

NORMATIVE PERCEPTIONS AND INFLUENTIAL FACTORS ON SEXUAL
BEHAVIOR AMONG ABSTINENT COLLEGE STUDENTS

by

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(Under the Direction of Su-I Hou)

ABSTRACT

The purpose of this study was to understand how abstinent students perceive sexual behavior among college students, and to examine the effect of these perceptions on abstinence behavior. Furthermore, the study investigated the influential and supportive factors in the practice of abstinence, and sought suggestions on how abstinence can be encouraged among college students.

Prevention of sexually transmitted infections (STIs) through safer sex and abstinence are the most effective approaches to control the spread of sexually transmitted diseases and unintended pregnancies. But research on abstinence among college students is sparse. Using the theory of normative social behavior (TNSB) and symbolic interactionism, in-depth qualitative interviews were conducted with 22 abstinent college students to understand their perceptions on sexual behavior of college students, the effect of the perception on them, and the underlying factors that influence and support abstinence behavior. Data from 16 of the 22 participants were analyzed using inductive analysis. Results showed that participants' perceived a high prevalence of sexual activity

among college students. In spite of the perceived norm, they decided to be abstinent because of past relationships and previous experiences, religion, fear of negative consequences, and expectation of themselves and others. However, participants reported that they faced several challenges to remain abstinent, these included pressure of long term relationship, unfulfilled sexual desires and curiosity, loneliness, peer pressure, and negative media influence. They were able to cope with these challenges using their strong support system and influential others. Other coping strategies included personal boundaries to avoid compromising situations, group dating, religion, co-operative partners and avoidance of alcohol. Participants were influenced by family, friends, and youth leaders (injunctive norms); they were also influenced by group identity, in which they drew strength from people with similar values and beliefs through open communication and accountability to one another. Outcome expectations from abstinence included enhanced relationships, elimination of distractions, ability to be role models to peers and siblings, and future and present rewards. They expressed their views on sexual health education programs on college campuses and how it can be improved.

INDEX WORDS: College, Abstinence, Norms, Sexual Behavior, Sex, Students

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DEDICATION

To the glory of God

You are the shield around me and the lifter up of my head.

To my husband Lanre and our children Dotun and Ibukun

You cared to persevere; you understood and supported.

To my mother Mrs. S. A. Odusote

You were present when it mattered most; your value is inestimable.

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CHAPTER 1

INTRODUCTION

Unintended pregnancies and sexually transmitted infections (STIs) are responsible for making safe sexual activity a focus of intervention on college campuses. This is because high levels of risky sexual behavior which may ultimately result in potentially life-altering consequences have been reported among college students (Centers for Disease Control and prevention [CDC], 2005; Lewis, Malow, & Ireland, 1997). Although attempts have been made by public health professionals to reduce the rate of STIs among some college students, only a limited number of them use condoms during sexual intercourse and many of them report having multiple sexual partners (McDonald, et al. 1990; Lance, 2001; CDC, 2004). One of the few national studies that monitored the health behavior and sexual practices of college students is the 1995 National College Health Risk Behavior Survey (CDC, 1997). In this study, 86.1% of college students indicated that they engaged in sexual intercourse during their lifetime, approximately 34.5% of students reported having six or more sex partners in their lifetimes while approximately 30% reported using a condom during their last sexual intercourse. In more recent National College Health Assessment (NCHA) data (American College Health Association [ACHA], 2007), about 52% of students who were sexually active reported using a condom the last time they had vaginal sexual intercourse, while 3.8% who had oral intercourse and 27.7% who had anal intercourse did use a condom.

According to the Centers of Disease Control and Prevention (CDC), two thirds of the 12 million sexually transmitted disease (STD) cases in the United States are among people under the age of 25 (CDC, 2000). As of the year 2003, a cumulative estimate of 38,490 young people between the ages of 13 and 24 years received an AIDS diagnosis in the United States. In 2003 alone, an estimated 3,897 young people received a diagnosis of HIV/AIDS and this number represents about 12% of the people diagnosed in that year (CDC, 2003). Even though college students are represented in this age group, the actual percentage of college students represented was not specified. The most recent report of the American College Health Association (2007) discussed sexually transmitted infection among college students and this will be discussed later.

Although research has shown the prevalence of risky sexual behavior to be high among college students, many students still make positive personal health choices (Cascoigne, 2001). Some students use condoms and some have fewer sexual partners (Chernoff & Davison, 2005; Siegel, Klein, & Roghmann, 1999), a limited number of college students (about 25%) indicate that they practice abstinence (Eisenberg, 2001; Page, Hammermeister & Scanian, 2000). Even though abstinence is the safest prevention method for STI's and unwanted pregnancies (Pinkerton, 2001; Thomas, 2000), there has been limited research on abstinent behavior among college students.

Sexual exploration is often portrayed as a normal part of college experience, and students often have misperceptions on the sexual behavior of their peers. In a study about sexual activity among a total of 725 college students, Page et al. (2000) reported a 22.6% abstinence rates for male students and 25.1% for female students. These rates are higher than the perceived rates given by college students (12.6% of males and 19.2% of

females). Also, in a study of a total population of 94,806 college students (ACHA, 2007) 45.2% of students reported that they had oral sex one or more times in the last 30 days. But 93.1% of respondents thought the typical student had oral sex one or more times within the same time frame. In the same survey, while only 48.8% of students reported having vaginal intercourse one or more times in the last 30 days, 93.9% of respondents thought a typical student would have had vaginal sex one or more times within the same time frame. About 4.7% of students reported having anal intercourse in the last 30 days while 58% of respondents thought the typical student would have had anal sex one or more times within the same time frame. This is a clear indication that there are considerable misperceptions about sexual behavior on college campuses. Also, college students are influenced by the extent to which they perceive their peers as being sexually permissive, the attitudes and behaviors of peers are important influence on the sexual behavior of college students (Cohen & Shotland, 1996; Page et al. 2000; Perkins & Wechsler, 1996; Scholly, Katz, Gascoine & Holck, 2005). Hence, if there are misperceptions about sexual behavior on college campuses, and if perceived norms about a behavior can influence behavior, then we should be able to increase abstinence by changing relevant norms. However, increasing abstinence by changing relevant norms may not be possible without understanding the underlying factors that influence the behavior.

According to the Healthy People 2010, complete abstinence during adolescence (primary abstinence), or reverting to abstinence for long periods of time after having had intercourse in the past (secondary abstinence) are positive protective behaviors for STIs and unwanted pregnancies (U.S. Department of Health and Human Services, 2000).

Hence, one of the objectives of the Healthy people 2010 is to increase the proportion of adolescents who abstain from sexual intercourse or use condoms if they are sexually active (Objective 25-11). In light of this objective and the importance of abstinence in preventing sexually transmitted diseases and unwanted pregnancies, there is need to examine certain factors that influence abstinent behavior and decision-making, and to understand the context in which they occur among college students and late adolescents.

Statement of the Problem

The degree of unprotected intercourse and sexually transmitted infections among college students have been of increasing concern to researchers. College students tend to be sexually adventurous and they often engage in unsafe sexual practices, which can lead to sexually transmitted infections and unwanted pregnancies (Reinisch, Hill, Sanders & Ziemba-Davis, 1995; Simkins, 1995; Zak-Place & Stern, 2004). At the university where this study was carried out, about half of the undergraduate students assessed with the National College Health Assessment (NCHA) survey reported using condoms the last time they had vaginal sex, while less than 25% of undergraduate students used condoms when engaged in oral and anal sex (American College Health Association [ACHA], 2003).

Even though sexual transmission is a preventable vector of HIV and other STIs, more than 15 million sexually transmitted infections occur annually in the United States with rates of chlamydia and gonorrhea infection highest among people between the ages of 15 and 24 years (Weinstocks, Berman, & Cates, 2004). Individuals who are infected with STDs are at least two to five times more likely to acquire HIV if they are exposed to

the virus through sexual contact than uninfected individuals (Wasserheit, 1992). Currently, there is no known cure for HIV/AIDS, and as a result, prevention through the use of condoms and abstinence are the most effective approaches to control the spread of sexually transmitted diseases. Condoms however, are not totally effective in preventing pregnancies and /or transmission of diseases (Thompson, 2003's study as cited in Hopkins, Tanner & Raymond, 2004). Abstinence remains the only way to completely avoid risk (Pinkerton, 2001).

Most intervention studies consist of educational programs aimed at reducing risky sexual behavior and negative consequences of risky behavior. However, these programs have shown limited effectiveness; perhaps another approach to solving this problem is abstinence (Thomas, 2000). Also, some college students regret the decision to have engaged in sexual activity as a result of feeling pressured by their partners (Dickson, Paul, Herbison, & Silva, 1998; Oswalt, Cameron, & Kobb, 2005). They may need support to revert back to abstinence or resist such pressure in the future. Therefore, understanding the underlying and sustaining factors in abstinence behavior may be an important part of a long-term strategy to develop effective STD prevention among college students. Using the social norm approach to personal health choices may help in understanding the factors that influence preventive behaviors.

Significance of the Study

The study of abstinent college students has numerous implications for researchers, health educators, and college students. This is because to my knowledge, very few studies have sought to understand abstinent behavior among college students. Most studies on

abstinent behavior are limited to early adolescents and as a result this study seeks to fill a gap. The study will highlight the coping strategies of abstinent students, that is, the underlying and sustaining factors in abstinence behavior, and provide information that may help to correct some misperceptions of sexual behavior among college students. The theory of normative social behavior (TNSB) has been used extensively to understand drinking behavior, but until now, only a few studies have applied social norm theory to sexual behavior among college students (Scholly et al. 2005). Using the TNSB to understand the norms and perceptions associated with sexual behavior in college could contribute significantly to the field. Also, applying the constructs of TNSB to a qualitative research is unique. Several ambiguities that will be discussed later in this study have been associated with norms research, so using a qualitative approach to understand how the theory guides sexual behavior is novel.

It is expected that this study will help those who use the social norms approach to intervention on campuses (Scholly et al. 2005) to focus more on positive behavior. Since sexually abstinent students are a “sexual behavior minority” among college students, the study will be able to explain the effect of the widely held views about college students’ sexual behavior on abstinent students and the choice they have made. It will inform health educators on strategies to use in encouraging abstinence among college students and encourage secondary abstinence among students experiencing sexual regret.

Considering the complex psychosocial issues that are involved with this topic and the fact that descriptive norms (individual beliefs about the prevalence of a behavior) affect an individual’s behavior through interaction with different mechanisms, the perceptions of students about sexual behavior on campus were investigated using a

qualitative approach. The qualitative research approach was used to understand the various mechanisms that interact with beliefs about the prevalence of sexual behavior that results in the decision to be abstinent.

Purpose and Research Questions

The purpose of this study is to understand the perceptions of abstinent students on sexual behavior norms among college students, to examine the effect of their normative perceptions on abstinence behavior, and examine the resilient and influential factors in abstinent students. It also seeks suggestions on how abstinent behavior can be encouraged among college students.

The research questions are as follows:

1. What are the perceptions of abstinent students regarding sexual behavior among college students?
2. How do the perceived norms influence abstinence behavior?
3. Why do students choose to be abstinent?
4. What are the factors that influence and support students sexual abstinence?

Definition of Key Terms

Abstinence: Act or practice of refraining from sexual intercourse.

Adolescence: The transitional stage of development between childhood and full adulthood, representing the period of time during which a person is biologically adult but emotionally not at full maturity.

Anticipatory socialization: Strategies about intention to develop and blend into new social circles.

Aspiration: Intention to establish social networks.

Bracketing: Setting aside what you know about a phenomenon so it does not influence your study results.

Collective norm: A collective social entity's code of conduct. It operates at the level of the social system; it could be a social network or the entire society.

Descriptive norms: Individual beliefs about the prevalence of a behavior.

Ego involvement: The extent to which individuals' self concept is connected with their position on a particular issue and forms an integral part of how they define themselves.

Group identity: Individuals' aspiration to emulate referent others and the extent to which they perceive similarity between themselves and those referents.

Healthy People 2010: A set of health objectives for the nation to achieve over the first decade of the new century. Different people, states, communities, professional organizations, and others can use it to help them develop programs to improve health.

Informational influence: When people accept information from others as the truth (Deutsch & Gerard, 1955).

Injunctive norms: Extent to which individuals perceive that others who are influential expect them to behave in a certain way, and by implication, social sanctions will be incurred.

Norms: Codes of conduct that either prescribe or proscribe behaviors.

Normative influence: The influence exerted on an individual by a reference group to conform to its norms.

Outcome expectations: Beliefs that one's actions will lead to benefits.

Perceived norms: Individual's understanding of norms, result of individual's construal processes.

Primary abstinence: Refraining from sexual intercourse by an individual who has never experienced sex.

Private acceptance: Conformity that involves real change in opinion on the part of the individual.

Public compliance: A change in behavior including the public expression of opinions that is not accompanied by an actual change in one's private opinion.

Secondary abstinence: Discontinuation of sexual intercourse among people who are already sexually experienced.

Sexual intercourse: Any form of insertive sexual behavior, which includes vaginal, oral and anal sex.

Similarity: Affinity and desire connection with the reference group.

Strong ties: Those with whom we spend much time, have strong emotional bonds, and do things for each other: in short, those we might consider close friends and who are likely to know one another (Granovetter, 1973; 1983).

Subjective norm: The social pressure put on an individual to perform a behavior.

Weak ties: Those people we consider acquaintances and who are unlikely to know one another. Weak ties act as bridges between dense social networks (such as our own social networks and those networks that our acquaintances are part of) (Granovetter, 1973; 1983).

CHAPTER 2

REVIEW OF THE LITERATURE

This chapter provides a review of the literature related to sexual behavior among college students. The first section discusses factors that influence sexual behavior; it discusses risky sexual behavior and prevention of risky sexual behavior. The next section describes perception of norms, social norms, norms in social behavior theories, and the ambiguities in norms research. Following this section is a description of the theory of normative social behavior (TNSB), and its similarities and differences with other norm theories. The final section of the chapter discusses the use of qualitative research in sexual behavior, and the qualitative research theory that guides the methods.

Risky Sexual Behavior among College Students

College students are often viewed as being at a high risk for sexually transmitted infections (STIs) because they engage in exploratory sexual behavior, seek social approval from their peers, and have a sense of invulnerability (CDC, 2005; Hernandez & Smith, 1990; Lewis et al. 1997). Unprotected sex has placed college students at an increased risk of acquiring sexually transmitted infections; some of the STIs and complications reported among college students in the recent American College Health Association-National College Health Assessment (ACHA, 2007) are reported in Table 1.

Table 1. Reported Sexually Transmitted Infection (STI), Disease (STD), or Complication, Among Students in the Past School Year (Spring, 2006)

| Types of STI/STD | Total | | Female | | Male | |
|-----------------------------|--------|------------|--------|------------|--------|------------|
| | Number | Percentage | Number | Percentage | Number | Percentage |
| Genital warts/HPV | 2,060 | 2.2 | 1,594 | 2.8 | 421 | 1.3 |
| Genital herpes | 892 | 1.0 | 645 | 1.1 | 222 | 0.7 |
| Chlamydia | 711 | 0.8 | 497 | 0.9 | 184 | 0.6 |
| Pelvic inflammatory disease | 302 | 0.3 | 231 | 0.4 | 59 | 0.2 |
| HIV | 253 | 0.3 | 112 | 0.2 | 133 | 0.4 |
| Gonorrhea | 204 | 0.2 | 98 | 0.2 | 99 | 0.3 |

Source: Journal of American College Health (2007)

Despite widespread prevention and education efforts that target college students, they still engage in behaviors that place them at risk of HIV infection (CDC, 2005; Lewis, et al. 1997). Some of the risky sexual behavior that puts students at risk includes having multiple partners without using condoms, use of drugs and alcohol, and failure to seek HIV testing.

Having Multiple Partners without Using Condoms

Adolescents and young adults often engage in high-risk sexual behavior, have multiple partners and have sex without using condoms (CDC, 2004; Douglas et al. 1997; Gilbert & Alexander, 1998; Lance, 2001). These activities place them at a high risk for infection with HIV and other sexually transmitted infections. In a survey of a random sample of 10,000 students across American Colleges and Universities (Eisenberg, 2001), almost 71% of students reported being sexually experienced, 95% of them reported that their sexual experiences were exclusively with opposite sex partners, and 5% reported sexual experience with members of their own sex. Females with both sex experiences and males with either both or same sex experiences, were more likely to report having multiple sexual partners than their peers who only engage in sex exclusively with the

opposite sex. Odd ratios of consistent condom use were lower for men with only same sex experience than among those with only opposite sex partners. The most recent pattern of condom use among sexually active college students is presented in the Spring 2006 report of the American College Health Association National College Health Assessment (ACHA, 2007) (Table 2).

Inconsistent condom use is one of the most important factors that contribute to the rise in STD/HIV infections in women (Roberts & Kennedy, 2006). In a study of 100 young multiethnic college women at risk for HIV and STDs, 61% of them demonstrated negative attitudes about the use of condoms. Women who were sexually assertive, had intentions to use condoms, and did not use substances, used condoms more often. Despite their assertiveness and intentions, many participants had multiple sexual partners, and 64% of the women were inconsistent condom users. Women who reported lack of sexual assertiveness and condom resistance from their male sexual partners were unlikely to refuse sex or demand condom use from their partners (Amaro, 1995; Bowen & Trotter, 1995; Libbus, 1995; Marin, Gomez & Hearst, 1999). So, to effectively negotiate consistent condom use, young women must have a sense of control over sexual encounter, favorable attitudes toward condoms, and a perception of risk (Bryan, Aiken, & West, 1997; Gerrard, Gibbons & Bushman, 1996). Other reasons that have been cited for not using condoms were monogamy, having a regular sexual partner, and preferring other forms of birth control. The leading reason for consistent condom use was fear of HIV infection (Bauman & Berman, 2005; Prince & Bernard, 1998).

Table 2. Reported Condom Use among Sexually Active Students at Last Sexual Intercourse

| Types of sexual activity | Total | | Female | | Male | |
|--------------------------|--------|------------|--------|------------|--------|------------|
| | Number | Percentage | Number | Percentage | Number | Percentage |
| Oral intercourse | 2,469 | 3.8 | 1,331 | 3.3 | 1,004 | 4.2 |
| Vaginal intercourse | 32,640 | 52.1 | 19,223 | 49.5 | 12,485 | 56.7 |
| Anal intercourse | 5,035 | 27.7 | 2,323 | 22.5 | 2,553 | 35.0 |

Source: Journal of American College Health (2007)

Condom use errors, which affect students' level of comfort and uncertainty about the effectiveness of condoms, have been identified as another reason why students fail to use condoms (Crosby, Sanders, Yarber, Graham & Dodge, 2002; Keller, 1993; Sanders, Graham, Yarber & Crosby, 2003; Yarber, Graham, Sanders, & Crosby, 2004). Specific problems reported with using condoms from a sample of 272 college students included inadequate lubrication, poor fit, and breaks or leaks during intercourse (Keller, 1993). Students who had not used condoms anticipated many more problems than were actually encountered by people who had used them. In an anonymous questionnaire used to explore the relationship between condom breakage and slippage in a sample of 428 single college men and women (Yarber et al. 2004), breakage and slippage were found to be associated with never receiving instruction on correct condom use, having more than one sex partner, more frequent use of condoms, and having partners who are less than highly motivated to use condoms. Those using condoms without proper lubrication and those experiencing loss of erection during sex would more likely report slippage.

Use of Drugs and Alcohol

Several studies have shown that adolescents who use tobacco, alcohol, and illicit drugs were least likely to use condoms and were prone to having multiple sex partners

(Bon, Hittner, & Lawandales, 2001; Ku, Sonenstein, & Pleck, 1992; Shafer & Boyer, 1991). Many students reported having unprotected sex due to intoxication (Cooper, 2002; Wechsler, Davenport, Dowdall, Moeykens, & Castillo, 1994). In 1998, an estimated 400,000 college students between the ages of 18 and 24 had unprotected sex after drinking, and an estimated 100,000 had sex while intoxicated (Hingson, Heeren, Zakocs, Kopstein, & Wechsler, 2002).

In a study about the relationship between substance use and HIV risk behavior among young adults ages 19 to 21 with or without a college education, Staton et al. (1999) indicated that increased use of alcohol and marijuana at younger ages is related to riskier sexual activity and increased use of alcohol and marijuana as young adults. Male participants who used alcohol or marijuana at a younger age engage in riskier sexual behavior than female participants. Female participants were more likely to use condoms regardless of their early substance use patterns, and those who had never experienced sex or who initiated sex later (ages 19 or 20) are less likely to report lifetime or current drug use. In other studies, however, substance use has been found to play a large role in young women's sexual risk behaviors leading to infections with STDs and HIV (CDC, 2002; Koniak-Griffin & Brecht, 1995).

In qualitative data collected among a sample of 96 drug users in London (Quirk, Rhodes & Stimson, 1998), three forms of unprotected sex were identified as a result of drug use. One of the three themes identified were condom use for ejaculation only, where a condom was used for penetrative sex only when ejaculation was imminent, so, that the function of the condom is only to prevent unwanted pregnancy rather than to prevent HIV/STDs. The second theme is the use of condom after limited unprotected penetration,

where sexual partners commenced unprotected penetration but used a condom soon after. The third theme is condom failure, where condoms split or came off during penetration. The likelihood of condom failure may increase in penetrative sex under the influence of drugs.

Failure to Seek HIV Testing

HIV testing and counseling could be used as prevention tools on college campuses rather than mere tests for students to determine their HIV status (Holtgrave, Valdiserri, Gerber, & Hinman, 1993), but only large schools and private schools are more likely to have a health center. Only schools with health centers can provide a wide variety of STD prevention services. Koumans, et al. (2005) estimated the proportion of students with access to HIV and STD education, treatment, and prevention services at 2-year and 4-year U.S. colleges and universities. In a stratified random sample of 910 colleges and universities, 73% of students attended a school with a health center. Notwithstanding, only 41% of students attended a school where tests for common STD [chlamydia, gonorrhea, *Trichomonas vaginalis* (TV), HIV, herpes simplex virus (HSV)] and pap testing are available. Although many colleges provided some clinical HIV and STD services, only 63% of these schools were able to test for common STDs and only 52% of students have on-campus access to tests for chlamydia or gonorrhea. However, the study did not collect information on the number of students tested on these campuses.

Although HIV testing is viewed as a means to help control the spread of infection in college students, these students often delay or avoid seeking testing for sexually transmitted infections (STIs) even if the services are readily available (Barth, Cook, Downs, Switzer, & Fischhoff, 2002). In an in-depth semi-structured interview about

factors that influence decisions about STI testing among 41 college students, Barth et al. (2002) reported that negative consequences of testing and perceived vulnerability to infection were the main reasons that influenced decisions to seek testing. Other issues that influenced decision-making included perceived benefits, perceived severity of diseases, public knowledge and opinion, social norms, provider characteristics, test-site characteristics, and personal considerations.

Several reasons have been given for testing for HIV among college students. Opt & Loffredo (2004) found that college students primarily get tested because of routine checkups, surgery or blood donation, and unprotected sex. Hou & Wisenbaker (2005) examined the psychosocial correlates of HIV testing intentions among 440 college students. Of the 344 who have never been tested for HIV but are sexually experienced, only 7.7% of the students expressed intentions to be tested, and the combined psychosocial factors that predicted testing intentions are perceived pros, cons, risks, self-efficacy and availability/accessibility related to testing. Older students and those who know someone infected with HIV/AIDS are more likely to have been tested. Anastasi, Sawyer, & Pinciario (1999) found that tested college students tended to be older and likely to be women. About 40% of 255 students who voluntarily sought HIV antibody testing at a university health center reported beginning a new relationship as a reason for getting tested.

Some of the factors that inhibit testing are being discriminated against if HIV positive, perception of low risk, and long waiting periods for results (Daniels & Wimberly, 2004). Marelich & Clark (2004) reported false disclosures of HIV testing among heterosexual college students. In a sample of 246 sexually active heterosexual

students, 21% of the sample had been tested for HIV, and most individuals disclosed their results to intimate partners. Of the entire sample, 5% had previously told an intimate sexual partner they were HIV-negative, even though they had not been tested. Factors that motivate individuals to report negative human immunodeficiency virus (HIV) antibody test results when they had never been tested are sexual intimacy motives associated with the needs for affiliation, sex, and dominance.

Grade Level

Grade level is also a factor that may influence sexual behavior among college students. College students differ across the four years in college with regard to rates of intercourse, contraception choice, responsibility, as well as HIV testing, and partner trust. In a study to characterize the differences and similarities among college freshmen, sophomores, juniors, and seniors regarding their sexual behavior, Siegel et al. (1999) found that the percentage of students who had vaginal intercourse rose steadily from freshmen to seniors. This was because seniors had more lifetime opportunities to be sexually active than freshmen. However, a later start on sexual activity does not obviate risky behavior. Condom use was found to be the most favored method of contraception at first intercourse, and it remained fairly constant across the four college class cohorts among men. However, among the women there was a gradual rise in condom use from freshman to senior year. Seniors reported an increased level of oral contraceptive use and an increased reliance on women to provide contraceptives when compared to freshmen. Also, there was an increase in the percentage of seniors who had undergone HIV testing compared to freshmen. Greater partner relationship duration, intensity, and

communication prior to initiating sexual intercourse were more reported in women than in men.

Approach to Reduce Risky Sexual Behavior

Promoting responsible sexual behavior can reduce the risk of STIs including HIV infection and unintended pregnancies. Currently, there is no known cure for AIDS and prevention of HIV through safer sex and abstinence are the most effective approaches to control the spread of sexually transmitted diseases.

Use of Condoms

Using latex condoms can reduce the risk of HIV transmission and unintended pregnancy (Bull & Shlay, 2005; Cates & Stone, 1992a; 1992b; Mahoney, Thombs, & Ford, 1995; Siegel et al. 1999). Condoms are considered a risk reduction strategy, because they may not be completely effective in preventing pregnancy or transmission of diseases (Hopkins, et al. 2004). Although condom use is known to be less effective for pregnancy prevention than other available methods, it is considered the most effective for preventing the majority of STIs when used consistently and correctly. Male condoms have been shown to protect against several STIs, including HIV infection (National Institute of Allergy and Infectious Diseases [NIAID], 2001). Female condoms should have a similar protective spectrum with consistent and correct use. The availability of different kinds of condoms such as female condoms and polyurethane male condoms increase the likelihood that couples will find one they can use correctly and consistently. Although some studies have shown that offering different choices of barrier methods may reduce use of the male condoms (Farr, Acosta Castro, DiSantostefano, Claassen, &

Olguin, 1996; Fontanet et al. 1998), this substitution may not be a drawback if the alternative methods are also effective for STI and pregnancy prevention. For example, women that were given both female and male condoms had a slightly lower incidence of STIs than the women who were only given male condoms (Fontanet et al. 1998). Other studies have found interventions at both individual and community levels that offered female condoms plus male condoms increased overall use of the latter, perhaps because of a heightened ability to negotiate with the male partner the use of either barrier method (Artz et al., 2000; Feldblum et al., 2001; Latka, Gollub, French, & Stein, 2000; Musaba, Morrison, Sunkutu, & Wong, 1998).

Studies have shown that couples are more likely to use condoms for pregnancy prevention rather than for STD prevention, and couples using some other contraception tend not to use condoms (Cooper, Agocha, & Powers, 1999; Critelli & Suire, 1998). Therefore, the use of dual protection is suggested for protection against unintended pregnancies and STDs (Bull & Shlay, 2005; Cates & Steiner, 2002; Rieder & Coupey, 1999). Dual protection can be provided by more than one method (e.g., oral contraceptive pills and condoms) or by one method (e.g., condom use or monogamy). Single women who are worried about pregnancy and HIV infection and those who have had an STD are more likely to use more than one method simultaneously (Riehm et al. 1998; Santelli et al. 1997).

Safe Sex Communications

Safer sex communications have been reported to influence condom use (Catania et al. 1992; Troth & Peterson, 2000). Discussing safer sex options with a sexual partner is considered an important first step in any new sexual relationship (Dilorio, Dudley, Lehr,

& Soet, 2000). In fact, HIV prevention programs often include instruction on how to introduce the topic of HIV with a sexual partner and how to negotiate for condom use and other safer sex practices (Kelly, 1995; National Institute of Mental Health (NIMH) Multisite HIV Prevention Trial, 1997). Basen-Engquist (1992) reported that college students who had higher levels of self-efficacy and more support from friends were more likely to express their intentions to discuss and to actually discuss safer sex with their partners. But neither the participants' feelings of self-efficacy for discussion nor their actual amount of discussion about safer sex options was related to their condom use. O'Leary, Goodhart, Jemmott, & Boccher-Lattimore (1992) found that college students who felt more self-efficacious about discussing safer sex with their partners were no more likely to use condoms than those who expressed low levels of self-efficacy were. But other studies seem to indicate that safer sex communication fosters the use of safer sex practices (Catania, Coates, & Kegeles, 1994; Catania et al. 1992; DiClemente, 1991; Malow, Corrigan, Cunningham, West, & Pena, 1993; Rickman et al. 1994; Sheahan, Coons, Seabolt, Churchill, & Dale, 1994). For instance, Catania et al. (1992) found that sexual communication was a consistent correlate of condom use across gender and sexual orientation among unmarried heterosexual, gay, and bisexual adults. Also, Catania, et al. (1994) reported that sexual communication about protection was related to a greater commitment to condom use among unmarried heterosexual adults who had a risk factor for HIV.

Parental support has also been identified as an important factor for safe sex communication. For example, Shoop & Davidson (1994) found that parental support enhanced college students' confidence in talking with sexual partners about AIDS.

Whitaker, Miller, May, & Levin, (1998) also reported that teens who talked with their parents about sex were more likely to report higher levels of sexual discussion with their partners than those who did not.

Socioeconomic Status

Socioeconomic status is a factor that can reduce or increase risky sexual behavior. Efforts to reduce risky sexual behavior may not be successful if socioeconomic and cultural realities in which sexual behavior are shaped are not understood and addressed (Barnett & Parkhurst 2005; Harvey, 2000; Wingood & DiClemente, 2000). It might not be enough to focus on prevention intervention of risky sexual behavior alone without addressing the context in which the behaviors take place and the life circumstances that the behavior addresses. Socioeconomic status (SES), as measured by family income or educational attainment, is associated with many measures of health status including reproductive health outcomes such as unintended pregnancy (Brown & Eisenberg, 1995) and adolescent birth rates (Alan Guttmacher Institute, 1994; Hofferth, 1987). SES may influence health by circumscribing social and educational opportunities, limiting access to prevention and treatment services, and shaping health behaviors (Santelli, Lowry, Brener, & Robin, 2000).

Although SES may be a risk factor for adolescent pregnancy and STD infection, the impact of poverty on sexual behaviors is not well understood. Several studies documented an association between lower SES or family factors and earlier onset of sexual activity (Cooksey, Rindfuss, & Guilkey, 1996; Moore, Miller, Gleib, & Morrison, 1995; Morris, 1992; Santelli et al. 2000). But a review of several studies by Hofferth (1987) showed that parental educational attainment was a more important predictor of

sexual experience than family income. Santelli et al. (2000) reported that adolescents whose parents reported higher educational attainment were less likely to engage in sexual intercourse, and adolescent females with college-educated parents were more likely to have used condoms during their last intercourse. Also, Singh, Darroch & Frost (2001) found that adolescent childbearing is more likely among women with low levels of income and education than among their better-off peers.

Ku, Sonenstein, & Pleck (1993) found that greater family income was associated with increased frequency of intercourse and increased number of sexual partners but not with the use of effective contraception for older male adolescents. Contraceptive use at first intercourse is associated with poverty status and race/ethnicity (Moore et al. 1995). Also, living in a single-parent family has been associated with an increased probability of early initiation of sexual intercourse compared with living in a 2-parent family (Young, Jensen, Olsen, & Cundick, 1991). This is an indication of decreased parental supervision, more permissive parental attitudes, or the coincidence of poverty and single parent families (Hofferth, 1987; Moore et al. 1995; Young et al. 1991). In college students, being away from direct parental control and the influence of former school classmates and peers is associated with increased probability of having sex (Turner, et al. 1994).

Religiosity

Religion influences a range of decisions about sex-related issues such as abstinence, birth control, and abortion (Lefkowitz, Gillen, Shearer, & Boone, 2004). Reference group theory has been used to explain associations between religiosity, sexual behaviors, and attitudes (Bock, Beeghley, & Mixon, 1983; Studer & Thornton, 1987; Zaleski & Schiaffino, 2000, Lefkowitz, et al. 2004). This theory suggests that individuals

will follow the teachings of their religion when determining their own sexual behaviors and attitudes. Since most religions disapprove of premarital sex, religious behaviors may be a better predictor of sexual behaviors and attitudes (Thornton & Camburn, 1989). Differences in religiosity may help to determine differences in sexual behaviors and attitudes. Individuals who are not currently sexually active may develop attitudes during emerging adulthood about sex, HIV, and condoms that have the potential to influence their future sexual and contraceptive behaviors (Morrill, Ickovics, Golubchikov, Beren, & Rodin, 1996; Toon & Semin, 1999).

Studies of religious affiliation and sexual behavior have yielded mixed results; some studies failed to find differences in sexual behaviors based on affiliation with specific religious groups (Studer & Thornton, 1987; Thornton & Camburn, 1989). Others found that certain Christian groups, including Catholics and conservatives or fundamentalist Protestants, were less likely to be sexually active than members of other religious groups (Beck, Cole, & Hammond, 1991; Brewster, Cooksey, Guilkey, & Rindfuss, 1998). Research on sexual attitudes has more consistently revealed that Catholics and Protestants were more conservative than other groups (Sheeran, Abrams, Abraham, & Spear, 1993; Thornton & Camburn, 1989).

Religious attitudes were associated with sexual behavior and conservative sexual attitudes (Jessor & Jessor, 1975; Lefkowitz, et al. 2004; Samuels, 1997; Sheeran et al. 1993) and perceived vulnerability to HIV. Youth who perceived religion as more important in their daily lives tended to be more conservative sexually and to fear HIV more. Sexually abstinent youth reported that religion was more important in their daily lives than did sexually active youth.

Zaleski & Schiaffino (2000) reported that religious identification may protect against initiating sexual activity among late adolescents, but may fail to protect against practicing unsafe sex among students who are already sexually active. In a study to examine the impact of religiosity on risk related sexual behaviors among 230 first-year college students in a private Catholic university, greater intrinsic and extrinsic religiosity were associated with less sexual activity and more positive attitudes toward condom use. Also, adolescents who are religious were more likely to have higher self-efficacy in communicating with new as well as steady male partners about sex, STIs, HIV, and pregnancy prevention. They were also more likely to refuse an unsafe sexual encounter compared to those who were not religious (McCree, Wingood, DiClemente, Davies & Harrington, 2003).

Abstinence Behavior

Abstinence from sexual intercourse is an important behavioral strategy for preventing STIs and unwanted pregnancies (Santelli et al. 2006). It is a risk avoidance strategy because it enables one to avoid risk, but only a limited number of college students (about 25%) indicated that they practice abstinence (Eisenberg, 2001; Page, Hammermeister & Scanian, 2000).

There have been many controversies surrounding what abstinence is and what it is not. It may be defined in behavioral terms as postponing sex, never had vaginal sex, or refraining from further intercourse if already experienced (Santelli et al. 2006; Thomas, 2000). Although persons practicing sexual abstinence are likely to be virgins, virginity is not a requirement for sexual abstinence (Norris, Clark, & Magnus, 2003). Some people engage in behaviors other than penile-vaginal intercourse as a strategy to retain their

virginity but still engage in other sexual practices (Haglund, 2003; Herold & Way, 1983; Mahoney, 1980).

In a 1999 e-mail survey of 72 health educators, about 30% of health educators responded that oral sex was abstinence behavior and about 29% asserted that mutual masturbation is not abstinence (Mercer, 1999), an indication that even health educators might not agree on the definition of the word abstinence. The data on college students perception of what is meant by sexual abstinence is limited. In a 1991 survey of about 600 students enrolled at a Midwestern University, while 59% did not believe that oral sex would qualify as sex, only 19% thought the same about anal sex (Sanders & Reinisch, 1999). The tendency to equate “sex” with intercourse alone represents long-standing cultural norms of acceptable sexual behavior (Remez, 2000). There are many sexual practices other than intercourse that predispose young people to negative outcomes. Some STIs may be spread through kissing, manual or oral stimulation (Santelli et al. 2006). So there is a need to understand what is meant by sexual abstinence.

For the purpose of this study, abstinence was defined as a form of behavior used to actively avoid sexual intercourse that is, vaginal, oral and anal sex, by persons who are not married. It will encompass primary abstinence, which is refraining from sexual intercourse by an individual who has never experienced sex, and secondary abstinence or the discontinuation of sexual intercourse among people who are already sexually experienced (Loewenson, Ireland, & Resnick, 2004; Thomas, 2000).

Sex Education

Sex education is another approach that has been found useful in reducing risky sexual behavior. The content of sex education in public schools in the United States

(U.S.) is debated intensely and there have been many controversies over the type of sex education to be implemented in the U. S. public schools. The approach that is being implemented presently includes abstinence only and comprehensive sex education. Nevertheless, an approach focusing on education alone may not be adequate because being both sexually active and knowledgeable about HIV/AIDS was not associated with safer sexual practices (McGuire, Shega, Nicholls, Deese, & Landefeld, 1992; Opt & Loffredo, 2004). Students are knowledgeable about HIV/AIDS but have little personal concern about becoming infected or taking appropriate safe sex precautions.

Abstinence only education programs. In 1996, Congress added the abstinent Education Grant Program to the Section 510, Title V of the Social Security Act. This act allocated \$50 million per year for 5 years from 1998 to 2002 to fund state programs providing abstinence education (U. S. Dept. of Health and Human Services, 1998; Fuller & McLaughlin, 1992; Thomas, 2000). This program is designed to emphasize abstinence from sexual activity outside of marriage at all ages (Sonfield & Gold, 2001).

Abstinence only education is one approach to prevent sexually transmitted infections and unplanned pregnancies but its evaluation has produced mixed results. While a number of programs reported encouraging outcomes, such as a reduction in reported sexual activity (Jorgensen, Potts, & Camp, 1993; Kirby, et al. 1994), increased positive attitudes (Olsen, Weed, Daly & Jensen, 1992) and decreased number of pregnancies (Howard & McCabe, 1990; Vincent, Clearie, & Schluchter, 1987; Napier, 1997). Collins, Alagiri, and Summers (2002) and Kirby (2000) reported that when behavior is measured and rigorous designs employed, no study has demonstrated the superiority of abstinent-only programs. Abstinence only and abstinence until marriage

programs have not been shown to be effective in long-term, randomized controlled studies, especially for sexually experienced adolescents (Bearman & Bruckner, 2001; Jemmott, Jemmott & Fong, 1998; Kirby, Korpi, Barth & Cagampang, 1997). Abstinence only education did not significantly change adolescents' values and attitudes about premarital sexual activity, or their intentions to engage in premarital sexual activity (Bruckner & Bearman, 2005; Sather & Zinn, 2002). This does not mean that abstinence only programs cannot or did not work; it is only that their effectiveness as a whole cannot be judged (Kirby, 2006). There are few abstinence only programs with sufficiently strong evidence of success (for example, promising effects for delaying sex) to recommend their widespread dissemination and implementation. Meanwhile, promotion of abstinence should not be discounted because of the health consequences of risky sexual behavior; rather it should be encouraged and reinforced at all levels before marriage. More efforts should be made to evaluate the effectiveness of abstinent only programs.

Comprehensive sex education. This includes teaching about abstinence, delay of sexual debut and information on contraception and protection against STDs. Bleakley, Hennessy, & Fishbein (2006) provide evidence that a very large majority of adults in the United States support comprehensive sex education programs that teach about abstinence and other methods of preventing pregnancy and sexually transmitted disease, whereas only a minority of adults supports the teaching of abstinence only. Despite the public controversy, the federal government is spending a large amount of money on abstinence-only programs and schools have increasingly adopted abstinence-only education. Many comprehensive education programs have been shown to be successful in delaying sexual intercourse and increasing condom and contraceptive use among sexually active

adolescents (Johnson, Carey, Marsh, Levin, & Scott-Sheldon, 2003; Kirby, Laris, & Rolleri, 2005; Robin et al, 2004). But only few abstinence-only programs have been well evaluated and found to be effective (Bleakley et al. 2006).

Peer Norms and Perceptions

College students often overestimate sexual behavior among their peers (Martens, et al. 2006). Those who estimated high levels of sexual activity among their peers were more likely to have had sexual intercourse in the past month than those who made lower estimation of peer sexual activity (Page et al. 2000). Also, students who reportedly decided to abstain from sexual intercourse gave significantly higher estimations of the percentage of students who have decided to abstain compared to those who had not (Page et al. 2000).

Several factors may have contributed to misperceptions among college students. One important factor is the media. Data from a survey of 312 college students suggested that students believed that their peers were significantly more sexually permissive than was actually the case and that the erroneous impression was based in part on their perceptions of media influence on peers (Chia & Gunther, 2006). The data also indicated that the misperceptions produced a significant impact on male college students, making them more likely to engage in casual sexual activity at an earlier stage in dating. Brown et al. (2006) reported that exposure to sexual content in music, movies, television, and magazines accelerate white adolescents' sexual activity and increase their risk of engaging in early sexual intercourse. Black teens appear more influenced by perceptions

of their parents' expectations and their friends' sexual behavior than by what they see and hear in the media.

Although media have contributed to misperceptions of social norms among college students, an effort to change social norms can be achieved through interpersonal and mass-mediated communication channels with the goal of influencing individual behavior (Hogg and Reid, 2006). People construct and modify their perceptions of group norms through the information they obtain from others via direct communication or mediated communication. Boer & Westhoff (2006) reported that subjective (injunctive) norms are shaped through positive and negative communication by personal social network and construal of the communicated social norm. The communicated norm is elicited by the strength of the relationship with more or less important referents (strong and weak ties) (Granovetter, 1973; 1983). With strong ties, individuals conform to the communicated injunctive norm, while with weak ties individuals do not conform to the communicated injunctive norm. In a study of condom use norms among 98 adolescents from different cultural backgrounds in South Africa (Boer & Westhoff, 2006), the role of interpersonal communication in influencing safer sex subjective norms draws on a combination of social network and diffusion perspectives. Communication with weak ties can greatly facilitate the diffusion of normative information, but communication with strong ties can reduce normative uncertainty about a particular behavior and exert more influence on perceptions of subjective norms.

In contrast, David, Cappella, & Fishbein (2006) believed that group communication processes could contradict or even reverse the positive effects of a mass communication campaign designed to promote a favorable norm. They illustrated how

individuals process normative information, form impressions of the norm, and continue to influence the expression of related opinions in a group context. Their analysis of online group interactions among 535 adolescents about anti-marijuana advertisements showed that individuals who hold non-normative attitudes (the minority) express their opinions more frequently in the context of group discussions, driving others (the normative majority) to adopt non-normative positions. These minorities of individuals were particularly successful in imposing their own norms on the group when discussions were held with reference to some out-group members (authority figures) possibly because such contexts promoted social identification with group members.

Social Norms

The theory underlying the social norms approach is based on the notion that individuals generally misperceive the frequency with which their peers engage in unhealthy behavior and these misperceptions have a causal effect on individual behavior (Perkins, 2002). If misperceptions of a behavior norm is corrected, the actual behavior may be altered; this approach uses peer influence in a positive manner. It has been used in different areas of research such as academic achievement (Braxton & Caboni, 2005), environmental studies (Corral-Verdugo & Frias-Armenta, 2006; Kneeshaw, Vaske, Bright, & Absher, 2004), theory and implementation (Smith, Atkin, Martell, Allen, & Hembroff, 2006), and tax compliance (Wenzel, 2005). In the field of health promotion and disease prevention, it was used in adolescent alcohol, tobacco, and other drug (ATOD) prevention (Gunther, Bolt, Borzekowski, Liebhart, & Dillard, 2006; Macaulay, Griffin, Gronewold, Williams, & Botvin, 2005; Weiss & Garbanati, 2006), eating

disorders (Brener, Eaton, Lowry, & McManus, 2004; Eisenberg, Neumark-Sztainer, Story, & Perry, 2005), marijuana use (Kilmer et al. 2006), as well as intimate partner violence and violence prevention (Bernburg, 2005; Bohner, Siebler & Schmelcher, 2006; Fabiano, Perkins, Berkowitz, Linkenbach & Stark, 2004; Sorensen & Taylor, 2005; Werner & Nixon, 2005), and work place safety (Linnan, LaMontagne, Stoddard, Emmons, & Sorensen, 2005).

Social norms theory has been used to understand high-risk drinking among college students (Boyle & Boekeloo, 2006; Haines, 1997; Lewis & Neighbors, 2006; Mallett, Lee, Neighbors, Larimer & Turrisi, 2006; Martens, et al. 2006; Perkins & Berkowitz, 1986; Werch et al. 2000). It is based on the idea that students harbor inflated perceptions about the prevalence of drinking on campus and that if these misperceptions can be corrected alcohol consumption will decrease. It is designed to correct misperceptions about drinking behavior and it is expected to result in decreased consumption as students change their behavior to fit in with the campus community. Correcting misperceptions of peer behavior has been used successfully in college-campus alcohol education programs (Haines, 1997; Perkins & Berkowitz, 1986; Perkins, Haines, & Rice, 2005), and it is found to be instrumental in changing drinking levels by making it easier for students to act on their moderated attitudes instead of on perceived norms. On the other hand, Campo et al. (2003) proposed that drinking behavior is positively related to perceptions of friends' drinking as suggested by the theory of planned behavior, which emphasizes subjective as opposed to social norms. Werch et al. (2000) also suggested the need for tailoring social norm binge drinking interventions to students' stage of initiating heavy drinking because there was no change between intervention and control group in

their social norm intervention. Nonetheless, the social norms strategy, designed to correct norm misperception, has been correlated with a decrease in reported consumption in the general college population (Carter & Kahnweiler, 2000).

The social norms theory has also been used in STI prevention (Albarracin, Kumkale, & Johnson, 2004; Chernoff & Davison, 2005; Latkin, Forman, Knowlton, & Sherman, 2003; Lynch, Mowrey, Nesbitt, & O'Neill, 2004; Peterson & Bakeman, 2006). The link between perceived sexual behavior among peers and personal sexual behavior have been examined, and normative misperceptions about peer sexual behavior were found to be good predictors of risky sexual behavior (Bon et al. 2001; Scholly et al. 2005; Winslow, Franzini, & Hwang, 1992). However, information correcting the misperceptions may lead to a decrease in risky sexual behavior. Diclemente (1991) reported that normative perceptions of peer contraceptive use predicted personal condom use among delinquent adolescents, while Emmons et al. (1986) found that perceived social norms regarding the dangers of promiscuous sex significantly predicted a reduction in the number of homosexual partners. Sexual health education programming that accurately portrays the true prevalence of recent sexual activity and corrects misperceptions that “everyone is doing it” may serve to lower the rates of sexual activity and the number of sexual partners among students (Page et al. 2000).

Norms and Social Behavior Theories

Among the many factors that can influence behavior are norms and influential others. Norms can encourage or discourage certain risky sexual behavior but peer group norms are consistently associated with sexual behavior (Benda & Diblasio, 1994; Dolcini & Adler, 1994; Maxwell, 2002). Family members and significant others can also be

important social forces that influence behavior (Crosby, DiClemente, Wingood & Harrington, 2002; Lefkowitz, Sigman, & Au, 2000). Multiple terms have been used to describe the influence of important others and the underlying idea on behavior. Some of the terms include subjective norms in the theory of reasoned action (TRA) and the theory of planned behavior (TPB) (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), social norms (Perkins & Berkowitz, 1986; Perkins, Meilman, Leichliter, Cashin, & Presley, 1999), normative influences (Cialdini, Reno, & Kallgren, 1990; Deutsch & Gerard, 1955), social influences (Rice, 1993), or simply norms (Bendor & Swistak, 2001). The use of the different terms suggested the lack of conceptual clarity between descriptive and injunctive norms (Rimal & Real, 2003).

The theory of reasoned action described the role played by subjective norm as a determinant of risky behavior, while the AIDS risk reduction model (AARM) ascribes significant import to the influence of interpersonal relationship in the commitment and enactment stages of behavior change (Catania, Kegeles, & Coates, 1990). Cognitive social learning theory emphasizes socially based learning processes, including modeling, feedback, and expectancies about the social repercussions of behavioral experimentation (Bandura, 1977); these models address the impact of influential others or of the social group of the individual.

Rimal & Real (2003) characterized norms as codes of conduct that either prescribe or proscribe behaviors that members of a group may enact. They are said to be different from laws in that laws are explicitly codified whereas norms are understood through social interaction. It is also implied that norms do not exist independently of

group identities. They therefore, redefine norms as group identity-based codes of conduct that are disseminated through social interaction.

Many researchers have focused attention on understanding the role of normative factors in influencing behavior change, but there is a limited understanding as to why norms work when they do in influencing behaviors. Rimal, Lapinski, Cook & Real (2005) identified some of the shortcomings in norms research; they include the need to understand the influence of descriptive norms, to delineate the underlying cognitive process between perceived norms and behavior, and the failure to make distinctions among various attributes that define behavior. Cialdini et al. (1990) conceptualized descriptive norms as persons' perception about the prevalence of a behavior and injunctive norms as pressures that people perceive from members of their reference group to enact or refrain from enacting a particular behavior. However, there are many situations when individuals defy strong descriptive or injunctive norms.

Normative influences may operate in much the same way as conformity processes (Asch, 1952) or they may include a rational, cognitive component (Ajzen & Fishbein, 1980) but the processes that underlie the influence of norms remain unspecified. Ajzen and Fishbein's (1980) theory of reasoned action addresses injunctive norms as it conceptualizes norms as coercive social influences with which individuals feel motivated to comply. The theory however, does not address descriptive norms. Many researchers fail to make distinctions among various attributes that define behaviors in general and health behaviors in particular. In an attempt to explain the influence of norms on behavior, Bagozzi, Wong, Abe & Bergami (2000) and Lapinski & Rimal (2005) proposed that the influence of norm on different behaviors would differ based on the

settings where the behavior is enacted. Some behaviors are enacted in personal, private settings, whereas others are enacted under the public eye. Compared with the first, the behaviors enacted under the public eye would likely be more strongly influenced by norms; in this case injunctive norms and descriptive norms are congruent (Rimal et al. 2005). In the case of sexual behavior such as being tested for HIV and using condoms, anonymity is likely to be a powerful attribute that governs behavior (Lapinski, Randall, & Pope, 2000); the same may apply for abstinent behavior. Thus, perceptions about the prevalence of behavior (descriptive norm) among one's social network may be less influential but injunctive norm will influence behavior. However, Bond and Smith (1996) reported that the amount of conformity to the group was not related to whether the participant had to behave publicly or privately. Subjective norm has proven to be the most important determinant of condom-use intention among adolescents in South Africa (Boer & Mashamba, 2005) and an important predictor of condom use among adolescents (Albarracin, Johnson, Fishbein, & Muellerleile, 2001). This may also explain why some interventions designed to increase condom use found small effects for normative influences (Sutton, McVey, & Glanz, 1999).

Ambiguity in Norms Research

Social norms exert a great deal of influence on human behavior and normative influence exists in a variety of contexts and situations that people encounter in their everyday lives. Still, despite several efforts to link norms to behavior more explicitly, much about the actual mechanisms and processes through which normative influence is exerted remain unclear.

According to Yanovitzky & Rimal (2006), much of the tension between the social (relational) and the individual (cognitive) conceptualization of normative influence is reflected in scholars' tendency to distinguish between two sets of norms, namely, collective and perceived norms (Lapinski & Rimal, 2005) as well as injunctive and descriptive norms (Cialdini, et al. 1990); two types of motivations that can explain the effect of norms on people, the desire to avoid sanctions and the need for self-validation (Bendor & Swistak, 2001); two conceptually distinct processes of influence, normative and informational influence (Deutsch & Gerard, 1955; Kitayama & Burnstein, 1994); and two sets of potential influence outcomes, public compliance and private acceptance (Cialdini & Goldstein, 2004; Kelman, 1958).

Also, despite widespread acceptance of social norms campaign among health educators and campus administrators, empirical results are clouded by measurement problems, and social norms theory is criticized for measurement error (Campo et al. 2003; Keeling, 1999; 2000). Many of the studies supporting social norms rely on ordinal or interval level measurements, thereby limiting the data analysis when the behavior is not limited to such measures and when there are different variables that have effect on such behavior.

In view of the ambiguity and limited understanding surrounding the influence of norms on behavior, this study proposes to use the theory of normative social behavior (TNSB) (Rimal & Real, 2005). The TNSB differentiates between descriptive and injunctive norms, and explains the underlying cognitive mechanisms that explain the relation between descriptive norms and behavioral intentions (Figure 1). Also, because of the private nature of sexual behavior and forces outside the individual such as partners,

cultural beliefs, and gender roles that may affect sexual behavior, this study proposes to understand the role of ego involvement (the extent to which enactment of a behavior is tied to self-concept) on abstinent behavior. According to Lapinski & Rimal (2005) and Rimal et al. (2005), the four cognitive mechanisms that moderate the influence of descriptive norms on behavior are injunctive norms, outcome expectation, group identity, and ego involvement (Figure 2). A more complete understanding of how the different constructs operate together to understand abstinent behavior in the midst of sexually active college students is important. An exploratory qualitative research design will help to understand individual experiences and seek to identify the deeper structure and common elements in experiences, while valuing the uniqueness of each person's experience.

Theoretical Frameworks

Theory of Normative Social Behavior

The theory of normative social behavior (TNSB) as shown above (Figure 1) is based upon the premise that descriptive norms affect individuals' own behaviors through interactions with three normative mechanisms; injunctive norms, outcome expectations and group identity (Rimal & Real, 2005). The fourth factor that governs how descriptive norms influence behavior was identified as ego-involvement (Figure 2) (Lapinski & Rimal 2005; Rimal et al. 2005). Although these normative mechanisms may exert a direct influence on behaviors, their primary use in a norms-based approach is the extent to which they heighten the influence of descriptive norms on behaviors. The descriptive norms describe the prevalence of a behavior while the injunctive norms refer to the extent

to which individuals perceive that influential others expect them to behave in a certain way, and by implication, social sanctions will be incurred if they do not. Hence, it is possible for individuals to believe that many others engage in a behavior and simultaneously believe that others would disapprove of their enacting the behavior.

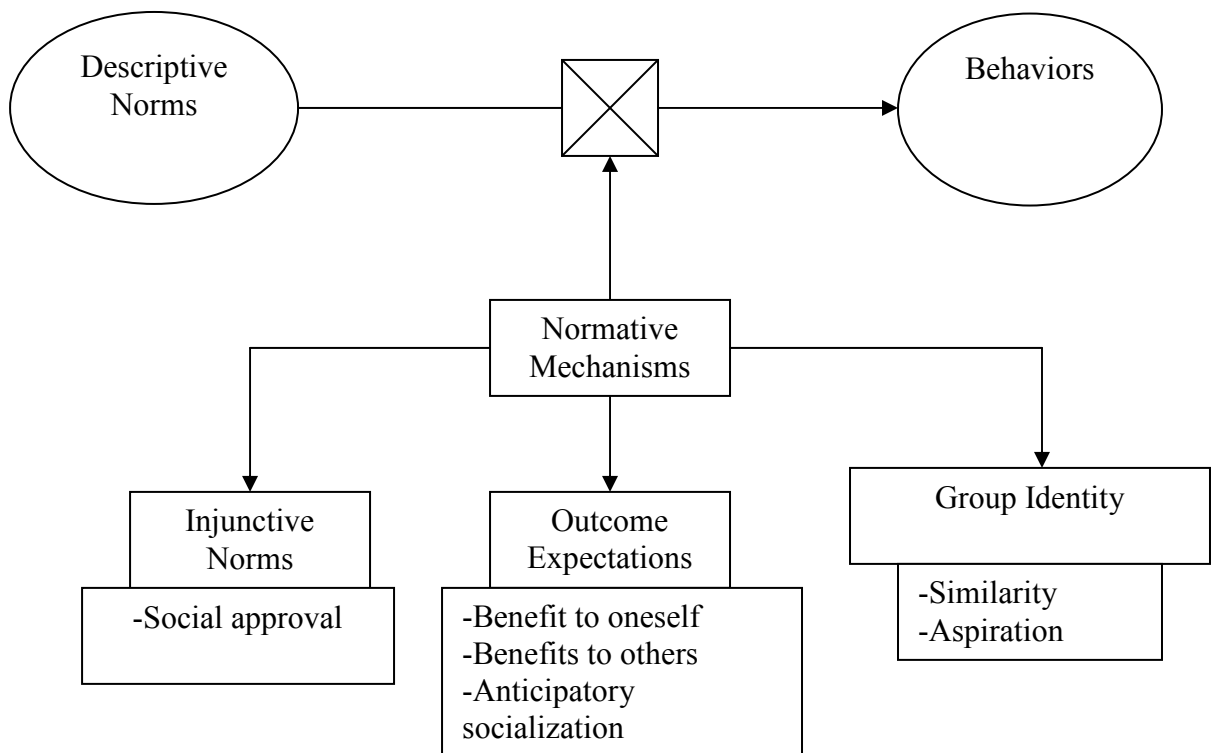


Figure 1. Components of the Theory of Normative Social Behavior

From: Rimal, R. N., & Real, K. (2005). How behaviors are influenced by perceived norms: A test of the theory of normative social behavior. *Communications Research*, 32 (3), 389-414.

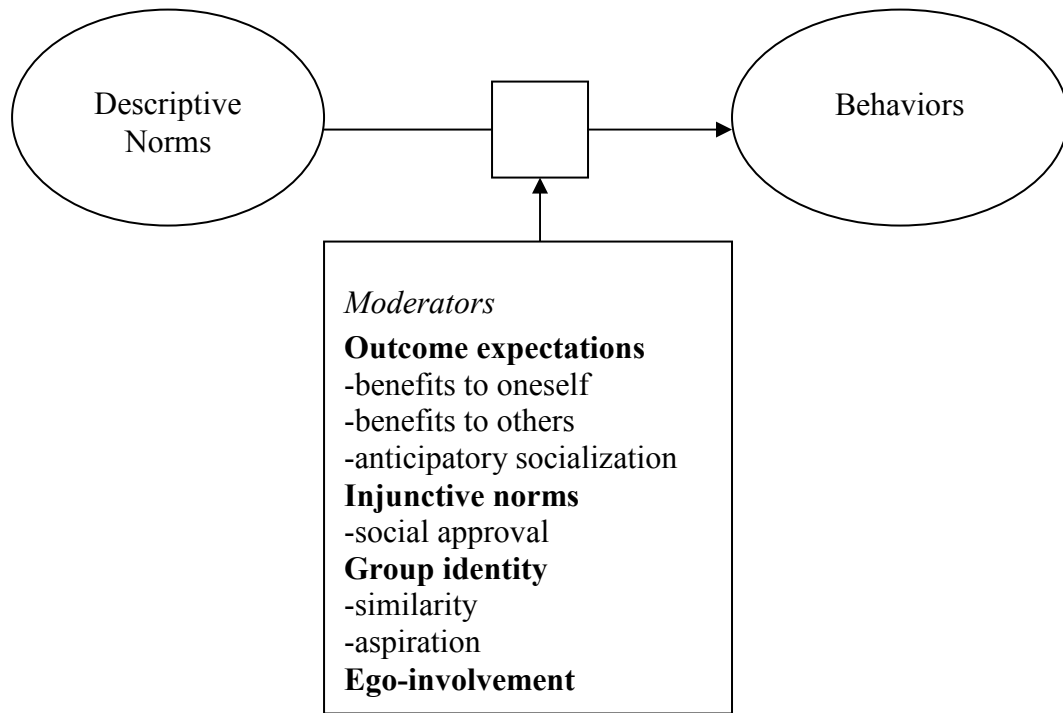


Figure 2. Cognitive Mechanisms in the Theory of Normative Social Behavior as the Moderators of the Influence of Descriptive Norms on Behavior.

From: Rimal, R. N., Lapinski, M. K., Cook, R. J., & Real, K. (2005). Moving toward a theory of normative influences: how perceived benefits and similarity moderate the impact of descriptive norms on behaviors. *Journal of Health Communication, 10*(5), 433-50.

Also, if individuals believe that most others refrain from an activity and perceived benefits are few, individuals will be less likely to engage in the behavior. They may also behave in a certain way if they perceive that others who are influential expect them to behave in the same way, and social sanction may be incurred if they do not comply. It is expected that when both descriptive and injunctive norms are compatible normative influences will be strong.

Injunctive norms are analogous to the concept of subjective norms in the theory of reasoned action (TRA) (Ajzen & Fishbein, 1980), which is defined as people's perceptions about the importance of others' beliefs as well as their motivation to comply with those beliefs. Although both concepts share the common element of pressures that individuals experience to conform, the difference between them lies in the roles that social sanctions are thought to play in the normative influence process. Bendor & Swistak (2001) note that it is meaningless to talk about normative influences without also acknowledging that defiance of norms incurs some sort of social sanction. Although, injunctive norms are based on individuals' perceptions about social approval, an underlying assumption in the influence of injunctive norms is that behaviors are guided, in part, by a desire to do the appropriate thing. As conceptualized in the TRA, the threat of social sanction is not thought to be a necessary element for subjective norms to exert their influence. In the TRA, subjective norms are thought to exert their influence because individuals look to important referents to guide his or her behaviors (Ajzen & Fishbein, 1980). Thus, from a social norms perspective, individuals can enact a behavior because they believe that people important to them expect them to do so (subjective norms) or because failure to do so will result in social sanctions (injunctive norms). The common element underlying both types of influences, however, is that behavior is guided by expectations of others' beliefs. Individuals often have direct knowledge about what others expect them to do, and thus they can develop perceptions about injunctive norms through experiences with others' reactions to their behaviors. There are instances, however, when individuals have to rely on cues other than direct experience to develop perceptions about

injunctive norms. Information about the prevalence of the behavior (i.e. descriptive norm) can serve this function.

Outcome expectations refer to the beliefs that enacting a particular behavior will lead to benefits. According to social cognitive theory (Bandura, 1977; 1986), human behavior is governed by individuals' expectations that his or her actions will lead to benefits. The subjective utility theory (Sutton, 1982) and the health belief model (Rosenstock, 1974; 1990) also postulate that individuals will engage in behaviors they perceive to be beneficial. For instance, adolescents perceive oral sex as less risky, more prevalent, and more acceptable than vaginal sex. They perceive that oral sex is less of a threat to their values and beliefs, and more of their peers are likely to engage in oral sex than vaginal sex (Halpern-Felsher, Cornell, Kropp, & Tschann, 2005). Prior research indicates that enactment of behaviors is affected by perceptions of volitional control (Ajzen & Fishbein, 1980; Petty & Cacioppo, 1981) and beliefs that one possesses the requisite skills (Bandura, 1977). Social cognitive theory (Bandura, 1986) posits that observing others, especially others similar to oneself enacting a behavior can strengthen one's own perceptions of control and ability to enact the same behavior. However, it is also necessary that one believe that the behavior will produce positive outcomes. Hence, individuals are most likely to be abstinent when they gain self-efficacy from believing that peers engage in the action and believe that the action will have positive consequences.

Group identity refers to individuals' aspiration to emulate referent others and the extent to which they perceive similarity between themselves and the reference group. Individuals' social networks play important roles in initiating and reinforcing positive

(Hibbard, 1985; House, Landis, & Umberson, 1988) and negative behaviors (Donohew et al. 1999; Dorsey, Sherer, & Real, 1999; Fraser & Hawkins, 1984; Kandel, 1973; Seeman, Seeman, & Sayles, 1985). When people perceive that they are connected with members of their reference group, they are more likely to conform because they experience positive emotions (Christensen, Rothgerber, Wood, & Matz, 2004). However, if a behavior is not popular among group members then individuals are less likely to engage in the behavior. According to social cognitive theory (Bandura, 1977), we are influenced by the actions of models that we aspire to become. Hence, to the extent that college students find themselves among colleagues that engage in sexual behavior or engage in abstinent behavior we can expect them to rely on social cues they receive from others and likely to engage in the behavior themselves. In the absence of this form of identification, there is no reason to expect group identity to affect individuals' behavioral choices. If individuals perceive a great deal of dissimilarity, it is likely that the behavior of the dissimilar others will be associated negatively with their own behavior.

Communication patterns play an important role in perpetuating and reinforcing group identity among members of a social group (Rimal & Real, 2003). Communication patterns are guided by members' desires to express their identity and their alignment with perceived group norms; nothing new is learned but a particular behavior is portrayed and confirmed. Groups also select their members based on common interest and values (Donohew et al. 1999; Oetting & Beauvais, 1987).

Ego involvement refers to the extent to which individuals' self concept is connected with their position on a particular issue and forms an integral part of how individuals define themselves (Johnson & Eagly, 1989; Lapinski & Boster, 2001; Sherif,

Kelly, Rodgers, Sarup, & Tittler, 1973). The effect of descriptive norms on behavior is strengthened for those whose self-identity is closely aligned with the enactment of the behavior. According to Lapinski & Rimal (2005), it is possible that strong descriptive norms activate the relevant aspect of self-concept and makes one's ego involvement more salient, thereby increasing the likelihood of behavioral action. This is in line with the proposition that attitude-behavior consistency is enhanced when the relevant attitude is made salient at the time of behavioral action (Fazio, 1986; 1990).

To understand abstinence behavior in a community that has been tagged with unprotected sex and at risk for sexually transmitted diseases, the TNSB is an appropriate theory. For many students, being away from home and in a new social setting is an opportunity to be free and engage in different behaviors, this can make them confused and ambiguous in their behavior. Cialdini (2001) suggests that the presence of ambiguity enhance normative influences. So, it is my belief that the TNSB will help to explore and aid in understanding the normative perceptions and sexual behavior of abstinent college students. It is possible for individuals to believe that other people engage in a behavior and they want to do the same; they may also believe some others would disapprove of them behaving in the same way (injunctive norms). The outcome expectation of abstinent students, their self-concept and the effect of social cues they receive from others to guide or not to guide their behavior, will be understood.

Qualitative Researches in Sexual Behavior

Qualitative research has been used in all social sciences and in the applied fields that derive from them; it has been used in health services research, nursing, and

pharmacy, public health and health promotion. It has been found very useful in several fields of maternal, child, and reproductive health (Martyn, Hutchinson & Martin, 2001; Olsen, Santarsiero & Spatz, 2002; Roye & Seals, 2001; Sundby, Svanemyr & Maehre, 1999). It has also been used extensively in sexual behavior research (Obermeyer, 2005; Price & Hawkins, 2002; van Kesteren, Hospers, Kok, & van Empelen, 2005; Zwane, Mngadi, & Nxumalo, 2004).

Obermeyer (2005) reviewed recent studies to examine the conceptual and methodological tools that are used to understand sexual behavior and HIV. He reported that while large-scale surveys are conducted with samples of the general population or of risk groups with the aim of collecting quantifiable information about behaviors, attitudes, and beliefs related to sex, smaller-scale studies are often carried out among marginal groups to understand the meaning of sexuality among diverse groups of people. In the present study a small-scale study will be used to understand abstinence among primary and secondary abstinent students. While the concepts and methods of epidemiology, demography, and to a lesser extent psychology primarily drive the surveys, small-scale studies are guided by the concepts of sociology and anthropology. Surveys are used primarily to produce indicators of behaviors or attitudes, whereas smaller studies tend to illustrate the diversity of sexual experience and meaning. He recommended expanding the models that drive research in sexual behavior using qualitative disciplinary perspectives that result in deeper understandings of knowledge, risk perceptions, attitudes, and behavioral change.

Qualitative methods in sexual behavior are usually defined according to the multiple techniques used in collecting data such as interviews (Barth, et al., 2002;

Hutchinson, Marsiglio, & Cohan, 2002; Lear, 1995; Perry, Thurston & Green, 2004), and focus-group discussions (Hyde, Howlett, Brady, & Drennan, 2005; Mansell, Bennett, Northway, Mead, & Moseley, 2004; Morrison-Beedy, Carey, Aronowitz, Mkandawire & Dyne, 2002; Robinson, 1999). Although these are all useful approaches, the most interesting attribute of qualitative methods is not the tools they apply, but rather their fundamental orientation toward evidence (Obermeyer, 1997). The qualitative approach is essentially interpretive; it seeks to contextualize instead of reducing; it provides rich descriptions through in-depth observation and analyzes evidence through a combination of quantification, textual analyses, correspondence, and triangulation (Denzin & Lincoln, 1994). When applied to sexual behavior, the contribution of qualitative research is to provide information about the context and meaning of such behavior (Obermeyer, 2005).

Most of the frameworks that guide large-scale research on sexual behavior lay emphasis on the rational dimensions of behavior. They assumed that information, attitudes, and actions form a logically connected sequence; they also emphasize the cognitive dimension. These models are limited when they attempt to explain the potentially harmful behaviors that spread HIV. They are unable to guide analyses of decision making processes that are iterative, based on incomplete information, and influenced by both rational and non-rational considerations (Obermeyer, 2005). The TNSB intersects with a number of other constructs that guide behavior, so using or combining a qualitative framework will result in deeper understanding of individual's ideas, motivations and perceptions about sexual behavior.

Symbolic Interactionism

Symbolic interactionism, is a theory of methodological process of exploration that assumes that human beings act toward things on the basis of the meaning the things have for them or arises out of social interaction with other individuals (Blumer, 1969). This theory guides the qualitative inquiry part of this study. Human behavior is modified when interacting with others in an active social world and individuals react to their own interpretation of the meaning of these actions. For instance, participants might respond to sexual behavior norms on the campus based on the meanings and values they ascribe to the behavior. Behavior is not caused in any mechanical way; it is continually constructed and based on people's interpretations of the situations they are in. To understand abstinence behavior, an approach that gives access to the in-depth meanings of factors that guide the behavior is needed.

Using the symbolic interaction, the researcher will take into account that sexual behavior is a social interaction among two or more people and the decision to be abstinent is based on the individuals concerned. "The individual is regarded as determining rather than determined and society is constructed through the purposive interactions of individuals and groups" (Klunklin & Greenwood, 2006, p.33). Different people can interpret the dynamic interaction between one's own values, attitudes, cognitions, and behaviors and those of others differently. When seeking to understand abstinence sexual behavior from a symbolic interactionist perspective, college students may be understood by exploring specific linkages between students' sexual behaviors, i.e., abstinence, the perceived norms on campus and factors that influence individual choice.

CHAPTER 3

METHODS

This chapter is composed of five sections and subsections. The first section describes the study design which includes research questions, research design and researcher's subjectivity. The second section describes the sampling procedure, which includes the research setting and selection of participants. The third section discusses the development of research instrument and data collection, while the fourth section describes the data analysis. The last section describes how the trustworthiness of the study was assessed.

Study Design

Research Questions

The purpose of this study is to understand the perceptions of abstinent students on sexual behavior norms among college students, to examine the effect of their normative perceptions on abstinence behavior, and examine the resilient and influential factors in abstinent students. The study also seeks suggestions on how abstinent behavior can be encouraged among college students.

The research questions are as follows:

1. What are the perceptions of abstinent students regarding sexual behavior among college students?
2. How do the perceived norms influence abstinent behavior?

3. Why do students choose to be abstinent?
4. What are the factors that influence and support students' sexual abstinence?

Research Design

This study employed a qualitative research design; Strauss & Corbin (1990) claimed that qualitative methods can be used to better understand any phenomenon about which little is yet known. They can also be used to gain new perspectives on things about which much is already known, or to gain more in-depth information that may be difficult to convey quantitatively. Apart from the ambiguities in norms research that made qualitative design a method of choice as described earlier, abstinence behavior is not a subject commonly researched among college students, and so qualitative design was used to better understand the inherent factors in abstinent students.

One of the several assumptions of the qualitative research paradigm that guided this study is that the researcher is primarily interested more in the process rather than in the outcomes. My principal focus is to understand abstinent students and the effect of college students' sexual behavior norms on their behavior. The experiences of abstinent students and the meanings they make of life situations are important. According to Merriam (1998), the key concern in qualitative research is in understanding the phenomenon from the participants' perspective and not the researcher's perspective.

Researcher's Subjectivity

Sensitivity to the ways in which the researcher and the research process have shaped the collected data, including the role of prior assumptions and experience, can influence qualitative research. According to Douglass & Moustakas (1985), the first phase in any qualitative study is to identify one's preconceived notions and biases.

Personal and intellectual biases need to be made plain at the outset of any research reports to enhance the credibility of the findings. The effects of personal characteristics such as age, sex, social class, and professional status on the data collected and on the relationship between the researcher and those researched also needs to be discussed. According to Peshkin (1985; 1988), subjectivity can be seen as virtuous, for it is the basis of researchers' making a distinctive contribution, one that results from the unique configuration of their personal qualities joined to the data they have collected (p.276).

My personal bias is that sexual abstinence is not promoted enough in American society. Although I believe in comprehensive sex education, I also believe that not enough attention is given to abstinence or individuals that choose to be abstinent. I think abstinent students should be encouraged to persist in their behavior; health promotion programs should mention the word "abstinence" more than they do presently. Some students are at the verge of decision-making and since nobody is encouraging them, they believe they should do what other students are doing. I intend to know more about the abstinent students and I will allow the data to speak for itself by suppressing my personal bias.

My personal beliefs and conviction as a Christian led me to undertake this research project. I am from a culture where abstinence is still encouraged and expected among unmarried youths, but in the Western Society, especially in the United States, it is the opposite (Darroch, Singh & Frost, 2001; Lottes, 2002). I have seen parents agonize over the exposure of early adolescents to the subject of sex. For example, why do we need to make Human Papillomavirus Vaccine (HPV) a routine vaccine for females at 11 to 12 years of age (Zimmerman, 2007)? Are we expecting every child to be engaged in

early sexual intercourse? By studying some abstinent students, I will understand what is inherent in them and this can be shared with others and encouraged among early adolescents.

Another bias that I brought to bear on the study is the belief that everyone can make changes in their behavior. I believe that if abstinent students are encouraged to be bold and to speak out, we may have more secondarily abstinent students. I believe everybody makes mistakes, some students suffer from sexual regrets and most times all society does is to offer them condoms and pills! What about the emotional effects of the behavior that affects them in academics and other spheres of life? I believe if we study and discuss abstinence as much as we study and discuss other preventive methods we may start to see changes in sexual behaviors.

Also, being a woman, I believe I will be able to research this subject better. Research has shown that people tend to report more sexual information to female interviewers, and that in this regard, women may be more influenced than men by interviewer sex differences (Catania, et al. 1996; Delamater, 1974). Delamater (1974) and James, Bignell & Gillies (1991) found that females were more likely to underreport proscribed behaviors to male interviewers than to female interviewers whereas Johnson & Delamater (1976) found that male interviewees with good rapport with the interviewer also reported more frequent sexual activity.

All these biases were suppressed and countered by an open mind during the data analysis. This was done by bracketing, which involves thoroughly examining and then suspending my beliefs. Munhall (1994) stated that the aim of bracketing is to “set aside

our own beliefs for a period of time so that we can ‘hear’ and ‘see,’ as undisturbed as possible by our own knowing.”

Research Sampling

Setting

The study site is a state funded university located in the Southeastern part of United States, about 70 miles northeast of downtown Atlanta. As at fall semester 2007, The University had a total of 33,831 students, including 74.3% undergraduates and 25.1% graduate and professional students. Fifty seven percent of the students were female students. Figure 3 provides information about the ethnicity of students enrolled in the fall of 2006.

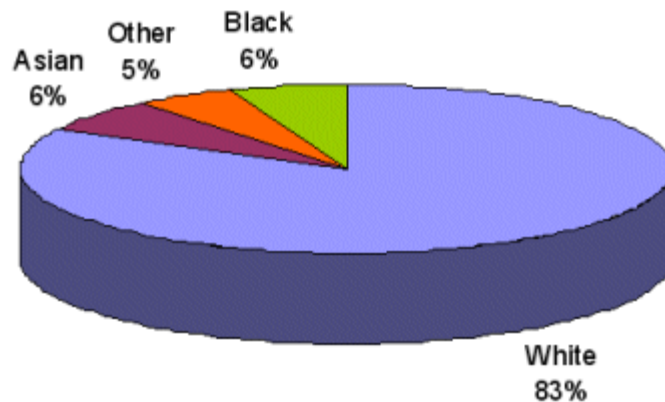


Figure 3. Undergraduate Enrollment Ethnicity Summary at the Research Setting, Fall 2006

From: <http://www.career.researchsetting.edu/employers/researchsettingprofile.html>

The National College Health Assessment survey used in collecting data about the health of college students was administered at the research setting in 2001 and 2003. Risky and protective behaviors and perceived norms across a variety of behaviors including sexual health were among content areas that were assessed. Students were contacted through a random sampling process and asked to participate in the survey on the web. In 2001, 525 undergraduate students were surveyed. In 2003, 326 undergraduate students and 112 graduate and professional students were surveyed. Appendix A, B, and C give a general overview of sexual behavior among students at this university.

Selection of Participants

Generalizations from samples to populations are not the goal of qualitative research (Merriam, 1998). Therefore, a purposive sampling strategy which is a common method of non-probability sampling to select samples that yield rich results and answer the research questions was employed in this study. The purposeful sample was recruited primarily by self-selection then snowball technique (Streeton, Cooke, & Campbell, 2004).

Snowball technique is the use of participants to contact other respondents. This method has been used most effectively when contacting hidden, deviant, hard-to-reach groups such as gays, lesbians, bisexuals, prostitutes and drug addicts (Ehlers, Zuyderduin, & Oosthuizen, 2001; Faugier & Sargeant, 1997; Magnani, Sabin, Saidel, & Heckathorn, 2005). It has also been used in studies of condom-related beliefs, behaviors, and perceived social norms (Organista, Balls, Garcia, Castillo, & Ureta, 1997). One of the major advantages of the snowballing technique is its ability to reach the participants that other methods cannot reach (Platzer & James, 1997). It is especially true when the

objective of the inquiry is largely to explore and analyze rather than to test hypotheses (Biernacki & Waldorf, 1981). Snowballing is very applicable when the focus of the study is on a sensitive issue, possibly concerning a relatively private matter, such as abstinence and thus requiring insider knowledge to locate people for study (Biernacki & Waldorf, 1981). The potential bias of the snowball technique is in passing invitations along a line of contacts that may be giving similar information, however this weakness may be balanced by the benefits of providing contacts for hidden, hard to reach groups.

Using the undergraduate student directory obtained from the university bookstore, e-mail notices for recruitment were sent to about 8,000 undergraduate students between July and September 2007. The e-mail notices (Appendix D) contained information on the criteria for selection of participants, the contact person for the study, and the compensation for participating in the study. Forty-four students responded to the e-mail and 18 students that met the criteria for participation were recruited for a face-to-face interview. The 18 participants recruited through e-mail were asked to identify other respondents that met the selection criteria and might be interested in participating in the study; four other participants were identified and recruited by snowball method. A total of 22 students (Table 3) were recruited and interviewed.

All the recruited participants were asked to verbally confirm that they met the criteria for the study. The inclusion criteria for participation are:

- Single male or female undergraduate student currently enrolled in the university, who is at least 18 years of age
- Has spent at least one academic year at the university

- Has intentionally practiced primary abstinence (refraining from sexual intercourse by an individual who has never experienced sex)
- Has intentionally practiced abstinence for at least 12 months after previous sexual intercourse (secondary abstinence)
- Has been in a dating relationship (going out with a romantic partner with sexual attraction) for at least 6 months

An appropriate sample size for a qualitative study is one that adequately answers the research questions (Marshall, 1996). Although, Morse (1994) recommended that phenomenologies directed toward discerning the essence of experiences should include about six participants. The number of required participants in this study became obvious as the study progressed, and as new categories, themes and explanation stopped emerging from the data (data saturation).

Instrument Development and Data Collection

The Institutional Review Board (IRB) of the university granted approval to conduct the study in June 2007.

Prior to the present study, a pilot study was carried out among a convenient sample of four female college students to check the suitability of the instrument used to collect data and to also assess the criteria for participation in this study. The participants in the pilot study had spent over two years in college and they were able to provide useful feedback and recommendations for the study. Each of them was over 20 years of age and abstinent by choice; only one of them reported being in a relationship. Based on the findings from the pilot study some of the interview questions were reframed and

additional questions were added for clarity. It was also decided that students in dating relationships are a better fit for the study, because there is a need to determine whether participants are intentionally abstinent or they are forced into abstinence due to lack of a partner. Some of the questions in the interview guide were modified and repeated in different forms to confirm students' responses. An expert panel, which is comprised of the dissertation committee for this study reviewed and approved the questions (See Appendix G for interview guide). The interview guide was based on the research questions and the constructs in the TNSB. The constructs that guided the interview were descriptive norms, group identity, outcome expectations, injunctive norms, and ego involvement.

The researcher is the primary instrument for data collection in qualitative research. According to Merriam (1998), data are mediated through the researcher rather than through some inanimate inventory, questionnaire, or computer. I was responsive to questions that participants had about the study. I also interacted both verbally and non-verbally with participants through interviews, by observing their countenance during the interview process and noting those observations in my field notes. The qualitative research paradigm provided the opportunity for having in-depth knowledge of the participants. As the primary instrument for data collection, I had the opportunity to make quick observations and interpretations where applicable and this helped in presenting a thick and rich final observation and report. Participants were interviewed at their chosen site within the university campus.

After the participants were recruited, they were required to sign an informed consent form (See Appendix E). They were informed that participating in the interview

was voluntary and that they could stop their participation at any time during the study and that all collected information would be kept confidential. Demographic information of participants (Appendix F) was collected and a face-to-face in-depth interview was conducted with each of the participants. An interview is a purposeful conversation (Morgan, 1988). It is directed by one individual in order to get information from another individual (Bogdan & Biklen, 1992). The purpose of an interview in qualitative research is to gather descriptive data in the respondent's own words. The way that respondents describe the phenomenon under investigation helps the researcher understand the perspectives of those respondents. "Good interviews produce rich data filled with words that reveal the respondents' perspectives" (Bogdan & Biklen, 1992, p. 97).

The participants were interviewed regarding their perceptions about sexual behavior among college students. Using the four normative mechanisms in TNSB, that is, injunctive norms, outcome expectation, group identity and ego involvement, I asked questions to explore how the constructs heighten the influence of descriptive norms on behaviors and how past and present events influence the participants' abstinent behavior. Questions were asked about the influence of college students' sexual behavior norms on abstinent behavior, the reason participants choose to be abstinent, and the factors that influence and support the decision to be abstinent (Appendix G). Participants were also asked to suggest how abstinence can be encouraged among college students. Probes were used to direct questions and to follow up on comments made by respondents. Each interview lasted for about 45 minutes to one hour. Each interview session was recorded verbatim by tape recording for further transcribing. Events, gestures, and observations during the interview were also recorded by note taking. A \$10.00 grocery store gift card

was given as a token of appreciation to each participant after the interview. The tapes from the in-depth interviews were labeled with the dates of the interview, the last names and pseudonyms of the participant and were locked up in a secure location off campus. The tapes will be destroyed after three years of completing the study in accordance with the IRB protocol.

Data Analysis

Taped interviews from the in-depth study were transcribed and screened for errors, transcripts were reviewed to delete identifiers; observations such as gestures and expressions were added to the field notes and data were analyzed using inductive analysis. The analysis was carried out through several readings and interpretation of the raw data and findings from the research emerged from the frequent, dominant, and significant themes in the data. Inductive analysis (LeCompte & Preissle, 1993; Ryan & Bernard, 2000; Thomas, 2006) is intended to provide universal rather than probabilistic explanation. It uses the data to generate ideas by scanning the data for categories. Open coding, line-by-line scrutiny of the data resulted in identification of substantive codes and those that appear to be similar were assigned to categories thereby developing working typologies and themes. The constructs in the TNSB guided the theme organization. Themes that identified challenges and coping strategies of abstinent students also emerged during the analysis.

Assessing Trustworthiness of the Study

Many qualitative researchers have argued for alternative criteria to judge the quality of qualitative research (Denzin, 1989; Lincoln & Guba, 1985; Silverman, 2000). This includes rejection of framework of validity as it is commonly accepted in quantitative research and reviewing strategies for enhancing the quality and credibility of qualitative analysis. The basic question regarding trustworthiness in naturalistic inquiry is: "How can an inquirer persuade his or her audiences that the findings of an inquiry are worth paying attention to, worth taking account of?" (Lincoln & Guba, 1985, p. 301). Criteria for trustworthiness include credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985).

Credibility or Internal Validity

Lincoln & Guba (1985) recommend a variety of strategies for improving the likelihood that findings and interpretations produced through naturalistic inquiry methods are credible. Two of these strategies are peer debriefing and member checking which were used in this study. Also, because the researcher is the instrument in qualitative research, I stated my subjectivities and suppressed my biases at the beginning of the research process.

Peer debriefing. Lincoln & Guba (1985, p. 308) define peer debriefing as "a process of exposing oneself to a disinterested peer in a manner paralleling an analytic session and for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer's mind." I used a peer debriefer throughout the study, discussing the methodology, the data, and the framing of the study. The qualitative

research specialists in my dissertation committee and classmates that are well versed in qualitative research served the purpose.

Respondent validation. Respondent validation, or member checking, includes techniques in which the investigator's account is compared with those of the research subjects to establish the level of correspondence between the two sets. Study participants' reactions to the analyses are then incorporated into the study findings. Although some researchers view this as the strongest available check on the credibility of a research project (Lincoln & Guba, 1985) it is better to think of respondent validation as part of a process of error reduction, which also generates further original data, which in turn requires interpretation (Bloor, 1997). In this study, I transcribed the data, identified the major themes in the data, I then sent a summary of the themes to the 16 participants whose data were analyzed to verify whether they agree with the findings. Thirteen out of the 16 participants responded and confirmed the investigators account of the interview.

Transferability or External Validity

Qualitative inquiry depends on a presentation of "solid descriptive data," or "thick description" (Patton, 1990; 2002) to improve an analysis' transferability. In order to enable others wanting to apply the findings of this study to their own research to make an informed decision about whether to do so, thick description of the experiences and identity development of the participants, as well as the definitive exposition of the researcher was provided. From a qualitative perspective, transferability is primarily the responsibility of the one doing the generalizing. The qualitative researcher can enhance transferability by doing a thorough job of describing the research context and the assumptions that were central to the research. The person who wishes to "transfer" the

results to a different context is then responsible for making the judgment of how sensible the transfer is.

Dependability or Reliability

Dependability emphasizes the need for the researcher to account for any changing context within which the research occurs. The researcher is responsible for describing the changes that occur in the setting if any, and how these changes may affect the way the researcher approached the study. Qualitative research specialists in the committee determined whether this process was applicable to the research undertaken and whether it was applied consistently (Lincoln & Guba, 1985). Triangulation with multiple analysts, which involves having two or more people independently analyze the same qualitative data and compare their findings, was also used to increase the dependability of the result. A doctoral candidate that is well versed in qualitative inquiry was asked to look through the data and analyze, the results of her analysis was compared to mine to make sure that there were no discrepancies.

Confirmability or Objectivity

Confirmability refers to the degree to which the results could be confirmed or corroborated by others. It also demonstrates the neutrality of the research interpretations. In this study I kept an audit trail of record of the inquiry process, as well as copies of all taped interviews and discussions, notes from interviews and discussions, and hard copies of all transcriptions were maintained and kept in a secure location as described earlier. These records are available upon request from the researcher.

CHAPTER 4

FINDINGS

The purpose of this study was to understand the perceptions of abstinent students regarding sexual behavior norms of college students. The effects of the normative perceptions and other influential factors on the sexual behavior of abstinent college students were examined. The study also sought for suggestions on how abstinent behavior can be encouraged among college students. In this study, primary abstinence was defined as refraining from sexual intercourse by an individual who has never experienced sex, and secondary abstinence as the discontinuation of sexual intercourse among people who are already sexually experienced (Loewenson et al. 2004; Thomas, 2000). In addition to this definition some of the participants also identified abstinence as meaning self-control, ‘loving myself long enough to wait’, sacrifice and honesty. The participants acted towards the practice of abstinence based on the meaning it has for them and out of social interaction with other individuals.

The constructs in the theory of normative social behavior (TNSB) in combination with symbolic interactionism framework guided the study and helped in the analysis of the data. This resulted in a deeper understanding of the norms, perceptions, and influences associated with abstinence sexual behavior among college students.

This chapter is divided into five sections. The first section describes the research participants; the second section discusses the perceptions of abstinent students about sexual behavior among college students, the reasons for their perceptions, and the effect

of these perceptions on sexual abstinence. The third section describes the reasons the students choose to be abstinent, the challenges and coping strategies of abstinent college students. The fourth section describes the influential factors on abstinence practice and the fifth section describes the participants' suggestions on how abstinence can be encouraged among college students.

Description of Research Participants

Table 3: Demographic Data of Research Participants

| Pseudonyms | Gender | Age | Race | Type of Abstinence | Class Standing |
|------------|--------|-----|----------------|--------------------|----------------|
| Andrew | Male | 19 | Caucasian | Primary | Sophomore |
| Angela | Female | 22 | Caucasian | Secondary | Senior |
| Ashley | Female | 20 | Caucasian | Primary | Junior |
| Beth | Female | 20 | Caucasian | Primary | Junior |
| Bill | Male | 20 | Hispanic/mixed | Primary | Senior |
| Dianne | Female | 20 | Caucasian | Primary | Junior |
| Emma | Female | 22 | Caucasian | Primary | Senior |
| Erin | Female | 22 | Black | Secondary | Senior |
| Jamie | Female | 22 | Caucasian | Primary | Senior |
| John | Male | 27 | Caucasian | Primary | Senior |
| Joy | Female | 21 | Caucasian | Primary | Senior |
| Leanne | Female | 22 | Caucasian | Primary | Senior |
| Lee | Female | 19 | Black | Primary | Junior |
| Lisa | Female | 21 | Black | Primary | Senior |
| Mark | Male | 20 | Caucasian | Primary | Junior |
| Marta | Female | 19 | Caucasian | Primary | Sophomore |
| Rosie | Female | 21 | Caucasian | Secondary | Senior |
| Sally | Female | 21 | Caucasian | Secondary | Senior |
| Susie | Female | 20 | Black | Primary | Junior |
| Tom | Male | 29 | Caucasian | Primary | Senior |
| Tim | Male | 20 | Caucasian | Primary | Senior |
| Will | Male | 19 | Caucasian | Primary | Sophomore |

Twenty-two participants were recruited and interviewed for this study. But data from six of the participants were excluded from the analysis either because they had not been in consistent relationship for six months or they had not been in the university for one academic year. All the participants but one were heterosexual, the data from the homosexual participant who also practiced primary abstinence was part of the six excluded in the analysis because he had not been in a consistent relationship for six months.

Out of the 16 participants whose data were analyzed, 13 practiced primary abstinence. Ten of the participants who practiced primary abstinence were abstinent for religious reasons; and two of the participants that practiced secondary abstinence did it for religious reasons. Other participants were abstinent because of moral and personal reasons. The number of years in dating relationships ranged from six months to five years for the primary abstinent responders. The secondary abstinent responders have been abstinent for several years but their dating relationship ranged from 19 months to two years.

Perceptions of Abstinent Students on Sexual Behavior of College Students

The participants in this study perceived a high prevalence of sexual activities among college students. The percentage of students they perceived as having sexual intercourse ranged from 40% to 85%, with an average of 69.4%. This is close to the number of students who reported that they had sexual partners in the 2001 and 2003 National College Assessment Surveys conducted at the same university (Appendix A). In the survey, 71.9% of 525 undergraduate students and 72.4% of 326 undergraduate

students reported that they had sexual partners in 2001 and 2003 respectively. Participants in this study perceived that many college students have sex because everybody else is having it. They have sex either with someone they are intimately involved with or through a random one night stand. Other participants perceived that the sexual behavior of college students' fall into two categories, (1) people who are monogamous and who sleep with one person at a time in a relationship and (2) promiscuous people who have multiple partners. The general consensus was that sexual activities are prevalent on college campuses.

The perceptions of the participants stemmed from assumptions, interactions, and conversations with fellow students. Some of the participants have these perceptions because of the people that surround them and the behavior of their friends. When participants were asked for the reasons behind their perceptions, some of the responses were as follows:

Jamie: Because of the people who surround me, they talk about it very casually, they do it very casually like it is not a big deal.

Ashley: It is a little bit uncomfortable sometimes because a lot of girls who are active, they talk about it freely and are not embarrassed about it and I feel a little bit embarrassed, and embarrassed for them sometimes.

John: Just from friends, people I know, people that I'm around, people I see, it seems like it is a fairly high number and pretty much everywhere you look on campus, it's either somebody talking about it on the bus or talking about their weekend on the bus or someone you know or roommate got a girlfriend over for the weekend or whatever.

Leanne: I just feel like most people in my class they talk about it and they brag about it and it is sad. And my closer friends who I know are having sex, it's hurtful, it hurts me, to watch my roommate, it makes my heart hurt, because I know she is not getting what she really wants and I know that she is not happy at all. And I know part of it is from the lifestyle that she is living.

Some of the participants believed they may be skewed in their perceptions but they still perceived that many students engage in sexual activities.

Bill: I guess, especially from being in the dorms and meeting this huge amount of different people and talking to them, also I think I may be skewed in my perception and this is just what I am thinking, I may be wrong, if I'm wrong it's likely because my perception is also affected by movies that I watch about college and anything I see on TV, like a news report or TV show.

Mark: Just from hearing things and knowing about things... I mean, you hear people around talk about it and then people that don't talk about it you kind of assume that it is even that much more, just different statistics that I've heard of people that have said that while they're in college they have engaged in sex many times.'

Perceived Reasons for High Prevalence of Sexual Activities

Different reasons were given for the perceived prevalence of sexual activities at the research location and on college campuses in general. Some of the themes identified were media influence, societal values, identity seeking, rebellion, influence of college environment, and peer pressure (Figure 4).

Media has a lot to do with it. The participants believed that the culture created by the media has a huge influence on sexual behavior in college. Most of the movies, music videos, pop culture, and commercials or advertisements on television, magazines and the Internet contain sexually related materials; and these materials are easily accessible to college students. They also believed that the acceptance of the media culture creates an attitude geared towards having sexual relationships without consequences. Some of the perceived effects of media on students are:

Will: I think the norm today is especially reinforced by pop culture, pop culture meaning perhaps music and not saying music is bad...but music being more provocative now, much more obscene, and much more easily accessible to especially younger groups of people becoming much more influenced upon younger age. I would go back again to the weakening of values in the country and

the strengthening of this sort of pop culture, “do what feels right” thought process and that processes strength that is growing through all types of media.

Sally: I think the media has a lot to do with it. Not just the media but also like what we watch on TV and in the movies and stuff...just going to a movie and seeing teenagers or unmarried people or people who met for like five minutes just having sex is okay. I think that definitely contributes to the behavior and it deemed okay for students, too.

Mark: I think that it is the culture created by media and the acceptance and the attitude that comes with that just kind of free to do whatever and because it is on TV that’s a huge percentage, and in advertisements anything that you see is sex related. So, that’s kind of getting into somebody’s attitudes and creating a culture for that.

Societal values. Some of the participants believed that our society has become less impacted by conservative values and this has led to the deterioration of the family unit. According to Will, ‘more and more couples are getting divorces, and there are many out of wedlock marriages in which the children have to fend for themselves at a much earlier and vulnerable age,’ this may be one of the reasons for prevalence of sexual activities among students. Some of the participants also believed that the society has not given its youngsters reasons to abstain from sex, society emphasizes consequences and not foundation, society views abstinence as unobtainable and they don’t talk about it anymore. Beth and Leanne expressed these beliefs in their own words:

Beth: A lack of a reason to abstain from having sex. I mean, there are consequences, I believe, there is that. You could get an STD or you could get pregnant but those are consequences and not really a foundation of why when it comes down to getting into a situation where they could have sex or they couldn’t have sex, they have to make the actual choice. I think that the world gives people cover-ups about why...you can take birth control or you can use condoms so that you won’t have these consequences...in fact I think that there is a deeper heart issue where if you really don’t want to do that then it is because of something that you believe in.

Leanne: I almost think that they might consider abstinence unobtainable because they don’t really talk about it anymore, it’s all safe sex and it’s more about not getting pregnant than not having sex or not getting an STD, it’s so easy to get

condoms, they hand them out at concerts and you go the next day to the pharmacy and pick up a pill that will prevent you from having a child if you have unprotected sex. Like I said earlier, so much of the influence is the culture, they are just making it so much easier to have sex and they're not really saying, it is immoral, they're saying just don't. May be not so much don't talk about it but don't get pregnant.

Some of the participants perceived that society thinks abstinence is outdated and it is for people who are afraid, people who are not adventurous and people who do not want to live their lives; they believe abstinence is boring and judgmental. Participants believe that when society starts to value abstinence it will become more socially acceptable and behavior will follow the attitude. In some of their words 'the society has a view of getting things when you want them and not thinking of the future ramifications'.

Ashley: I guess just society's view today and the way...in America I think we just have this view of you get things when you want them and take things whenever you want it and if you want it now, you get it now and it doesn't matter what the outcome may be in the future but you're happy now.

Mark: I think human nature, as well. I mean, you know, it's something that is good to do, fun to do, that sort of thing and so doing it is not an issue and I think with the way that people, college students don't necessarily look at the future ramifications, and don't understand future ramifications, then that happens as well. Just lots of things I'd say...parenting is an influence. A lot of people my age have had parents who have been divorced and not have good relationships with their fathers and I think that's a big influence.

In spite of the above comments about the societal value, some of the participants believe a lot of older people want younger people to be abstinent but do not know how to communicate it and are not supportive enough because abstinence may be ideal but not necessary.

Rosie: I think there are a lot of older people who will like younger people to be abstinent but don't really know how to communicate that. I think parents do generally like their children to be abstinent but don't know very well how to communicate that either. I think the most powerful, gainful, possible thing you need is support. I do think the society views it as ideal but not something really necessary anymore in our society. It's just nice. For good kids, it's nice for the

good kids to do that but they don't expect everyone to do that. I mean kind of not everyone can be, it's kind of like what looks great, or successful achievement, of course some people are going get all A's in this and that there are plenty of people end up with B's and C's and maybe some will not graduate college. It is just reality that abstinence is not for everyone I guess.

Identity seeking. Some of the participants perceived that the reason for the high prevalence of sexual activity among college students is the need for acceptance, unfulfilled sexual desires, or other need for intimacy, and lack of self-esteem. The majority of students do not have enough self worth; 'they have to search for their meaning in other people, their desire to be wanted; we all have the desire to be wanted to be loved to be appreciated and that's a quick way, a quick fix way of fulfilling that desire.' As Rosie put it, 'I think that people come into college trying to find themselves, and they begin searching in college for satisfaction towards what their life is going to be about, I think a lot of people search for sexual things and these are just accepted among their peers.' According to Tom, 'they are looking maybe for security, to feel loved and then they feel like they can find those answers through sex, even if they can fulfill those desires for a short time.' Angela's best friend was having sex because she was lonely and her parents were going through divorce, she was sad and needed to find acceptance somewhere.

Rebellion. Another reason given for high prevalence of sexual activity among college students was rebellion, for instance Angela who is currently practicing secondary abstinence had sex because her parents kept saying 'don't do it', and her friends were persuading her to do it. Some of the other participants also talked about rebellion,

Leanne: I don't know because at this point...in their life they are so rebellious, I guess, they think that they should be able to try anything and do anything...I

don't know, you can't really tell them that you shouldn't have sex. They are not going to believe you and they think hopefully that it is something that will make them happy and something that they want and I don't know how to make them see the downside of it. To see what I see, the emptiness, and just that it isn't fulfilling them in any way.

Marta: I think half of it is lack of religion. I think some of it is just the fact that you're out in a place where you can do whatever you want finally. To some people it is more of a rebellion thing. Some people just have not been taught otherwise.

College environment and peer pressure. The freedom in college, a lot of free time (leisure), boredom, excitement and the seemingly invincible attitude of college students were perceived reasons given for the prevalence of sexual activities on campus. John talked about invincibility, 'there is always a chance and we just think we are invincible and I don't know that there is a solution to getting that through to us as college students, outside of personal beliefs and stuff.' Some of the participants believed that the college environment just promotes and facilitates sexual activities.

Tim: Well, college is your first chance of like independence and freedom and college is when students are most attractive in their lives so the environment of college is you know 15 hours a week of class time and you have all that time of free time in your first year of independence, every one look scared and you know a lot of people begin to use alcohol this time in their life, I assume that these are all contributing factors.

Some of the participants believed that the structure of the college campus allows easy access to the use of alcohol and influence of peers, especially when there is lack of self-control and the unwillingness to make a sacrifice to wait.

Jamie: College environment makes it a lot easier, it's easy to go downtown when you're not old enough to drink and drink. It's easy to bring a boy back into the dorms late at night and you're not responsible to anyone. There is no standard, there is no norm that says that it is wrong, it's accepted and that's okay, especially for men because men, from my perspective, men always gather the ego when they bring back a girl and the girl is a slut if she goes home with a guy. It's a girl/guy thing and it's a factor of it and I think that the college environment especially at such a big school, it's so easy to ----go home with the wrong guy, get dated, raped

or choose to have sex with a million guys, getting STDs...so many things that can happen.

Bill: It takes a lot of sacrifice I believe, to remain abstinent and it takes a self-control that it doesn't take to put on a condom or take a pill. And maybe they are not being raised in a way that helps them appreciate the value of self-control, the value just honoring your sexuality the way it should. And I think it shows...I guess what I'm saying...they're not really...(pauses)...rising up to the best lifestyle that could be.

According to Angela who had previous sexual experience, it was a combination of peer pressure, boredom, and excitement that made her engage in sexual activity.

Angela: It was new and exciting, the first time he kissed me and I was like, gross but then I was like, why not? My friends were like, just do it...just try it...they were encouraging me to go out with this guy. I didn't really like him...they were telling me I needed to experience all this...so I said OK, and I felt, what's the harm in it...it's just kissing, whatever, so we kissed, and kissing led to other things...then oral sex...after oral sex...well, we've done that, why can't we just do this. Then every time we did something, since we've already done this, we can just go a little bit further...no big deal...until eventually I got everything. There was nothing left to do. That's kind of the reason I don't have sex with my current boyfriend. I just cared about him so much, and I could see myself getting married to him, and I felt like if we had had sex, if we had gotten married there would be nothing exciting left, you know nothing to explore so I just wanted to wait, so there would be something to look forward to so it's not like we've done everything there is to do even before we get married.

Effect of Perceived College Students Sexual Behavior on Abstinent Students

The perceived high prevalence of sexual activities on this college campus affected abstinent students in different ways. While some of the participants reported that it has no effect on their behavior and they are not judgmental about the behavior of other students, it has made it difficult for some other students to continue to be abstinent. It has also reinforced abstinent behavior in some others and made them more determined to wait (Figure 4).

No effect. Some participants reported that the sexual behaviors of most students have no effect on them and some believed it has effects on their thoughts but not on their actions.

Tim: I don't feel that having sex is a taboo or should be, I respect people that choose to have sex before marriage but it hasn't had too much effect on me because I have stayed pretty much consistent in what I think since I have started dating.

Rosie: I think it has no effect on me but I guess just being around occasionally makes it sink, because just being around someone who can engage in sex so casually makes you sometimes think and I've thought that, you know, do I need to be as strict and as serious as I am about my boundaries? And so I think there is an influence in thoughts but not in actions.

Even though some of the participants believed the prevalence of sexual activities in college has no effect on them, they believed that other students react to their behavior and perceived them as “goody two shoes” they have the perception that an abstinent student is better than them, Joy reports,

Joy: Them towards me, I believe, I think that because people have a sense that I am better than them which is not true, it is just that by making this choice, I feel that I am making a statement sometimes whether I mean to or not, you know, it's to protect myself, it's because of my beliefs but people are embarrassed sometimes.

Difficult. Some participants believed that the effect of sexual behavior on campus make it difficult for them to maintain abstinence. Marta said, ‘I think it makes it harder because you're the only one. It hasn't changed my beliefs, it has made it more difficult but it hasn't changed what I think is right.’ According to Tom, ‘it is not easy...a lot of people just don't understand and they think that...I don't know, they just think that may be...you just try to punish yourself and they usually just fulfill those desires. But it is hard too, because everyone else is doing it and it's easy to be influenced by the people.’

Rosie also discussed the effect of her previous relationship on her decision to be abstinent.

Rosie: Speaking of things that really influence someone's sexual behavior the values of your partner I think it's a huge definitely an important element and I believe that, that is the way I have been negatively influenced in my time in college, this is probably due to the two partners that I have had in a dating relationship and their values hadn't matched up with mine and that's really important and my friend who is into sex is because she's largely influenced, incredibly influenced by her partner's views which kind of conflicts with her own, which tends towards abstinence.

Reinforcement. Some other participants believed that the lessons learned from the sexual behavior of other sexually active students have reinforced their decision to wait, as Marta remarked, 'I'd say it only reinforces that I shouldn't because I see a lot of problems.' Past sexual activities of Angela also reinforced her not wanting to have sex in the current relationship 'For me I think it's personal, why I chose to not have sex with my current boyfriend because when I had sex with my old boyfriend it wasn't a healthy relationship. So the one I am dating presently I decided not to have sex with him.' Most of the participants reported that they are rather influenced by their friends who don't have sex than those who do. This can be understood by the construct group identity, that is, individuals' aspiration to emulate referent others and the extent to which they perceive similarity between themselves and those referents. Bill remarked, 'it makes me...being in college you feel like you're alone, that you're choosing to live that way and having friends around you in that way really keeps reinforcing my commitment and it reminds me that I'm not crazy.'

Sally: Well, I definitely...I am more influenced by my friends who don't have sex because...I guess it is the way that they feel about it and the way I feel about it, that it should be saved for marriage and someone you want to spend the rest of your life with and I think that has really affected me because they are waiting for that, too.

Will: Well, it gives me sort of a group strength so...I'm not as greatly pressured by peers that a lot of students have where they are surrounded by people doing it and of course, the tendency is to follow what your friends do. And I believe since I have a group that is abstinent and has the basic set of values that I share, that it strengthens me to do the same.

Ashley: It's been really encouraging because I have a few girls to talk to about it because we are definitely in the minority so it is nice to know that there are people that have the same values that I do and have same beliefs that we can talk to each other about the frustration as well. It's hard but it is definitely worthwhile to wait. It's definitely been beneficial to have close friends that share those beliefs.

Factors Responsible for Abstinence Behavior

The participants in this study have different reasons for engaging in abstinent behavior. The reasons span from past negative relationships and previous experience, religion, fear of negative consequences to expectation of others.

Past relationships and previous experience. The emotional effect of past relationships kept some of the participants from sexual activities. The participants that practiced secondary abstinence had personal experiences while the participants who practiced primary abstinence learned from other people's experience. For Angela, Sally, and Rosie, the emotional effect and sexual regrets of past experiences have a lot of influence on their decision to be abstinent; Rosie said, ' I have heard emotional effects from what I've done in the past, it is a positive effect on my decision to be abstinent.' Angela felt it was damaging to have sex with the wrong person,

Angela: The reason I'm not having sex is emotional, and not so much like I'm scared about being pregnant, or STDs or anything...I'm just blocking those emotions and just telling them like to be quiet or whatever, and thinking about the consequences of what is going to happen if we break up or whatever. I think once you have sex with somebody it takes the relationship to a different level, from before you had sex with them, and I really don't think sex is the biggest problem. But I think it definitely made breaking up with him a lot harder, and it just made

everything so much harder, and I think our whole relationship was just physical and the only thing we did really was have sex with each other and so I just didn't want my relationship to be like that anymore. I think not having sex with this boyfriend made me feel more attached to him, and our bonds are so much stronger than if we're having sex. I had sex with my first boyfriend, and my second boyfriend I didn't. I tried really hard not to, cause I really wanted to, so I had to work really hard at it, so sometimes like I know I could have had sex with him, I am pretty sure he's never had sex before. He's a virgin...but, I feel like if I had wanted to have sex he would have had sex with me, but I tried really hard to protect us so we wouldn't have sex.

Sally: Well, I guess my past relations with my boyfriend in high school. It ended up complicating the situation, you know, complicating our relationship and fortunately, I didn't end up with a baby because we were in high school. I mean, I want to save that for my husband and have something special between him and me. And I don't really want to end up with a baby that would be more than I could handle in college. I definitely want to be married to him.

Although Jamie was practicing primary abstinence, some of the experiences of her previous relationship led to the decision to be abstinent,

Jamie: Having had a bad experience with a boyfriend, having made decisions that when I look back I wished that I hadn't with a boyfriend, was really hard emotionally and it even kind of strengthened my case to wait until I got married to have sex because I don't think I could go through that emotional heartache again. It is so painful, I don't understand how people do it so commonly, have sex and just move on. Even crossing smaller boundaries with a former boyfriend and letting him touch me when I was sixteen, when we broke up I was so emotionally scarred by...the emotional connection but also our physical connection that it made me want to wait until the perfect person.

Some other participants were abstinent because of the experiences, stories, and report of other people who were sexually active.

Marta: It seems like whenever I'm down and think that being abstinent may not be the right decision, something always comes up that convinces me otherwise, it's usually my friends who were upset because of whatever guy, or whatever situation they are in and it kind of reinforces what I'm thinking that abstinence is better.

Ashley: I've seen girls who have been in relationships where they have been intimate and I see them when those relationships don't work out and how broken they are because they have given part of themselves away and I think that if I hold on to that, I guess I don't have as much to lose if this relationship doesn't work

out. I mean, I think that most of the benefit would come in the future. I think it has also made me feel more secure about myself.

Lisa: Hearing other people’s stories saying how they should have waited. I hear that a lot. I am not afraid to tell someone that I am a virgin so they are like oh that’s great, I wish I would have waited as long as you do. That lets me know that okay; it’s worth waiting for. There is nothing I am missing out on. So I will wait.

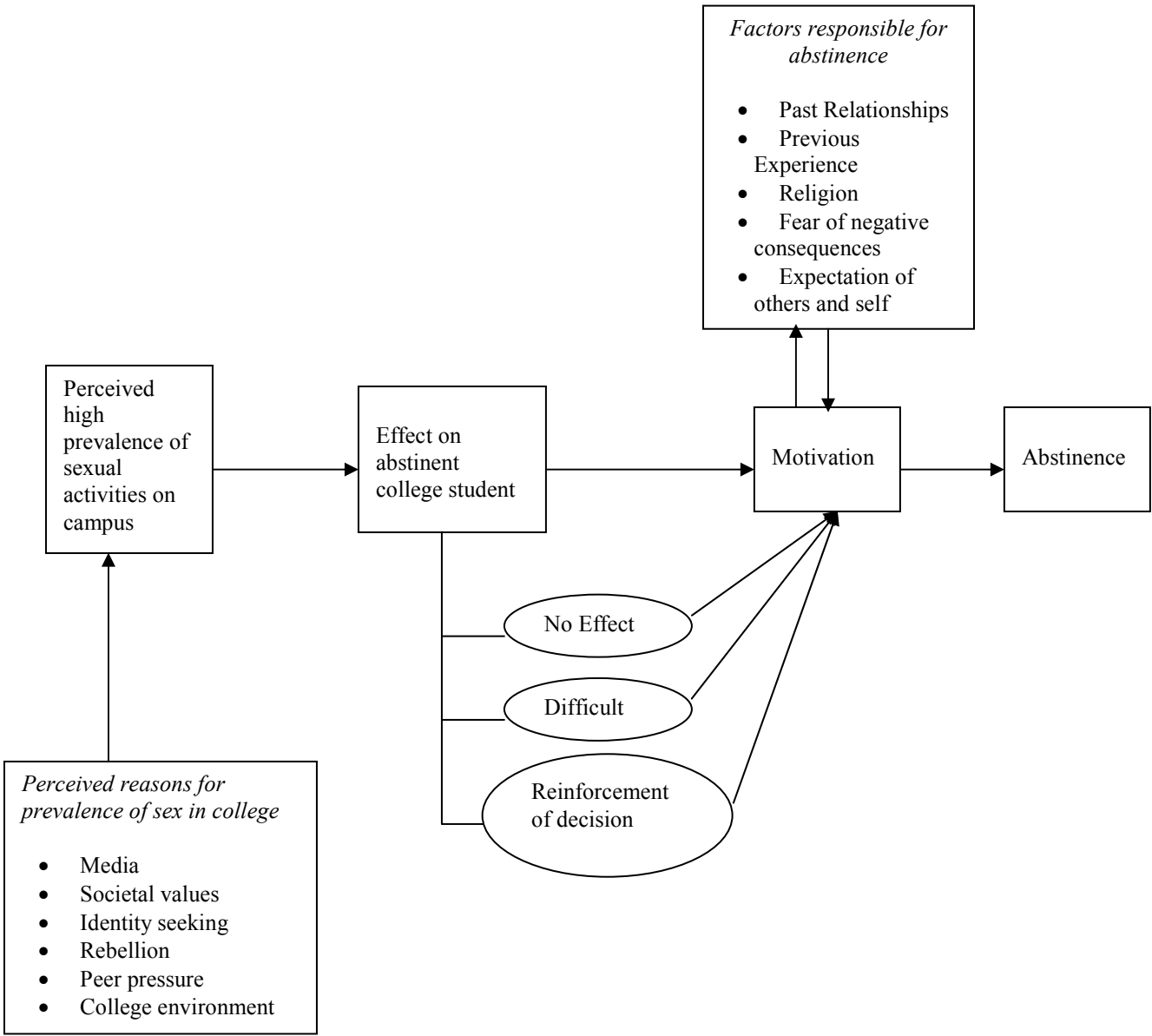


Figure 4. Normative Perceptions and Abstinence at a Glance

Religion. Most of the participants were abstinent for religious reasons. They believed that sex is better within marriage and that it is a gift from God to be shared between husband and wife. Some of the participants who were not religious were abstinent for moral reasons. For instance Tim reported, 'First of all for religious reasons, I used to be a Christian and I was just following the doctrine but a long time ago 3 or 4 years ago, I lost my kinship to my religion. But I still felt that it is important to save yourself for your wife even if you don't know her, showing her that you are thinking about her before you even met her is a sign of respect and it's nice not having to worry about STDs and pregnancy, just the emotional complications that come from sex.' Being a Christian is an important reason to be abstinent for many of the participants,

Ashley: I'm a Christian and I believe that God created sex for a husband and a wife joined together and I think that when you have sex you are giving part of yourself away and if you do that too quickly, you don't have much of yourself left and I don't think it is right to give yourself away so freely because I think a lot of people don't really have very much self value anymore. And so they will give themselves to whomever, whenever they want and they are not keeping themselves whole anymore and so when they do get married or find the one, they're not...complete anymore. I think that's why divorce rate is so high, it's because...people can't really complete each other anymore because they've given part of themselves away.

Although Rosie was practicing secondary abstinence, according to her she was practicing primary abstinence. She thought her previous experience was morally wrong because she had oral sex in her previous relationship. She said, 'It was something morally wrong to do, I wouldn't have done things that I did but because I thought I was going to marry the person I was dating in high school I did, and after that I realized why you don't need it before marriage.' She is now abstinent for religious reasons and she reported,

Rosie: I believe that sex is better within the marriage, and that's what God created it for, I just think that it would be better. I mean maybe not, it's not one on one comparison. This one time with one person, this one time with another person

over a long extended period of time I think sex is more about giving than about playing. It's about giving yourself to another person and I think that it's not only giving yourself, like gaining intimate knowledge of you but about receiving. It's going to be a special gift; I am giving it to only one person. I feel like it's honoring my husband, even before I know him it is something I valued. Just being able to have something unique between two people and being able to say you are the only person that I have had this kind of experience with and we can share it and just enjoy it and not compare. In fact the only sex education my mother gave me was do not have sex with so and so, it gives you a reason to compare this person's performance with your husband and that won't be good. I mean in practical ways, I remember it. That is not the only reason, there is another reason, but at one point in my life that was kind of only the reason.

Fear of negative consequences. Some of the participants were abstinent for the fear of negative consequences, which include fear of sexually transmitted infections (STI), cost benefit of waiting instead of having unwanted pregnancies, psychological and emotional consequences of having sex. As Tom reported, 'originally, I chose to be abstinent out of fear that I would catch some kind of disease and I definitely don't want to be someone that spread diseases.' Tim also compared the cost benefit,

Tim: I feel like, the first thing is the cost benefit, I just think in the long run I think for me personally I think it's better for me and my wife and our family if I choose to have a family, that being abstinent will keep me from any complications that could hinder my family and my wife.

Expectations of others and self. Most of the participants were abstinent because they did not want to disappoint themselves, hurt their relationship with God, and other people such as parents and friends. According to Ashley, 'I know that if I did give in on sex that I'd be really disappointed in myself and so I know that I'd be really hurt. So, I definitely think that plays a role in my decision.' Rosie believed, 'Honestly I do it for myself, but really I'm doing that for my relationship with God. It will just shock me if I'm not, and hindering my relationship with God. But really I have done it more for my husband and for God than for myself.' Leanne also reported,

Leanne: I feel like we have been so long now, it would kind of stupid and a waste of three years to have sex at this point. And I guess it would really be a big disappointment. I mean, not just to us but...we'd be disappointing God and I don't think I could handle it emotionally at this point. I would just be really crestfallen if we did it.

The expectation of Lisa's mom and her guidance when they were younger made Lisa decide to be abstinent.

Lisa: My mom kind of scared me, she would tell me and my sister stories about when she's growing up, it's kind of like a scare straight thing, you know how they take the kids to boot camps, they made sure that the kids never err--, she's not strict but you can tell that she really wants us to wait, so it's kind of like I am forced into waiting but I don't mind. I've grown comfortable with it.

Challenges of Abstinence Behavior

The participants in this study believed that their sexual behavior is very different from the majority of students on campus. They talked about some of the challenges that made abstinence tough and difficult to practice (Table 4). Some of the factors are as follows.

Pressure of long-term relationship. Most of the participants that have been dating for a long time found it difficult and challenging to continue to be abstinent. Some of them reported that they love their partners and there is a tendency to want to express that love sexually and or take it further from platonic relationship. Some of them referred to this challenge as "pain of sacrifice and waiting." For some of the participants being engaged and having friends that were already married was a challenge. According to Rosie, 'Being in love, really being engaged is the difficult point. I have been engaged for about a year and a half. That is a challenge because you know who your husband is going to be, you want to communicate to them how much you care about them and that is a very unique way. Though you can say over and over again but it is different if you can

say it physically. So for me being engaged is a challenge and having married friends sometimes is a challenge.’ Bill and Beth among others also reported the following:

Bill: Actually the biggest challenge is being engaged because I know that marriage is coming up so soon. Before being engaged it was always a possibility but I never really knew that I was going to be marrying this person. Now, that I have promised her that I’m going to show up on that wedding day, and being around her is way more difficult now because I know that it is coming and I think about being married and having sex a whole lot more than I did before.

Beth: I have been in a very long relationship and so it is a challenge every time I see him, just being in love and knowing that is something that you experience with somebody that you love and that other people that haven’t even been in relationships have had sex but me and my five year relationship, I haven’t? What? And so, the challenge comes with that just seeing him on weekends or whatever and having those feelings or having those desires. That in itself is a challenge to overcome. That’s the hardest one.

Unfulfilled sexual desires and curiosity. Some participants had sexual desires that were not met, especially with a lot of beautiful girls around. Tim said, ‘I look at women and I am attracted to the women on campus, I am very attracted to my girlfriend and I know that I’m not stupid. I know that sex is enjoyable and that it’s very fun, that’s how I found it difficult. I am a guy, I have testosterone and I have times that are much more difficult than others.’ Some of the participants have the urge to experiment and experience sex with their partners but because they have chosen to be abstinent the urge has become a challenge to them. Jamie said,

Jamie: When we’re together, we’ve been together so long to the extent that you run out of things to do, you know, and you’re curious and want to experiment and so it is hard when you’ve kind of exhausted all other options to the point that you still want to keep your love life exciting but you don’t want to cross over too many boundaries that you’ve set for yourself. It’s hard and you really love the person, you want to get married to the guy, you want to make sure that he’s the correct person.

Joy: Just being a young woman, you know, I have crushes like everyone else, I really like the guy and there have been times that is really hard and that’s why it helps to have someone that shares your belief as far as abstinence, but it’s simple

just the way that like in movies everything just seem to think it's so normal to have sex and that is a challenge. You know people do talk about it and you can just perceive as if they don't have anything to offer sometimes, it's just a weird feeling, example if you sit in class and kids talk about what they did last weekend or about how their boyfriends are in bed or also what is happening like you know last night – so, that's a challenge, but honestly I feel the greatest challenge is to be a young woman who does desire something and you know you can't.

Lonely and uncomfortable. Some of the participants had feelings of loneliness, embarrassments, and often felt they were not able to contribute as much as they would have wanted in conversations about sex. Some became uncomfortable and cautious during conversations because they already assumed their ideas and opinions were going to be different from those of others. Some of them had a feeling of loneliness when some of their friends who were abstinent before suddenly become sexually active; Jamie said, 'I think that feeling alone and like you're one of the only people that don't do it. It can be hard and it can be frustrating when you feel you're the only one who has the self-control.' Mark also felt the same way, 'I feel uncomfortable sometimes because I feel like I am a minority in that way. So, I feel uncomfortable sometimes, other times I just try and deal with it and just say, if they ask me about myself, tell them where I stand and go from there.' Some of the female participants believed they don't get much attention from men and people sometimes make fun of them and misunderstand them. Rosie said:

Rosie: A lot of people don't understand, you can be misunderstood as you are holier than thou and people might think you are better than them. Telling jokes more than anything, just people kind of pulling fun at what you haven't done and then people ask what is wrong with you? Like why are you not giving it up? People do not understand you; they just kind of believe you are crazy. Also, not getting as much attention from guys. The way I can see guys give attention to other girls and want to be friends with them and props that type of relationship with them too. I like to have attention too.

Media/movies. Some of the participants believed the media have a negative influence on them and it is a challenge to the practice of abstinence. This includes the

television, movies, radio talk shows, Internet, and magazines. According to Sally, ‘You hear people talking so much about it that sometimes it feels like...it is harder than what it is and it feels like if everybody is doing it, then why shouldn’t I be? And so, sometimes it feels like it’s a little bit impossible or a little harder than what it really is.’ Tom commented that, ‘It runs a complete counter to what I believe. And it is hard to remind myself that I don’t believe what they believe.’ Mark also reported,

Mark: Things like the media, whether it is commercials or advertisements for movies, TV shows, things like that make it sound normal or fine or acceptable and even friends of mine that I know are sexually abstinent, when they watch shows like Sex in the City and Friends, things like that where a good chunk of the show comes from sex and sex related activities. To me, it’s discouraging when I have a friend of mine that is like, “Oh, I really like this show.”

Peer pressure. Although most of the participants draw strength from peers of similar values, and group identity is a supportive factor of abstinence behavior, some of the participants reported that peer pressure from friends that were not abstinent was a challenge. Tim said, ‘Among some of my acquaintances not necessarily close friends, abstinence is seen as impotence or abstinence is seen as “unmasculine”, being able to have sex with a lot of women is seen as a masculine characteristics, something that is a mark of manhood. I hear akin comments that allude to you know, proving yourself to women or things of that nature are social influence.’ Mark believed it is peer pressure when girls wear sexually explicit clothes. Tom was challenged about combating peer pressure and just having people think he is a “goody two shoes” or that he is better than them or being silly, and missing out on something. He was also worried about lack of understanding of peers and said:

Tom: Most people didn’t understand, they would say “Do you have any hormones?” “Are your testosterone levels low? And they don’t understand that yes, I do have desires; they can’t understand how, if my desires are as strong as

their desires are, why I haven't had sex already. And they tell you that sex is good and that it's cool to have sex. And there are a lot of people out there that think you're not cool if you don't have sex. I wanted to be accepted by those people and so that's why I was embarrassed, but now I don't really care what those people think.

Will, who was a student athlete, commented about being left out during conversations, 'for example, all my good friends on the wrestling team were sexually active and sort of comparing stories about what girls did and what it was like and I wasn't able to contribute or participate at all. And that sort of...definitely pressures you to want to partake in the conversation but you can't.'

Alcohol. Some of the participants who drink alcohol believe getting intoxicated makes abstinence a challenge. According to Tom and Leanne,

Tom: Just being intoxicated that definitely makes it difficult. So, now, I drink socially meaning that I don't have more than a glass of wine or beer or a mixed drink. I don't get drunk anymore because getting drunk definitely makes it harder because with alcohol you definitely lose your inhibitions.

Leanne: I think it is really hard if we are together for a long period of time, especially late at night, if we are both tired. It is just real easy to get carried away and...just the desire to stop gets so much farther away if you're tired or if you have alcohol in you. Just desiring each other at this point it's natural, it's just hard to refrain.

Coping Strategies in Abstinence Behavior

Most of the participants decided they were going to be abstinent until marriage, but some of them were not so sure; they just knew they would be abstinent for a long time. Although Marta hoped to be abstinent until marriage, she expressed some concerns, 'Probably as long as I can...which is hopefully until marriage. I mean, I am of the opinion that if I do screw up and have sex, it's not the end of the world...it's something that can be dealt with and doesn't have to change everything. I can still do something

wrong and come back to what I believe. I don't think it is just going to throw everything to pieces.'

In order to be abstinent for a long time or until marriage all the participants have set up strategies to help them sustain the decision to be abstinent (Table 4). Some of the themes identified from the coping strategies are as follows:

Personal boundaries and avoid compromising situations. All the participants had personal boundaries and restrictions that enabled them to retain the decision to be abstinent and avoid compromising situations. The participants and their partners set these boundaries ahead of any compromising situation. The boundaries varied from participant to participant and they include not kissing until marriage, not to be alone together for a prolonged period or late at night, being romantic in other ways such as 'writing her a card or making a sacrifices for her, cleaning her place, or just talking to her about how beautiful she is and things like that...so I'm not just stuck there but I'm actually doing other things instead.' Other boundaries include removing themselves from situations where they will be tempted, for instance not watching movies that are sexually explicit, Tom said, 'I just remove myself from situations where I'd be tempted, like for example, if I'm watching a movie and there is a sex scene, I try to look away because --- it makes it harder to resist. Or if there is a movie that is just filled with sex scenes or innuendoes then I just won't watch that movie.' Joy also said, 'I try not to watch very sexually graphic movies or read this kind of extreme romance novels and these kinds of things, because I found the longer that you hear, you think I wish I had that or I wish I could do that, the more the distractions and so forth. Find other things, places in life to see beauty

or to enjoy yourself, it takes your mind off it. And I feel that it makes you grow in different ways.'

Participants avoid compromising situations by playing cards and engaging in fun activities, John said, 'We do a lot of puzzles, we go traveling, like day trips around, go out to the little zoo here or go to Atlanta to a museum or something like that.' Apart from playing games some participants engage in physical separation to avoid sticky situations, Jamie said,

Jamie: There are so many ways. There are so many things to do. We play cards once a week. I mean we love playing cards. There are a billion card games you can play. We play video games, we go on walks, we go bowling, we drive around in the car and try to guess the next song that's coming on. You know, when you have someone you care about and really love to be around, there is so many things you can do to entertain yourself because you share common interest and it's all about being with the right person. You have to take yourself out of sticky situations, there are opportunities, I'm very sexually attracted to my boyfriend and not that I don't have the desire but it's just that I'm choosing to wait and so I have to take myself out of situations when I'm tempted to do things. If there is a situation where it is getting kind of close, and we are both very attracted to each other and we potentially are tempted by it we stop what we are doing, we go our separate ways and he gets on the other side of the couch and I get on the other and we separate physically to fight that emotional and physical attraction.

Some of the participants set boundaries to only go so far, Mark termed this creative boundaries, 'I have set creative boundaries with my girlfriend, say "We're not going to go here." So, creating boundaries before boundaries...you know, before sex there is still five levels of boundaries and fences and everything to prevent you from getting to that point.' Marta's boundary allowed for "making out" or "dry sex" where certain clothes are on and certain clothes are off. Some other participants would not lie down while they "make out" and in some other cases all clothes are kept on, and they can only make out for 30 minutes. The principle that guides such making out is if your bathing suit covers it you don't touch it.

Group dating. Some of the participants were coping with the challenges of abstinence behavior by engaging in-group dating. This is similar to group support in that couples surround themselves with couples of similar values and beliefs; they all do things together, go out together, cook out, and enjoy themselves. The principle is that when they are all together, they would not engage in sexual activities. Rosie explained, 'I do double date or group date, we hang out with friends who have a lot in common this really helps. We still have a great time with other people a lot of which may have the same belief and we have that group interaction too.'

Co-operative partner. Many of the participants were able to cope with abstinence challenges because they have partners that understood and cooperated with them. As Tim said, 'mutual understanding is the most important that keeps us in line'. They have partners that respect their values, beliefs, allowed open communication about their physical boundaries, their past struggles, and weaknesses and also agreed to and support the limits they set for interaction. According to Jamie, 'Actually, our first conversation was that kind of what we were about and then as we progressed early on in the relationship before we had started dating, we had the talk about, you know, what are your expectations sexually, physically -- very important to me and was important to him, too. It's hard to find someone that is compatible in that area.'

Avoid getting drunk. Some of the participants that drink tried to avoid getting drunk because they know that once they get drunk they may lose the self-control that is necessary to be abstinent. According to Tim, 'don't drink alcohol, I mean don't get really, really drunk to where your logic is impaired and knowing before you get into the situation what your line is and expressing that. I think if you are kind of ambivalent the

social acceptance and the situation will incline you to have sex or do something that you may be unsure of, so I think being sure of what you think before hand and then trying to avoid situations that might get you into trouble. I don't drink with her and she generally does not drink with me.'

Religion. Some of the participants depend on God to cope with the challenges of abstinence. While some of them reported that they prayed and depend on the strength that is higher than them, some of them reported that they read the Bible and this reminds them that they are different. John believed it is strictly a mental or spiritual thing. Others expressed their beliefs in different ways,

Tom: For me, personally, just praying because those desires are not easy to resist and so I just pray to my God to just protect me from that and give me patience.

Rosie: I will say my relationship with God because it takes having a strength that is bigger than my own, it allows me to be strong in that way because it takes courage to be different and strength to resist what is natural. I try to get in the bible. Back my perspectives. It basically reminds me that I am supposed to be different and its okay, and there is a reason.

Although Joy has a purity ring or promise ring, she said there is no specific power in the ring, even though she still wears the ring as a physical reminder to be abstinent, it embarrasses her to tell people it is a purity ring. In spite of the ring she still depends on God for strength.

Joy: But I also have a very strong personal interaction with God, I pray a good deal and try to be active in the community. It just kind of contributes to the idea of the beauty of sex within marriage and I feel like my relationship with God has really filled a hole that some people try to fill with emotional intimacy through sex. And I might sound weird, but that is what my experience has been.

Table 4. Summary of Challenges and Coping Factors in Abstinent College Students

| Challenges | Coping Strategies |
|--|---|
| Pressure of long-term relationship | Personal boundaries and avoiding compromising situation |
| Unfulfilled sexual desires and curiosity | Group dating |
| Loneliness and uncomfortability | Co-operative partner |
| Media and sexually explicit movies | Avoid drunkenness |
| Peer Pressure | Religion |
| Alcohol | |

Influential Factors on Abstinence Practice

The components of the TNSB guided this section of the research, it explains the different mechanisms that operate together to influence abstinence practice (Figure 5).

Injunctive Norms

Most of the participants reported that parents, siblings, and friends were influential in their decisions to be abstinent. Some of the participants had parents that went to church and these parents inculcated their beliefs about abstinence into their children. Some grandparents and extended families also had positive influence on the participants; John reported that, ‘A big one is my father because he was really the one that brought us up in the beliefs and stuff like that, he has really encouraged us to

maintain our abstinence and maintain the idea that you don't need to have sex until you're married.' Sally also said 'I think probably my mother because she didn't really have a role model. I love my grandmother, but she didn't have quite as strong a role

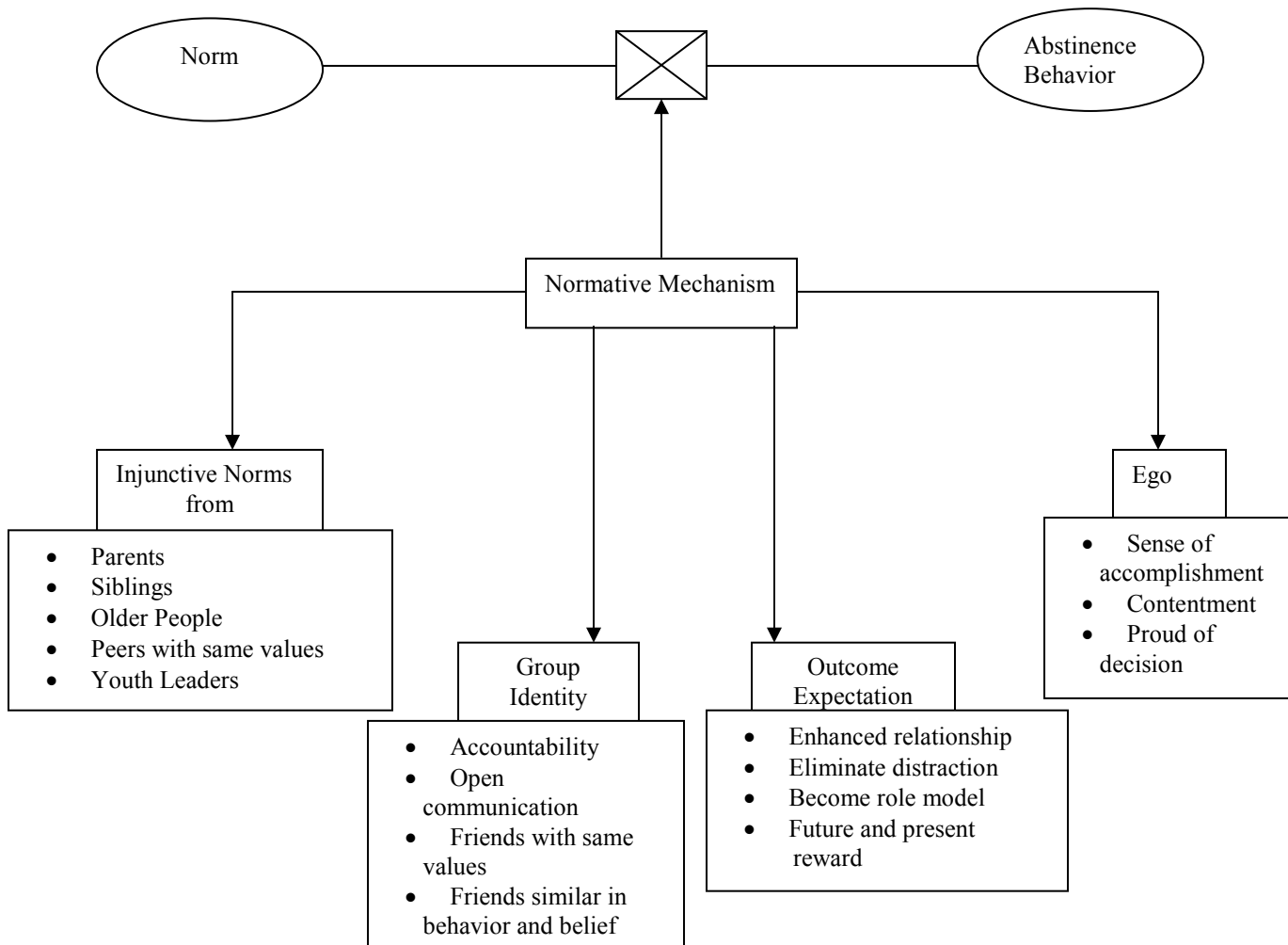


Figure 5. Diagrammatic Representation of Influential Factors on Sexual Behavior of Abstinent College Students

model as I do. Like her mother wasn't quite as strong a leader in terms of abstinence and good relationships as my mom is. And she waited for my dad and she's only been with

my dad. And she's definitely expressed the importance to me of waiting for that right person, besides my mom, my leaders at church.' Rosie also commented, 'I will say friends and my parents. I have a close relation with my extended family, my grandparents especially, I regard their opinion and want their approval naturally and so their example and just their view of me and close friends.' Other influential people on abstinent students were people that have been in their situations and were honest about their struggles. Leanne reported:

Leanne: To me, especially people who I've seen who have done it and people are really honest about the struggle; people who are willing to admit that it was a struggle and admit that they didn't necessary always want to do it, to remain abstinent but...people who have come through it. Like my preacher's wife, she's does a bible study for college students and she said after they got engaged they would like to have a chaperone or somebody because it was just hard for her at that point and just knowing that other women do struggle with it. Because it is not something that is really talked about among women...I've seen women who are like "I've really struggled but you can get through it and there are ways to do it."

The participants have been supported by the care shown to them by family members, they aspired to be like them and were not ready to let these people down; they also counted on the support of their partners. Jamie said, 'My friends support me and they know that's what I stand for and they would think less of me if I cross that line even if they had because they know that is what I'm about. My boyfriend is a big support as well.' Beth, Tim, and Joy reported,

Beth: I am supported by the man that I date, definitely. I'm supported by words of encouragement by affirmation of "hey, this is the right thing to do" by also couples that I've seen in the past that have now been married and the benefits of their decision to stay abstinent. So, that's a support, just knowing that. Accountability from friends that are also abstinent and want to stay that way until marriage.

Tim: I respect the way that they carry themselves and so they have proven to me that they care about me and they care about themselves, and I respect that, I

respect their actions. A lot of my peers and my families are ahead of me in age, and I aspire to be like them when I get older so that gives them merit that they have achieved that.

Joy: Really, I have this expectations just knowing how disappointed they will be if I messed up, there are friends I have at work that know I am a virgin, that just--I think it makes them see me very differently in positive ways, so just knowing that they are aware of it is a support I think. I have had a friend say you know, that's really pretty neat, you know, even though he wasn't sexually abstinent and so they just support me in my belief or in respecting it.

Group Identity

To the extent that college students find themselves among colleagues that engage in sexual behavior or engage in abstinent behavior we can expect them to rely on social cues they receive from others and are likely to engage in the behavior themselves. The participants reported that they draw strength from people with the same values and this has influenced their behavior. They reported that their group of friends build each other up, have the same views about sex, think similarly about sex, believe it is something special that should not be done before marriage, and they communicate freely with their group. As Ashley put it, 'we've all decided to be abstinent until we're married. It makes me feel great that I have the support system with the same values and encouragement especially when you feel like you're the minority. It's really good to have people around you that have those same beliefs.' She continued, 'It's been really encouraging because I have a few girls to talk to about it because we are definitely in the minority so it is nice to know that there are people that have the same values that I do and have same beliefs that we can talk to each other about the frustration as well. It's hard but it is definitely worthwhile to wait. It's definitely been beneficial to have close friends that share those beliefs.' They also hold themselves accountable to each other. Beth reported:

Beth: I think that group support has greatly influenced my decision because we keep each other accountable. The four of us...there are four of us that are very close...and three of us are in very serious relationships, one is engaged and we all grew up with the same background, the same teachings, the same belief in God and I think that we keep each other accountable. We talk about how hard it is nowadays and just because we don't have sex doesn't mean that we don't want to (laughs). So, I think it is a great influence. If they gave in I think it would be a lot harder for me to not give in.

Outcome Expectations

The outcome expectation construct of the TNSB helped in understanding the reasons the students choose to be abstinent and the expected benefits from abstinent behavior. The reason the participants choose to be abstinent is the belief that their actions will lead to benefits. The participants shared how the practice of abstinence has benefited them; these discussions were categorized into themes as follows;

Enhanced relationship. The participants were able to keep a healthy relationship devoid of sexual activities with their partners. This in turn strengthens their relationship and keeps their relationships from being based on physical attraction alone, instead they focus on discussions and learn more about one another. They all agreed this was good for their relationships and made their relationships less complicated. It also benefited people they have dated in the past because sexual relationship was not involved, nobody would be hurt, and they could still be friends. Angela and Rosie expressions are as follows:

Angela: I think it benefited my relationship with my boyfriend because it doesn't have that like whole sexual thing to our relationship. I knew that he really liked me, but we just didn't do anything, and I felt like with my other boyfriends that I had sex with all the time...whenever we were around my parents or my family, I felt like they knew what we were doing, because they'll know that I've had sex, and I felt really guilty...but then with my boyfriend, since we weren't doing things we really shouldn't be doing...I felt more free I guess...and we'd hold hands in front of my parents...with my old boyfriend we wouldn't even touch at all. I think we didn't really want anyone to know what we were doing.

Rosie: Well, it's benefited me in wisdom and relationships being able to choose someone not based on physical aspects and just not being focused on a person physically and your attraction to them, and letting attraction and feelings drive you getting into a relationship instead of praying about a person for a long time before reaching such a premium, I think it kept me from some situations that I would have regretted and I think that I have a lot of friendships with guys that I couldn't otherwise have. My ex-boyfriend, my only other boyfriend in college lives with my current fiancé and we are all friends and I think there is no way that could happen if I had been sexually active for sure with that ex-boyfriend, or even just mere physical involvement with him.

The participants' relationships have also been healthy because they did not have to worry about STIs and unwanted pregnancies. As Tom put it, 'I don't have any STDs so far. So, I consider that to be a huge benefit. I don't really have any regrets about not having sex; I have had friends who have had regrets about being intimate with someone that they didn't really belong to that person.' Apart from being free from STIs, the participants also believed they have been free from emotional breakdowns and stress due to relationships that were sexually involved. The participants believed when you have sex with someone you get emotionally attached, and when there is a break in the relationship it could cause emotional breakdown.

Will: Well, the obviously first benefit would be that I'm not worried about STDs, while other kids are worried about HIV tests and all these other multiple diseases out there; I don't have to worry about that. And that's a real comfort and another thing is, the emotional part of it because so many of my friends that have engaged in that, just have emotional breakdowns sometimes because of the stress it puts on a relationship and the stress it put on a person and when you're in college, I don't think you need any more stress than what you've got.

John: It's strengthened my relationship with her, I believe. First it has kept me healthy; I don't have to worry about having any STDs or anything like that. Secondly, emotionally with each other, our relationship together is different in that it is not a purely physical one and we don't have the confusion of "is this good sex or is this something else?"

Eliminate distractions. The participants reported that being abstinent helped them to be more focused academically and they were able to set their goals without being

deterred from accomplishing them. It enhanced their self-discipline, self control, and self-esteem, they were able to be more conscious of the decisions they are making and how the decisions affect their lives, As Joy reported,

Joy: Aahm, well honestly, it kind of eliminates a lot of getting involved too quickly with someone and I know that a lot of guys do not want to date somebody that doesn't want sexual intercourse before marriage, so it has taken away a lot of distractions I think, and it has kind of given me time to know myself better and to not struggle with some of the self esteem issues. I think some girls do that but I don't have to worry now about what exactly it is to be naked. You know, I can wait until I finally engage to exercise----, I just know it enabled me to get to know myself a lot better and to really enjoy the academic side of school, because I really enjoy reading. I think I can be alone a lot better than some people.

Angela who practiced secondary abstinence also believed that being abstinent has helped her to eliminate distractions and be more productive, she said 'I feel like when I was having sex I was wasting a lot of time that I could have been doing something more productive to make myself a better person, laying around having sex and being lazy. I'm being more productive now.'

Role model to peers and siblings. Most of the participants believed that their choice to be abstinent has benefited others; they have been able to influence peers and siblings. While some of the participants did not really want to admit setting themselves as examples or being role models, they still believed they have made good decisions that have influenced and benefited their siblings and peers. Others see themselves as role models to people who were younger than themselves, they believe they are examples and sources of encouragement to peers and friends; they have been able to influence others by sharing their experiences, their strengths, weaknesses, struggles and doubts about their sexual behavior. They have also been able to leave a very big impression on people that were not abstinent and encourage those that were already abstinent.

Rosie: I am able to be an example to other friends and I always make friends with freshman I know how hard it is to be a freshman, especially the people that I choose to invest in their lives. I can be that example and hopefully---, maybe not a role model but being an example. Being someone that can influence them through just an example of my lifestyle and they can say if Rosie can do that I can do that too.

Beth: I think that it has been an encouragement to those that have also been abstinent. That we can be a couple that stays abstinent but also has a great time with other people, they can tell that we love each other and that we are going through this together. We're walking through this together and staying abstinent until marriage. And I think that encourages our friends around us, that they can also do it.

Apart from being a role model, some of the participants believed they have a good testimony, Jamie reported 'I think I have a good testimony. I think that I can share my story with people and I can be a normal college kid and have a great time at a party or whatever. And I think it shows strength of character and I hope that it shows other people what I'm about, my core values and my faith and everything that comes with being a Christian.'

Future and present reward. The participants expect future reward and benefit because of the decision to be abstinent. They see sex as a final connection with their partners and a potential gain in the future; they hope the future spouses will appreciate the sacrifice they have made to keep themselves from sexual relationships. As Jamie said, 'I think that in the future it is going to be something that pays off, and I am not going to look back and wish what if---? It is something very rewarding in the future and for the person that I'm married to I don't want to have regrets.' She continued,

Jamie: I feel that my sexuality is a gift, it's one of the most intimate things you can do with another person and it's a gift that you can share with someone else. And I feel that I want to share that with my husband and until I'm married to the man that I'm with, he might not be my husband and then I'd feel like I'd mess up in two ways if I slept with him, one is I've given something to him that would have belonged to my future husband that I could have saved for that perfect

relationship and two, I have taken my boyfriend's virginity that he could have saved for his future wife. And so, I think that's the ultimate gift you can give to your partner and I want to save that for the perfect person.

Tim also alluded to this,

Tim: The day when I get married and my wife knows that I have skipped out on all that so that I could really prove to her that she is the one I want to be with for the rest of my life and show her that I was thinking about that when I could have not been, just the day, the future.

While most of the participants expect to benefit from abstinence in the future, Lisa reported that in addition to the expected benefit in the future she is already benefiting in the present.

Lisa: I am praised for waiting; a lot of people praise me for waiting. I have gotten money from random people. Just because like my mom knows some people she's worked with, that she hasn't seen in a long time, they meet up again and they are like oh your children are beautiful and my mom's like and they are virgins like oh that's great, you know what I am going to give you \$50.00, because now we have the opposite image. It's like you get paid to show your body. It's sexual instead of non-sexual. My mom tells everybody, she's like it's nothing that you should be ashamed of.

Ego Involvement

Ego involvement (the extent to which individuals' self-concept is connected with their position on a particular issue and forms an integral part of how individuals define themselves) is one of the four cognitive mechanisms that moderate the influence of descriptive norms on behavior. According to Lapinski & Rimal (2005), it is possible that strong descriptive norms activate the relevant aspect of self-concept and makes one's ego involvement more salient, thereby increasing the likelihood of behavioral action.

The participants used different terms to describe how they feel as abstinent college students, the terms used included 'I feel really good', 'I am happy', 'I feel fine', 'I am proud of myself', 'I am content', 'I feel accomplished about it', 'I am not ashamed

of it'. These expressions helped the participants to maintain the decision to be abstinent. John said, 'I feel proud of myself. I'm perfectly okay with it and like I said, it is what I believe is the right thing to do. And it is what I believe is the thing that you are supposed to do. And so, to me, what I'm doing fits me perfectly.' Mark said, 'I feel good about myself...you know, I feel accomplished about it. I feel like I said earlier that I am in a minority but...I feel like it's something that is in my power that I can handle to remain and retain that abstinence.'

While some participants claimed to be proud of being abstinent, some participants believed it has more to do with respect than pride, they don't count themselves better than others but they were still happy with the decision they made.

Tom: I don't really think pride is that big of a factor. I mean...I guess I am proud that I'm abstinent and so I want to maintain that...I mean, I want to stay abstinent. I don't see myself better than someone else. I just like have a lot of positive influences in my life and someone else might have a lot of other influences in their life to make them think a different way and have a different belief system and I can't really judge them for that. For me, it was fairly easy from the beginning because I was always taught to be abstinent. So, I don't know that self-pride is a big factor.

Beth: Like I hate to use this word but I'm proud, so many people that I know have come to college with the same belief that I have but have given in. And so, it almost chokes me up now, knowing that they wanted that before and they can't...they gave it away, they're not virgins anymore. And really knowing their heart, I feel sad for others but glad for myself, you know.

Some participants believe these feelings have played a major role in their decision to be abstinent. When the participants were asked the question about the role of self-pride in the decision to be abstinent, Tim responded, 'A very big part, like I made a promise to myself I think I know who I want to be so I don't want to go back on that. I feel if I had sex, despite how pleasurable it is even if I didn't have any of the negative consequences that I talked about, I would feel like I failed myself, I will feel that I let

myself down and I want to be someone who is accountable to himself.’ And Sally responded, ‘I think it plays a really big role because I don’t need...some guy telling me that I’m beautiful or whatever and for me to know that I am and to know that...I guess, I have enough self esteem to know that I don’t have to give into peer pressure and give into something that I don’t want to do because somebody else wants me to do it.’ Some of the other participants had concerns using the word ‘self-pride’ because they believed ‘pride is the root of all things’ but they still claimed to be proud, according to Jamie and Leanne,

Jamie: I think pride is the root of a lot of things. I think our pride gets in the way, Self pride----- a lot of disagreements and a lot of evil things that people say, a lot of them stems from self pride and I would not doubt that my pride is a factor in my choice. I’m very proud that I’ve made this decision. It is the thing that keeps me going but it is not the reason why I initially made the choice. And so it’s not end all value of this decision. It’s definitely a factor I’m sure. But it is not the reason for the choice.

Leanne: I guess, I don’t know if a lot of it is self pride because it is more of a thing with relationship with God but...just being able to say when we do get married that we were pure and I don’t really like the word “pride” because it is not like I’m rubbing into people’s faces. I am proud that we have gone this far and I don’t want to jinx it because we’re trying really hard to stay pure but...I think that the people who I was talking to this summer at work, they have kind of made me realize that it is something that I should be proud of that I have done because like I said, I never really considered that it is something that I should be proud of.

Abstinence in College

The factors mentioned above influence, enhance, and support abstinence among college students. Nevertheless, another way in which abstinence can be encouraged among college students is by sex education. Participants in this study expressed their views on sex education and suggested ways to improve on the way it is being promoted among college student.

Disappointed with style and method of sex education. Most of the participants believed that college students have a nonchalant attitude and only cared about themselves and what they want to do, therefore it is difficult to promote abstinence among them. Angela said, ‘they have to be at the right place in their lives...to be able to hear it’s okay not to have sex.’ But they also believed that there should be an improvement in the way abstinence is promoted. The participants were currently unhappy and disappointed about the way abstinence is being promoted. Jamie expressed her feelings that,

Jamie: I think people are always going to do it because again, at the end of the day it is what makes me happy and if that is what makes me happy and I’m going to do it. And that’s kind of the attitude. But I think it is all about marketing and it’s about how it’s posed to people. And I mean, I don’t have a particular exposure, I could think about it but in terms of...you know, if you put in form of a seminar and you have someone come and you have leading questions, “why is this something that you choose to do?” What about this that that makes you really happy? What kind of fulfillment do you get from it?” Kind of addressing the situation like that, challenging students to think about the choices that they are making and the significance of them instead of saying don’t do this, “abstinence is the answer” making it where it is really engaging and an experience for them, be able to connect with them and getting to dig a little deeper into the mind of students and getting them to think why do I do this?

Although the participants support comprehensive sex education, they reported that health educators go into the field with a preconceived notion that abstinence is unobtainable so they either don’t talk about it or they just mention it at the beginning of their presentations and they spend a greater deal of time talking about safe sex. They believe giving individual agencies equal opportunity to see all the health options is important. Leanne said:

Leanne: It might have been geared toward people who were sexually active and trying to get them to be safe but maybe they don’t realize that they are ignoring a portion of the population and perhaps discouraging them. Not providing them a way to remain abstinent or to continue in the decision that they have made that they want to stay pure until they are married and not talking about it is kind of alienating them and I feel like it is discouraging to people who want to remain

abstinent. I almost think that they might consider it unobtainable because they don't really talk about abstinence anymore, it's all safe sex and it's more about not getting pregnant than not having sex or not getting an STD, it's so easy to get condoms, they hand them out at concerts and you go the next day to the pharmacy and pick up a pill that will prevent you from having a child if you have unprotected sex. Like I said earlier, so much of the influence is the culture, they are just making so much easier to have sex and they're not really saying, it is immoral, they're saying just don't. May be not so much don't talk about it but don't get pregnant.

Other participants also expressed their views about the way abstinence is promoted, while some tried to justify the reasons health educators' promote abstinence the way they do, some feel insulted.

Tim: Experiences are not shared, they are like I am making the assumption that these college students know about sex, know about STDs and they know the dangers and the benefits. That being said, I think experiences are not being shared, keep the topic on the table, I feel like a lot of the issue is that well, they gonna have sex, let's just provide them with protection, I agree they need to be able to say that, but there also need to be a spot in the form of discussion for abstinent, and as long as people can kind of see all the options, that's okay you can have sex and be safe, but you can also be abstinent, this is also an equally viable option, as long as this is on the table with safe sex, I think that people could choose for themselves and be able to make their decisions better.

Jamie: I think that the reason they take the angle that they do is because they think that their morals will tell them how to make choices and to tell them how to be safe in the choices that they are making and that's why they push the contraceptives and things of that nature on them. But I think a strong abstinence stand would be awesome and I think that maybe every freshman coming into orientation goes through a health abstinence/safe sex talk. I completely think that abstinence should be the upfront piece and it shouldn't just be something you say, "Well, abstinence is a hundred percent but if you're not going to do that, then here...". I think the focus should be more on abstinence part of it. And I think maybe it should be compulsory to the orientation or something like that for all freshman. I think that would be an awesome thing to have.

Bill: I really think it is demeaning to reduce it to a problem of mere STD it is really insulting. I think it is really important, but there is a fantasy that when it becomes only a health issue and that also an issue of what it means to be human and what it means to lead a good life, sometimes I feel like the way that they present it... it's not different from why you should spay and neuter your pets. A lot of people advertise for spaying your cat so that they don't reproduce too much. And I feel like the way a lot of times, when people treat sexual health at this

university, presents a really similar view, you know, we're kind of like cats, and the only way to control us is to hand out a bunch of condoms because we obviously can't have the self control to choose abstinence. It's very insulting that they are saying to me "I don't believe you have what it takes to choose to not have sex. The only way to protect yourself is to put on a condom."

When Angela who now practiced secondary abstinence first had sex, she was miserable and was scared about many things. At that stage of her life she reported she would have probably considered an abstinent education, but this was not part of the options she was given.

Angela: I felt like once I had done it there was no going back, I was just like a sinner, like a whore, and my life was over or something. I was completely so emotional and upset. I've ruined everything; I've had sex because it's a big deal, but it's not that big a deal...not like life or death. After we had sex I was crying I don't want my parents to know, I'm in so much trouble...I felt like everybody know what I've done. I felt like I'm horrible, a terrible person and it's mostly because my dad's a pastor, and my whole life I've had this, don't have sex, don't have sex I felt horrible and then I did, I felt so bad. The first time I had oral sex, we had vaginal sex and then I started crying but eventually I got over it. At Planned Parenthood I was crying, I talked to this person who said did you use a condom. I said no, she said OK, she talked to me about it for maybe 2 minutes and then give me the condom and morning after pill, she did not talk about secondary abstinence.

Share stories of people with experience. Participants suggested that one of the ways to encourage abstinence is to share life experiences of people who are practicing abstinence, to share their physical and emotional struggles, regrets and success stories.

They believe that they should emphasize the benefits of being abstinent.

Tim: I think for me personally, what influences me is hearing personal experience of bizarre. If someone came up to me when I was first going to college and said, I just went to college, this is what I experienced this are my regrets, seeing that I was going to his or her same position, I will be more influenced right away, being about sex, being about academics, being about anything. Someone who have been down my path and I'm about going that path, using their experience to learn I think is influential.

Jamie: I think they need people to relate to. I think they need to hear that I'm not alone if they abstain and that it is not a dumb thing, it's not an immature thing,

you're not sexually retarded, not that you can't get a girl, you are abstinent. I just think that there are a lot of people who abstain and a lot of benefits to it. If college students will come out and share that with other college students, people will have something to relate to. "Look, I abstained, I have a great time in college" people who have positions on campus are people who people know. Change the image of what it is, it's not such a bad thing to be abstinent, it's actually a really rewarding thing. Enjoy all the benefits that come with it. Let me tell you how good my life has been because of the choices that I made.

Although some of the participants belong to religious associations and they draw their strength and support to remain abstinent from this group, they believed that abstinence education should be from a logical standpoint and not religion. Marta said:

Marta: It's a social thing because usually...there are the religious and there are not religious people and you don't mix them usually. It is easy to try to surround yourself by people who think the exact same as you. It can be effective but it is usually...because college students are so open minded and so into trying new things, religion is something that they've been taught their whole life and usually it's thrown at them in some manner for the last eighteen years and so usually they are not interested in hearing anything from a religious standpoint. They are more interested in seeing something from a logical standpoint or educational.

Support group for abstinent students. Some of the participants believed that there should be a support group to give more visibility and weight to abstinence. They believe there is a need to let students know that some people are still abstinent, so they don't feel alone. Leanne said, 'I definitely think abstinence needs encouragement because they need to know that they are not alone and girls need to know that there are guys out there who want to remain abstinent until marriage. And they need to know that that there are places that they can go and things that they can do with people that will allow them to remain abstinent.' Some of the participants suggested that such groups should not necessarily be tagged with abstinence but a social group with a goal to encourage abstinence.

Mark: If you can create programs where you have support groups, it doesn't have to surround around the issue of sexuality because that's an uncomfortable issue for people, but it can surround around a Thursday night movie group and then one of the things...you have different things that you talk about, a subject that you

talk about every night or something and then you'll talk about that but then you'll also have a movie, pizza, whatever, because kids that live on campuses want community and so they want a friend base to be able to hang out with whether it is the guys on their hall that play video games together or people in the church that will have that small group or people in the fraternity that will go party downtown.

Rosie: I think abstinence should be put out there so people don't have this concept of everyone's doing it kind of concept of sex. I think it will be great if even though some organization on campus, where people could discuss abstinence and the benefits. May be visible organization on campus for people to go to or I don't know exactly what they can do but you know they should be active and people could see that there is presence of people who are abstinent because they don't talk about it people think they are invisible. May be more visibility. I think some people with passion will come, just like any other organization. I don't think it will be the biggest group on campus or anything but just having it there might mean something. There are some crazy organizations and clubs on this campus and there is someone in all of them I don't even know why they have some of them. Like I cannot believe they found someone to get in that club. I don't think there are enough people on campus who are abstinent, but it could be you know, it could be real organization, that's my opinion.

Some of the participants were particular about a support group for students with prior sexual experience and regrets, who have decided to practice secondary abstinence,

Sally: My friends and family and the feelings that I had from it. I didn't want that feeling again of... I mean, I don't know exactly how, other than I guess just creating support groups for girls and creating support groups for guys too. Girls that have been hurt or either girls that have decided that they don't want to have sex or had sex once and they were like "No, I don't want to this", that there are actually girls and people who have the same ideas and same beliefs.

No scare tactics. Some of the participants also believe that health educators should not use scare tactics instead they should encourage fun activities, this is because it is a personal decision, and scaring people with STI's and unwanted pregnancies might not necessarily be helpful to some students. Lisa and Rosie talked about their ideas of fun activities,

Rosie: I think encouraging fun activities that don't involve drinking because I think sexual activities happen when people are out having a crazy wild time or other times when they're drinking, and then they make a decision which wholly

they would never made. Fun activities are good alternatives to just going down town or just staying at home with your boyfriend; I think education to an extent, more education especially freshman at college need to really be a target for sexual education for safety in general

Lisa: They have sex chats; I think we can have abstinent chats. You can have fun without having sex, people do it every day, I think people have the wrong ideas that having fun is having sex. It's like what did you do before you started having sex, what did you consider fun. So that's what we need to talk about.

Encourage self-esteem. Some of the participants believed sex education should promote self-esteem, self-worth, and assertiveness. They believed that girls should be encouraged to appreciate themselves and recognize that abstinence is positive and noble and that there are other people who have a common practice. Sally reported that lack of self-esteem was part of her initial sexual problem, 'And that just may be self-esteem encouragement for girls or something like that because I think that was definitely a part of my problem in high school. I had to deal with "well, he says he loves me".' Joy also stated her views about self-esteem and assertiveness,

Joy: I think they can be encouraged to appreciate themselves, especially girls, that if you are not into it just say no. Just tell the male no, it is not abnormal, it's not wrong. You know, and just understand that there can be healthy relationships outside of marriage. The biggest thing I would say is just to encourage women not to partake in sexual random encounters especially not just because they feel like it's what the guys want. You want to have some kind of female mentors and just educate women on their rights, you know, like protect themselves, and being on the alert. But I think in the more gray area of you know, you just met a guy, he wants to make out with you and you don't want to actually have intercourse, you know, in that situation say to women you really have a choice and you can say no. Helping women learn assertiveness and learn to say no. If you feel he wants something decide when to walk away.

In spite of the suggestions above some of the participants felt everything depends on the society. According to Tim, 'I think, honestly I think when we as a society or especially when people start to value abstinence it becomes more socially acceptable then

behavior will follow that attitude but that's a very, very, may be not insurmountable but very formidable, like opposition to change, I feel like it is a very difficult avenue.'

Summary of Findings

In summary, findings from this study showed that participants' perceived a high prevalence of sexual activity among college students. In spite of the perceived norms, they decided to be abstinent because of past relationships and previous experiences, religion, fear of negative consequences, and expectation of themselves, and others. However, participants reported that they faced several challenges to remain abstinent, these included pressure of long term relationship, unfulfilled sexual desires and curiosity, loneliness, peer pressure, and negative media influence. They were able to cope with these challenges through their strong support system and influential others; they also had personal boundaries to avoid compromising situations. Other coping strategies included group dating, religion, co-operative partners, and avoidance of alcohol. Using the constructs from the TNSB, it was gathered that participants were influenced by family, friends, and youth leaders (injunctive norms). They were also influenced by group identity, in which they drew strength from people with similar values and beliefs through open communication and accountability to one another. Outcome expectations from abstinence included enhanced relationships, elimination of distractions, ability to be role models to peers and siblings, and future and present rewards. Participants also suggested ways to promote the practice of abstinence among college students.

CHAPTER 5

DISCUSSION

The aim of this study was to understand the normative perceptions of abstinent students about the sexual behavior of college students, and the effect of the perceptions on their sexual behavior. The study examined why students chose to be abstinent, the influential and supportive factors, the challenges they face because of the behavior, and the coping strategies that helped them to retain the abstinence decision. The study also sought for participants suggestions on how abstinence behavior can be encouraged among college students.

The constructs from the theory of normative social behavior (TNSB) guided the study and the symbolic interactionism theory helped to explore, understand, and identify individual experiences and the deeper structure and common elements in experiences. It also helped to interpret the uniqueness of each person's perception and experience.

This chapter is divided into four sections; the first section discusses the findings from the interviews with respect to the research questions, and as contextualized in the literature, the second section discusses the limitations of the study, the third section is the implications for public health research, and the fourth section is the conclusion.

Discussion of Findings

The first and second research questions were about the perceptions of abstinent students' on sexual behavior among college students and the effect of the perceived

behavioral norm on abstinent students. All the participants in this study perceived that there is high prevalence of sexual activities among college students. It has been reported that behaviors are influenced by perceived norms (Rimal & Real, 2003; 2005), and the link between perceived sexual behavior among peers and personal sexual behavior have been found to be a good predictor of risky sexual behavior (Bon et al. 2001; Scholly et al. 2005; Winslow et al. 1992). The perceived norms of participants in this study have different effects on each of them (Figure 4). While some participants reported that the perceived norm had no effect on their decision to be abstinent, the perceived norm made it difficult for some participants to be abstinent but actually reinforced the abstinent decisions in others. This demonstrated that healthy behaviors such as abstinence, and the decision to subscribe to a norm, are guided and determined by many other factors, and not only the perceptions about the behaviors of others. This is in contrast to the report that those who estimated high level of sexual activity among their peers were more likely to have had sexual intercourse in the past month than those who made lower estimation of peer sexual activity (Page et al. 2000).

Several reasons were perceived to be responsible for the high prevalence of sexual activities on campus. Among them is media, which has been implicated in a lot of research (Brown et al. 2006; Chia & Gunther, 2006; Kembi, Hou & McNair, 2007; Martino et al. 2006; Tayler, 2005). It has also been reported that society exerts a lot of influence through media (Jensen, De Gaston, & Weed, 1994). Women in sexually explicit clothing are used to sell everything on the television and casual sex is seen as normative in movies, so the media and the society has a negative influence on youths. Hence, students without influential role models are guided by the societal values.

Identity seeking was another perceived reason for the high prevalence of sexual activities among college students. Social identity theories propose that people construct their self-concept through self-categorizations (perception of self as identical, similar, equivalent to some group of others but different from another) and that social identity (categorizing oneself as an in-group or out-group member) is an integral part of self-concept (Tajfel, 1982; Tajfel & Turner, 1986). When social identity is salient to self-concept, people experience depersonalization, whereby their self-perceptions and behavior are defined in terms of a shared social identity. When applied to normative influence, self-categorization not only facilitates a person's feeling of belonging and identification with a group of people but also facilitates conformity to perceived group norms.

The college environment provides a setting in which friendship networks develop, socialization occurs, and norms that govern behavior are developed and reinforced (US Department of Health and Human Services, 2000). It is a behavioral setting that can have influence on individuals' behavior (Barker, 1978; Wicker, 1987). The participants in this study perceived that the freedom in college and the seemingly invincible attitude of students is responsible for the high prevalence of sexual activities among college students. Turner et al. (1994) also reported that most traditional college age students are between the ages of 18 and 24 years and they start the freshman year away from direct parental control, bursting with hormones, and congregated with hordes of adolescents in similar condition. This might explain the reason the participants perceived the college environment as one of the reasons for high prevalence of sexual activities. Rebellion is another perceived reason for sexual activities among youths in general; this confirms

Osho's (2002) study which suggested that rebellion comes with sexual maturity among other things. He claimed that all over the world the rebellion of youth is part of sexual freedom and this was also perceived in this study.

The perception of an individual about the prevalence of a behavior is known as descriptive norm in the TNSB. The descriptive norm did not change behavioral intention or behavior of students in this study. This might be because the students have other influences that have more effect on them than the perceived norms. There is growing evidence that when people feel a moral compulsion to behave in a certain way, there is a stronger link between their attitude and their behavior (Manstead, 2000). Campo et al. (2003) also found that students' perceptions about the prevalence of drinking among other "typical" students were less predictive of behavior than their perceptions about the prevalence of drinking among their close friends. So, the perceptions of students about high prevalence of sexual behavior among college students may not have as much effect on them either because of their moral values or because of the more compatible effect of sexual behavior of their close friends. In the theory of reasoned action, Ajzen & Fishbein, (1980) predicted that norms emanating from one's close social referents are more instrumental in determining behavior than those emanating from a more diffused social group. Hornsey, Majkut, Terry & McKimmie (2003) also reported that where people have a strong moral basis for their attitude, they might treat public actions as a way of converting other group members to their view or of reinforcing their privately held sense of self.

The perceptions of participants in this study stemmed from assumptions, interactions, and conversations with fellow students. The communicated norm is then

elicited by the strength of the relationship with more or less important referents and whether or not others expect them to behave in the same way (injunctive norm). The communication and influence of strong ties reduces the effects of the perceived norm on abstinent behavior. Also, the strongest and most enduring form of normative effect is internalization, and it occurs when personal and perceived group norms converge (Yanovitzky & Rimal, 2006). The process of internalization may be initiated in the presence of a group; its influence on individual behavior is thought to occur when group members are not present to exert their influence (Kelman, 1958), probably because individuals have internalized the appropriate mode of conduct. People of similar values and beliefs have probably influenced the participants in this study and they have internalized the decision to be abstinent, so the perceived norm about sexual behavior of college students has no effect on them because they have chosen the mode of conduct they wanted.

The group identity construct of TNSB is very influential among the participants in this study; it seems to be a very strong source of strength for them to be able to carry out the abstinent behavior. This is because they have a strong network that helped in reinforcing their behavior. The attitude and behaviors of peers with close ties are important influence on the abstinent students and the participants tend to have a high level of self-efficacy because they have a very strong support system. Bandura (1977) reported that one of the sources of people's efficacy beliefs is vicarious learning and vicarious learning is facilitated when role models possess characteristics similar to the audience's. In this study it appears that self-efficacy of the participants may be enhanced by depicting the behavior of people with similar beliefs and identity.

Outcome expectation, which includes perceived benefits to oneself, benefits to others and anticipatory socialization is one of the constructs of the TNSB that governed how descriptive norms influence behavior (Lapinski & Rimal, 2005; Rimal & Real, 2003). But the participants in this study have internalized the decision to be abstinent and the need to express their cherished value has overridden the challenges or the perceived effects of the descriptive norm. So the outcome expectation of their behavior and other factors motivated them to be abstinent and not the descriptive norm (Figure 5). When people are faced with the opinions of others on morality issues, it has been argued that the need to be right balances or outweighs the need to belong (Frideres, Warner, Albrecht, 1971; Hornsey et al. 2003; Shamir, 1997). Also, Rimal & Real (2003) found that descriptive norms surrounding alcohol use was not predictive of consumption when other factors were included in the TNSB. This means that individuals make assessments about benefits and consequences of other people's behavior before making a decision on whether or not to enact the behavior. The participants in this study believed that abstinence is beneficial to them, and the outcome expectation of the practice of abstinence among other influential factors probably blocked any effect that their perceptions about the prevalence of sexual activities among college students might have on them.

The discussion of the outcome expectation of the participants would be incomplete without discussing the reasons for their choice to be abstinent (Figure 4). The reasons the participants chose to be abstinent is complemented by benefits that would accrue if they retain the decision to be abstinent. Some of the reasons for abstinent choice among the participants include fear of negative consequences, which corroborates the

findings of Loewenson et al. (2004) studies where it was reported that one of the reasons for avoidance of intercourse among their participants was fear of negative consequences and normative beliefs about the appropriateness of having intercourse. Past relationships and previous experiences was another reason participants gave for abstaining from sex in this study. This is in agreement with Ouellette & Wood (1998) who reported that past behaviors are consequential for later behaviors. Although some of the participants in this study have not experienced sexual activities, the experiences of some of their peers enabled them to make the decision to be abstinent. However, some of the participants with past relationships intend to be abstinent because of their previous experiences. So far it could be assumed that these participants have control over their sexual behavior.

Perceived behavioral control refers to one's perception of control over a behavior and is assumed to reflect obstacles that one encountered in past behavioral performances. After all, the theory of planned behavior proposes that perceived behavior control could influence behavior directly. Although this is controversial, it has been suggested that perceived behavioral control often impacts intentions and behaviors because perceptions of control are based on one's past behavior (Ouellette & Wood, 1998). Eagly & Chaiken (1993) reported that control should only be relevant when people intend to perform the behavior in question. Measures of past behavior were the best predictors of intentions and attenuated the effects of attitude and subjective norm (Sutton et al. 1999).

Most of the participants in this study were abstinent because of their religious beliefs; they reported that they derive strength and support from people that are similar to them in views and beliefs. This is in support of Lefkowitz et al. (2004) and Sheeran et al. (1993) studies where they reported that as individual's transition from adolescence to

adulthood, they become more committed to religion and their religious beliefs become more intrinsic. They found that those who reported a stronger reliance on religious beliefs when making sexual decisions tended to engage in sexual intercourse less frequently. Holder et al. (2000) also found that feeling spiritually interconnected with friends and believing that religion is important were associated with a lower likelihood of voluntary sexual activity. Religiosity and sexuality are closely linked to each other, in that religion potentially influences a range of decisions about sex-related issues such as abstinence. Rasberry & Goodson (2007) also reported that greater religious ties significantly predicted self-efficacy for secondary abstinence.

Another reason the participants were abstinent is because of self expectation and the expectation of others. This reason overlaps with the injunctive norms construct of the TNSB (People's perceptions that their important referents expect them to comply with a behavior and failure to do so will result in social sanction). The participants in this study look up to significant people in their lives to guide their thoughts and actions. Some of this referent others include family, friends, youth and religious leaders; some of the participants also aspire to be like them. According to Asch (1951; 1952) healthy behaviors are not only guided by the perceptions about other people's behavior and beliefs (Ajzen & Fishbein, 1980) but also by the pressure of influential others. The participants did not anticipate any social sanction from influential others, but they believed they would have disappointed themselves and others if they were to deviate from abstinence behavior. Some of them believed they would have sinned to God because of their religious beliefs. It appeared the participants in this study were guided by the need for self-validation. Bendor & Swistak (2001) reported that two types of

motivations that can explain the effect of norms on people are the desire to avoid sanctions and the need for self-validation.

Prior research indicated that enactment of behavior is affected by perceptions of volitional control (Ajzen & Fishbein, 1980; Petty & Cacioppo, 1981) and beliefs that one possesses the requisite skills (Bandura, 1977). The participants used different methods to cope with the challenges of being abstinent in an environment with perceived high prevalence of sexual activities. Some of the coping methods they used were personal boundaries to avoid compromising situations, group dating, co-operative partner, avoiding getting drunk and religious beliefs. There are several models that have included perceptions of ability to carry out intended coping mechanism; they include the Protection Motivation Model (Rippetoe & Rogers, 1987) and the Health Belief Model (Rosenstock, 1990). Bandura (1997) included self-efficacy as a critical variable in adopting coping response, and self efficacy as a control over the behavior (Ajzen, 2002).

The participants discussed their dissatisfaction with the current method used by health educators to reduce sexual behavior among college students. Even though they support comprehensive sex education they believed that health educators do not address the subject of abstinence as much as they address safe sex. This agrees with the result of a survey undertaken by the Sexuality Information and Educational Council of the United States (SIECUS) and Advocates for Youth in which it was found that most people in the U.S.A. believed abstinence should be a topic, even though they rejected abstinence-only education (Haffner & Wagoner, 1999). Some of participants' suggestions for health educators were supported by the findings of Oswalt et al. (2005) who demonstrated the need for sexual educators to incorporate sexual regret into their curricula, because the

phenomenon of sexual regret is more common than pregnancy and sexually transmitted diseases, which are the usual focus of sex education.

Limitations

The research on abstinent college students was unique in that it filled a gap that is not commonly explored among researchers. It is to my knowledge one of the few research studies on abstinence among college students. It provided invaluable insight into the effect of normative perceptions and influences on abstinent students. It also provided information on the challenges and coping factors of primary and secondary abstinent students. It examined how college students could be encouraged to be abstinent. However, it is important to note some of the limitations of the current study, the norms of sexual behavior in college was based on perceptions and not the actual behavior of students, therefore the actual number of students that engage in sexual activities were not known. The use of a college sample prevents generalization of findings to youth of similar ages who are not enrolled in college. Also, there was not enough diversity among the participants, a higher percentage of them are Caucasians; this might be due to the composition of student population at the research university. Despite these limitations, the study identified important findings that may help to develop norm intervention and help in understanding abstinent college students.

Implication for Public Health Research

The social norm approach uses peer influence in a positive way by informing the target audience of true peer behavior or the norm in the population. College students

often overestimate the number of their peers that engaged in high-risk health behaviors. And the social norm theory attacks the misperceptions by using positive credible norm-based numbers, which inform students of the actual behavior of their peers. In this study we do not know the actual number of students that engage in risky sexual behavior, but we know that some students practice abstinence and they perceived that there is high prevalence of sexual activities among college students.

Reliance on normative restructuring strategies has been used to curtail the prevalence of drinking norms and the strategy used is based on normative perceptions or descriptive norms. There is a possibility that norms-based campaigns could be effective in preventing risky sexual behavior among college students, but different strategies are needed to address sexual behaviors. In this study the presence of strong group identity, high outcome expectation, and strong injunctive norms enabled the students to maintain sexual abstinence and not descriptive norms. Individuals make assessments about benefits and consequences that are likely to result if they engage in a behavior. They gauge the acceptability of the behavior among their referent others and they make comparison between themselves and others that are perceived to be engaging in those behaviors. This principle is supported by the social cognitive theory (Bandura, 1977).

Abstinent students rely strongly on group identity and they sometimes take their cue from their support system, so social norms campaigns may need to develop messages targeted at units or groups of students at a time. If social groups become the unit of intervention, it is possible that there might be a change in both the descriptive norms and communications within the group and this may impact behavior. The normative restructuring approaches should include messages designed for an audience such as

friendship networks rather than the whole student population. This study showed that peer group networks of friends of similar values are influential. So, the possibility of more communicative opportunities to correct normative misperceptions among small groups should be employed. Self-categorization theory holds that the perceived similarity between the source and the target is a strong basis for occurrence of minority influence (David & Turner, 1996; Turner, 1991).

Peer communications is one of the mechanisms through which norms are disseminated in social groups (Real & Rimal, 2007). In a small group intervention it may be used as a vehicle through which information gets disseminated among members. When people believe that many others engage in abstinence behavior and they engage in extensive communication about the behavior, they are more likely to engage in the behavior themselves or give it a thought. The perceived prevalence of sexual activity among college students has different effect on participants in this study but it did not influence them to engage in sexual activities. In a small group intervention descriptive norms may affect people's attitude and behaviors if they have similar values and beliefs about a behavior. Especially if some members of the group are undecided, they might rely on others to determine what is right, particularly if the reference group is seen to be motivated and competent. This form of influence is referred to as informational influence (Hornsey et al. 2003). Informational influence is not an irrational process; rather it is a functional way of defining a position in the face of limited information. Informational influence is internalized by the individual and it is assumed, leads to genuine attitude change rather than normative influence, which does not imply genuine attitude change.

An intervention that provides realistic portrayals of sexual behavior among college students is important; this information may reduce perceived norms and reinforce actual behavior. In this study, the participants suggested that sex education without scare tactics would have a positive effect on students. Scholly et al. (2005) reported that traditional college health education programs often heighten awareness of high-risk behavior. Health education messages that incorporate scare tactics are likely to teach only the hazards of negative behavior and ignore the reality that some students do not engage in such behavior. Interventions that would focus on prevention of high prevalence of sexual behavior should also address the context in which the behaviors take place and the life circumstances that the behavior addresses should be discussed. For example, a peer educator can share stories of past experiences if they have any. In addition, adequate time should also be used to address the benefits of abstinence.

Interventions that seek to reduce high prevalence of sexual behavior among college students using normative restructuring strategies should go beyond simply correcting misperceptions that students harbor about the prevalence of sexual activity in their midst. Rather they should attempt to understand the pressures that make it difficult for students to decide to abstain or maintain the abstinence decision. They should also reinforce already held beliefs and attitudes among the students that are abstinent. Such programs should also understand the relation between students' group identity, injunctive norms, and normative influences. Then, campaigns for abstinence norms could be based on injunctive norms, outcome expectation and group identity.

Conclusion

According to the theory of normative social behavior, individuals' perception about the prevalence of a behavior is associated with their own behavior in the presence of strong group identity, high outcome expectation, or strong injunctive norm. However, there are many situations when individuals defy strong descriptive or injunctive norms. Findings from this study indicated that college students' sexual behavior was influenced by more than just descriptive norms. The participants in this study were not influenced by the extent to which they perceived their peers as being sexually permissive. Instead strong group identity, injunctive norm and outcome expectation influenced the decision to be abstinent. They believed that the perceived norms were inconsistent with their values and beliefs; instead they had individual strategies that helped them to cope with challenges of the perceived norm. The influence of descriptive norms, injunctive norms, and group identity on behavior of sexually active college students may provide us with more insights on the use of social norms intervention to reduce sexual activities among college students.

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APPENDICES

Appendix A

Number of Sexual Partners among Students in Percentage

| | 2001 Undergraduates | 2003 Undergraduates | 2003 Graduates |
|------------------------------|------------------------|------------------------|----------------|
| No sexual partner | 28.1 | 27.6 | 21.7 |
| 1 sexual partner | 42.9 | 44.1 | 63.0 |
| 2 sexual partners | 11.0 | 12.7 | 12.0 |
| 3 sexual partners | 6.5 | 7.8 | 2.2 |
| 4 or more sexual partners | 11.5 | 7.8 | 1.1 |

The data on sexual behavior is retrieved from
http://www.uhs.researchsetting.edu/documents/NCHA_data.pdf.

Appendix B

Condom Usage among Sexually Active Students in Percentage

| | 2001 Undergraduates | 2003 Undergraduates | 2003 Graduates |
|--|------------------------|------------------------|----------------|
| Using a condom within the last 30 days (mostly or always) for oral sex if they engaged in oral sex | 1.1 | 0.0 | 2.0 |
| Using a condom the last time they had oral sex | 0.5 | 1.3 | 0.0 |
| Using a condom within the last 30 days (mostly or always) for vaginal sex if they engaged in vaginal sex | 46.1 | 50.0 | 43.7 |
| Using a condom the last time if they had vaginal sex | 50.7 | 49.0 | 31.9 |
| Using a condom within the last 30 days (mostly or always) for anal sex if they engaged in anal sex | 9.3 | 20.8 | 12.5 |
| Using a condom the last time they had anal sex | 18.1 | 21.1 | 83.3 |

The data on sexual behavior is retrieved from
http://www.uhs.researchsetting.edu/documents/NCHA_data.pdf

Appendix C

Types of Sexual Activities among Students in Percentage

| | 2001 Undergraduates | | | 2003 Undergraduates | | | 2003 Graduates | | |
|--|---------------------|-------------|----------|---------------------|-------------|----------|----------------|-------------|----------|
| | Oral sex | Vaginal Sex | Anal Sex | Oral sex | Vaginal Sex | Anal Sex | Oral sex | Vaginal Sex | Anal Sex |
| Never did this activity | 25.5 | 32.8 | 80.4 | 26.3 | 35.3 | 78.5 | 20.2 | 20.2 | 69.7 |
| Have not done this during the last 30 days | 22.5 | 20.3 | 14.6 | 23.5 | 16.7 | 17.7 | 24.7 | 14.6 | 23.6 |
| Did this 1 or more times | 52 | 46.8 | 5.0 | 50.2 | 48.0 | 3.8 | 55.1 | 65.2 | 6.7 |

The data on sexual behavior is retrieved from
http://www.uhs.researchsetting.edu/documents/NCHA_data.pdf.

Appendix D

E-mail Transcript

Dear Colleagues,

My name is Sade Kembi, a graduate student in the Department of Health Promotion and Behavior at the University of Georgia. Please I need your participation in my dissertation research on sexually abstinent students at the University of Georgia. If you are sexually abstinent i.e. never had oral, anal or vaginal sex OR has abstained from oral, anal and vaginal sex for at least 12months after previous sexual experience. Please e-mail me at kembif@uga.edu or call me at 404-285-4530 if you will consent to a 1hr confidential in-depth interview on the subject. You will receive \$10.00 compensation in appreciation of your time and contribution.

In addition to the above condition you also have to be a single undergraduate student that has spent at least one academic year at UGA. You must be at least 18years of age, and be in a dating relationship for at least 6 months.

The UGA IRB has approved the study, and it is being carried out under the supervision of Dr Hou of the department of Health Promotion and Behavior.

Thanks in advance for your time and response.

Sincerely,
Sade

Appendix E

Consent Form

I, _____, agree to participate in a research study titled " Effect of College Sexual Behavior Norms on Abstinent Students" conducted by Folasade Kembi, a doctoral candidate from the Department of Health Promotion and Behavior at the University of Georgia (706 542-3313) under the direction of Dr. Su-I Hou, Department of Health Promotion and behavior, University of Georgia (706 542-8206). Participation is voluntary. I can refuse to participate or stop taking part at any time without giving any reason, and without penalty. I can request to have the results of the participation, to the extent that it can be identified with me, removed from the research records or destroyed. It is possible that I may feel uncomfortable answering some of the research questions. I can skip any questions that I do not wish to answer. In addition, I may stop answering questions or discontinue participation at any time. If I experience any distress as a result of my participation in this research, I may contact the investigator or her advisor for other counseling referrals, assistance, and resources

The reason for the study is to determine the effect of college students’ sexual behavior norms on abstinent students, and understand the inherent factors responsible for being abstinent in college.

If I volunteer to take part in this study, I will be asked to participate in one audiotaped interview about my sexual abstinent behavior. I understand that the interview will take approximately 45- 60 minutes at a place that is convenient to me. I may be contacted by mail, phone, or E-mail after the interview to review the themes identified during my interview.

If I provide information that is used in this study, the researcher will not disclose individually identifiable information about me in the written report, as well as in any presentation of the information without my permission unless required by law. Pseudonyms will be used on the audiotape and the written transcript. The researcher and the dissertation committee will analyze the transcribed interview. I understand the tapes will be destroyed by May 31, 2010. Demographic data will be presented as group data.

There are no direct benefits to me but the findings from this study will help to identify the influence of the widely held views about sexual behavior of college students on abstinent students. It will help in understanding the underlying factors that sustain and encourage abstinence in college. It will inform health educators on strategies to encourage abstinence among college students, if the number of students that are abstinent increase the number of students with STI’s will reduce.

I understand I will receive a \$10 gift certificate as a token of appreciation for my participation.

Ms. Kembi will answer any further questions about the research, now or during the course of the project, and can be reached by telephone at 404-285-4530.

I understand that I am agreeing by my signature on this form to take part in this research project and understand that I have received a copy of this form. I agree to be contacted by phone or E-mail to review the themes identified during the interview

Yes No

Folasade Kembi_
Name of Researcher
Telephone: 706- 542-3313
Email: __kembif@uga.edu

Signature Date

Name of Participant

Signature Date

Please sign both copies, keep one and return one to the researcher.

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

Appendix F

Demographic Information

1. Name-----
2. How old are you? -----
3. How long have you been a student on this campus? -----
4. What is your class standing? -----
5. Department-----
6. Gender-----
7. How do you describe yourself in terms of race and ethnicity? -----
8. What is your religious preference? -----
9. How long have you been in a relationship? -----
10. How would you like to be contacted, (mail, Email, or phone,) to review the
summary sheets, and would you provide this contact information? -----

Appendix G

Guide to In-depth Interview

| Research Question | Construct | Interview Guide |
|--|--|---|
| <p>1. What are the perceptions of abstinent students regarding sexual behavior among college students?</p> | <p><i>Descriptive norms:</i> Individuals beliefs about the prevalence of a behavior.</p> | <ol style="list-style-type: none"> 1. What is your perception about the sexual behavior of college students? 2. What percentage of unmarried college students engage in sexual intercourse? 3. What do you think is responsible for the behavior? 4. How likely is it that the average unmarried college student will engage in sexual intercourse during the next 3 months? 5. Why do you have the type of perception you had about sexual behavior in college? 6. Of your three closest unmarried friends, how many are currently in a relationship in which they regularly have sexual intercourse? 7. How has this influenced your own personal sexual behavior? |

| | | |
|---|--|--|
| <p>2. How do the perceived norms influence abstinence behavior?</p> | <p><i>Group identity:</i> Individuals' aspiration to emulate referent others and the extent to which they perceive similarity between themselves and those referents</p> | <ol style="list-style-type: none"> 1. How has sexual norm on campus influenced your own personal sexual behavior? 2. How would you compare your sexual behavior to most students at this University? 3. What do your friends think about sex? 4. What do your friends think about abstinence? 5. Tell me about your friends that are abstinent? 6. When other young people your age discuss their sexual behavior, how does that make you feel, and how do you handle those conversations? 7. Who do you consider as your role models in terms of sexual behavior and why? 8. What is it that you have to do to maintain abstinence while some others are not? |
| <p>3. Why do the students choose to be abstinent?</p> | <p><i>Outcome expectations:</i> Beliefs that his or her actions will lead to benefits.</p> | <ol style="list-style-type: none"> 1. Tell me why you choose to be abstinent? 2. What does sexual abstinent mean to you? 3. What motivates you to decide or retain the decision to be abstinent? 4. How has this decision benefited you? 5. How do you think being abstinent has benefited others? 6. What are the positive consequences of this behavior? 7. What are the negative consequences of this behavior? |

| | | |
|--|---|--|
| <p>4. What are the factors that influence and support students' sexual abstinence?</p> | <p><i>Injunctive norms:</i> Extent to which individuals perceive that influential others expect them to behave in a certain way, and by implication, that social sanction will be incurred.</p> | <ol style="list-style-type: none"> 1. What is the inherent factor that enabled you to keep up with abstinence? 2. Who do you consider as influential others? 3. How are you supported in the decision to be abstinent? 4. Does your value system regarding sexual behavior agree with those of your friends? Tell me how that makes you feel? 5. How do you think the society view abstinence? 6. How has this decision affected your social interaction with other students? 7. Discuss the type of influence both negative and positive (family, peer, educational, emotional) on your decision to be abstinent? 8. What are the survival strategies that you use to remain abstinent in the midst of sexual behavior going on campus 9. Give me an example of the kind of things that make it hard for you to stay abstinent? 10. Discuss the type of peer pressure you may experience regarding sexual behavior? |
| | <p><i>Ego involvement:</i> Extent to which individuals' self concept is connected with their position on a particular issue and forms an integral part of how individual define themselves</p> | <ol style="list-style-type: none"> 1. How do you feel about yourself as an abstinent college student? 2. What role does self-pride play in this decision? |

| | | |
|--|--|--|
| <p>5. What are your suggestions on how sexual abstinence can be encouraged among college students?</p> | <p><i>Abstinence behavior:</i> An action that helps prevent illness and promote health</p> | <p>1. How do you think college students can be encouraged to be abstinent? 2. Tell me about a health promotion program you participated in while in college?</p> |
|--|--|--|