. *Journal of Psychology & Human Sexuality*, 3, 53-70.
- George, L., Ellison, C., & Larson, D. (2002). Explaining the relationships between religious involvement and health. *Psychological Inquiry*, 13, 190-201.
- George, D., Young, M., Spear, C.E. (1999). The evaluation of the Sex Can Wait abstinence education curriculum series. *American Journal of Health Behavior*, 23, 134-143.
- Gil, S. (2005). Personality traits and coping styles as mediators in risky sexual behavior: a comparison of male and female undergraduate students. *Social Behavior and Personality*, 33, 149-158.
- Gough, H.G. (1974). A 24-item version of the Miller Fisk Sexual Knowledge Questionnaire. *Journal of Psychology*, 2, 183-192.
- Horowitz, J. (2002). Gender differences in motivation for sexual intercourse: implications for risky sexual behavior and substance use in a university and community sample. *Dissertation Abstracts International*, 63, 1030.



- Hyde, J.S., & DeLamater, J.D. (2006). *Understanding human sexuality*. 9th edition. Boston: McGraw Hill.
- Just say know! (2005, March 11). Retrieved March 11, 2005, from [http://www.rcrc.org/faith\\_choices/issues/sex\\_ed/index.htm](http://www.rcrc.org/faith_choices/issues/sex_ed/index.htm)
- Mabray, D. & Labauve, B. (2002). A multidimensional approach to sexual education. *Sex Education*, 2, 31-44.
- Mahoney, E. (1980). Religiosity and sexual behavior among heterosexual college students. *The Journal of Sex Research*, 16, 97-113.
- Miller, P. (2004). Special report on sexuality non-education. Retrieved March 11, 2005, from [http://www.rcrc.org/news/commentary/sexuality\\_non\\_education.htm](http://www.rcrc.org/news/commentary/sexuality_non_education.htm)
- Oman, D. & Thoresen, C. (2002). "Does religion cause health?": differing interpretations and diverse meanings. *Journal of Health Psychology*, 7, 365-380.
- Paloutzian, R.F., & Ellison, C.W. (1982). Loneliness, spiritual well-being, and quality of life. *Loneliness: A sourcebook of current theory, research and therapy* (pp. 231-233). New York: Wiley Interscience.
- Powell, L. & Jorgensen, S. (1985). Evaluation of a church-based sexuality education program for adolescents. *Family Relations*, 34, 475-482.
- Regnerus, M.D. (2005). Talking about sex: religion and patterns of parent-child communication about sex and contraception. *The Sociological Quarterly*, 46, 79-105.
- Rostosky, S.S., Regnerus, M.D., & Wright, M.L. (2003). Coital debut: the role of religiosity and sex attitudes in the Add Health Survey. *The Journal of Sex Research*, 40, 358-367.
- Slater, W., Hall, T., Edwards, K. (2001). Measuring religion and spirituality: where are we and where are we going? *Journal of Psychology and Theology*, 29, 7-21.
- Smith, J. (2005). The Christian view of sex: a time for apologetics, not apologies. Retrieved March 11, 2005 from <http://www.nfpoutreach.org/Sex.htm>
- The role of religious congregations in fostering adolescent sexual health. (2005, March 11). Retrieved March 11, 2005, from [http://www.rcrc.org/faith\\_choices/issues/sex\\_ed/index.htm](http://www.rcrc.org/faith_choices/issues/sex_ed/index.htm)

Zaleski, E., Levey-Thors, C., & Schiaffino, K. (1998). Coping mechanisms, stress, social support, and health problems in college students. *Applied Developmental Science*, 2, 127-137.

## **VITA**

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