

AN EXPLORATION OF THE RELATIONSHIP BETWEEN COLLEGE WOMEN'S
SELF-REPORTED RELIGIOSITY AND SEXUALITY

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An Exploration of the Relationship Between College Women's Self-Reported

Religiosity and Sexuality

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ABSTRACT

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This study explored how female college students' religiosity varied according to their sexual behavior and attitudes. However, research is limited to showing that never-married female college students who have a high degree of religious commitment are less likely to engage in sexual intercourse without being in a committed relationship (Beckwith & Morrow, 2005; Earle et al., 2007; Jessor & Jessor, 1975; Mahoney, 1980; Meier, 2003; Robinson & Calhoun, 1983; Thornton & Camburn, 1989). Four hundred fifty-one emerging adult female college students from a Midwestern university participated in this study, ranging in age from 18 to 25 years old. Participants for the larger study completed an online survey which asked for demographic information, sexual activity, sexual attitudes, body image, and religiosity. An independent sample *t*-test was used to test whether there was a statistical difference in religiosity between (1) participants who are or have been sexually active, and (2) those who have not engaged in sexual activity. An independent samples *t*-test was also used to test for statistical difference in religiosity between the types of sexual activity (e.g., anal sex, oral sex, and mutual masturbation) participants considered to be "sex." It was found that women who did not engage in sexual activity were more religious than those who engaged in sexual activity. Participants who believed oral sex or mutual masturbation were sex did not differ significantly in religion; however, women who did not consider anal sex to be sex were more religious while those who did consider it to be sex were less religious. Religiosity and sexuality issues should be addressed in therapy

with this population in order to better understand the roles they play in regards to self views and developing relationships.

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CHAPTER ONE

Introduction and Theoretical Framework

People's religious views often influence their opinions regarding sex and sexuality (Cochran & Beeghley, 1991). Throughout history, sexuality has been a focus of religious institutions (Foucault, 1978). In particular, religion is a guiding force in determining social norms and rules, and religious doctrines from various institutions often outline what is considered to be appropriate sexual behavior (Cochran & Beeghley). Religious beliefs often dictate legislation and legal issues related to sexuality, such as adolescent access to reproductive healthcare and contraception, gay rights, reproductive rights, statutory rape, and age laws. These issues are relevant topics on college campuses as students are exploring their sexuality and developing their beliefs about these topic; college women are of particular interest in that many preventative efforts are directed towards them. Moreover, first year college students who are no longer under parental or guardian supervision face new opportunities to make decisions regarding religious practices since their religious beliefs and activities from their childhood may not be as prevalent (Lefkowitz, 2005).

An overwhelming majority of the research states that college students who have a high degree of religious commitment, which includes attending church, feeling that religion is important, and praying, are more likely to hold conservative views on sexuality and refrain from sexual activity when compared to students who do not have a high degree of religious commitment (Beckwith & Morrow, 2005; Earle et al., 2007; Helm, McBride, Knox, & Zusman, 2009; Jessor & Jessor, 1975; Lefkowitz, Gillen, Shearer, & Boone, 2004; Mahoney, 1980; Meier, 2003; Murray-Swank, Pargament, & Mahoney, 2005; Notzer, Levran, Mashiach & Soffer, 1984; Pluhar, Frongillo, Stycos, & Dempster-McCain,

1998; Robinson & Calhoun, 1983; Thornton & Camburn, 1989). Conservative is only clearly defined in as those who are less likely to approve of sexual intercourse without being in a committed relationship in one study (Earle et al.). For the purpose of this study, conservative is defined as those who are less likely to engage in sexual activity outside of a committed relationship or prior to marriage.

While research on college students' sexuality and religion exists, it tends to focus on highly religious students who largely practice abstinence (Pluhar et al., 1998). Religiosity and sexuality are rarely clearly defined in the literature. Although, few studies have clearly defined religion (Beckwith & Morrow, 2005; Haerich, 1992; Murray-Swank et al., 2005) or spirituality (Pargament & Mahoney, 2002), yet appear to assume Christianity. Murray-Swank et al. classified male and female undergraduate college students as moderately religious if they attended religious services monthly and said a weekly prayer. Haerich included church attendance and self-reported religiosity as measures of religiosity. Beckwith and Morrow linked religiosity with "church attendance, importance of religion, and the impact of religion on an individual" (p. 2). Pargament and Mahoney defined spirituality as the function of religion. For the purpose of this study, religiosity is defined by participants' religious beliefs, religious identity, participation in an organized religion, and frequency of prayer (see Appendix B).

The Higher Education Research Institute at UCLA studied the spirituality of 112, 232 male and female undergraduate students from 236 universities and found that eight out of ten college students have attended a religious service within the past year; more than two thirds of college students pray; four out of ten college students think it is very important to act on religious beliefs daily; and eight out of ten college students believe in God. The

results of the study show that “college students show a high degree of spiritual interest and involvement” throughout their college careers (Higher Education Research Institute, 2006, p. 4). Based on these statistics, it is evident that college students engage in sexual activity and frequently identify as religious; however, research does not discuss this relationship. Therefore, the purpose of this study is to explore attitudes, views, and beliefs college women hold about sexual activity based on their religiosity.

Over eighty-six percent of male and female college students report engaging in sexual activity (National College Health Risk Behavior Survey, 1997); however, few studies clearly define sexual activity and sexuality. Lefkowitz, Gillen, Shearer, and Boone (2004) identified male and female undergraduate college students as sexually active if they had ever engaged in penetrative sex, which was defined as the penis penetrating either the vagina or the anus. The students who answered “yes” were classified as sexually active and those who answered “no” were classified as abstinent. This definition does not account for other types of sexual activity, such as oral sex, and are based on heteronormative assumptions. For the purpose of this study, participants will be classified as sexually active if they report engagement in sexual intercourse, oral sex, and/or anal sex.

Literature exists that focuses on college student’s sexual activity and sexual health issues (Davidson & Moore, 1995; Moore & Davidson, 2006); however, sexual activity and religiosity are rarely studied together (Murray-Swank et al., 2005). There appears to be an either/or dichotomy regarding religion and sexual activity; in other words, college students were considered to be either religious or sexual. However, it is likely that many students do not fall on either extreme of the spectrum. Many students do not abstain until marriage, yet they value serious committed relationships. For example, Davidson and Moore (1994)

found that some never-married undergraduate college females who attend church on a weekly basis are still likely to engage in premarital sexual intercourse if they feel a strong bond and affection with their partner. While research focuses on the sexual activity of religious college students, there is limited research available that looks specifically at college women's sexual relationships (Davidson, Moore, & Ullstrup, 2004) and how they view their degree of religiosity.

Thus, the goal of this study was to explore the relationship between college women's religiosity and sexuality, along with clinical implications for addressing these issues in therapy. During their college years, women are held to multiple standards in regards to their religiosity and sexuality. College is a time where young women develop new beliefs and challenge previously held religious and sexual belief systems (Lefkowitz, 2005). College women are faced with contradictory messages in regards to their religiosity and sexuality during this exploratory period of emerging adulthood; emerging adulthood includes the ages between 18 and 25 (the years between adolescence and young adulthood) (Arnett, 2000). They receive societal messages to dress and act sexy, but they also receive messages based on their religiosity and society to remain innocent and virtuous (Kilbourne, 1999); unlike women, men are socialized to be independent and sexual initiators, but not in terms of religion (Krassas, Blauwkamp, & Wesselink, 2003). I hope to contribute to a lack in the body of literature with empirical data by finding a relationship between religiosity and sexuality in order to better understand and empower women.

In addition to finding a relationship between religiosity and sexuality, another goal of this study was to discover how college women define sex in order to better understand their perceptions. A definition of sex may be related to college females' religious views,

and it may be helpful in understanding their sexual decision making and what they consider to be sex. For example, female college students who are religious and actively engage in religious activities may be less likely to participate in sexual activities than those students who do not identify with being religious. Female college students who are religious and actively engage in religious activities may have a strong belief that virginity is only correlated with sexual intercourse, so to remain virgins they actively engage in other sexual activities instead of penile-vaginal heterosexual intercourse, such as anal or oral sex.

Theoretical Framework

Feminist theory guided all aspects of this research. Women receive mixed messages about what is expected from them regarding their religious teachings, which often conflicts with social messages about how they should behave sexually. Feminist research calls for links to be made between what is studied and women's daily lives (Hesse-Biber, 2007).

This study is an effort to understand the role of religion in women's sexual beliefs and practices, which is an area that is not frequently addressed from women's perspectives. Current literature focuses on sexually transmitted infection and pregnancy prevention of college women, yet rarely looks at the sexual experiences of this population. While studying women's sexual health from a physical stance is crucial, examining the relationship between beliefs and behaviors offers insight into the importance of meaning. Gender differences and social context impact women's lives and must be better understood for change to occur (Hesse-Biber, 2007).

Exploration of attitudes about specific sexual behaviors provides researchers and clinicians data demonstrating the differences in religious beliefs. This study contributes to a limited body of literature that helps to challenge previous dominant discourse about

women's beliefs and behaviors within the context of penile-vaginal heterosexual intercourse. These broader understandings, beliefs, and behaviors help to address both the physical and emotional well-being of women.

This study sought to understand intimate aspects of women's lives that have been studied from a limited perspective. The findings from the current study will help to create social change (Crawford & Kimmel, 1999; Hesse-Biber, 2007) by developing deeper understandings about the relationship between sexuality and religiosity, which are interconnected fundamental issues for women.

CHAPTER TWO

Literature Review

The review of literature for this thesis focused on two themes: (1) gender and sexuality, and (2) college students and sexuality. Religiosity is discussed in detail throughout this review; however, Christianity is implied as it has been the main focus of previous research in regards to its relationship with sexuality. Value-laden language such as “premarital” and “nonvirgin” are used throughout the literature review to reflect how women are written about in the literature; however, this language is not reflective of the researchers’ views of sexually active women.

Gender and Sexuality

Women receive contradictory messages about their sexuality from society; be sexy, but stay innocent. These contradictory messages interfere with the way females view themselves (Kilbourne, 1999). Religious beliefs encourage women to be virtuous, which conflicts with societal messages about who and how they should be sexually. Moreover, messages about sex are prevalent in the media, especially advertising, as women’s bodies are often viewed as objects in advertising (Kilbourne; Krassas et al., 2003). This can also affect their self-esteem when women come to believe that the advertisements portray how they are supposed to look, feel, and act; this can result in unrealistic beliefs and expectations about their bodies and sexual behaviors (Kilbourne). Krassas et al. stated, “The media prescribe how we [women] should look, with whom we should have sex, and how important sex should be in our lives” (p. 98).

Gender also impacts the messages that men receive about sexuality. The media exemplifies men by their physical strength and dominance especially when interacting with

females (Hedley, 1994). Masculinity is identified with dominance, perception of skill, experience (Kimmel, 1994), and the number of sexual partners a male might have throughout his lifetime (Kimmel). Men are socialized to believe that they need to have sex often with many different partners in order to be satisfied, so they are socialized to not be involved in a monogamous relationship; however, many are in such relationships (Krassas et al., 2003). Therefore, standards for men and women are different; women are socialized to be virtuous and involved in a committed relationship while men are socialized to be independent and sexual initiators. Men and women may experience conflicting beliefs regarding the way they are socialized, religious standards, and behavioral expectations.

College and Sexuality

The majority of female college students are in a period of their life called emerging adulthood, which includes the ages between 18 and 25 (Arnett, 2000). Emerging adulthood is “the age of identity explorations, especially in the areas of love and work; it is the age of instability; it is the most self-focused age of life; it is the age of feeling in-between, neither adolescent nor adult; and it is the age of possibilities, when optimism is high and people have an unparalleled opportunity to transform their lives” (Arnett, p. 7). This period of emerging adulthood is a time when an individual can freely explore her own identity (Arnett, 2006), especially in regards to religiosity and sexuality. In college, women develop new values and morals and now have an opportunity to challenge previously held religious and sexual belief systems. Many issues affect young, traditionally-aged female college students, such as recently leaving home and being on their own, being faced with new social and personal situations, pressure to find a life partner, and making their own decisions regarding their religious involvement and beliefs.

College students face new and exciting challenges as they move away from home and into a college setting (Lefkowitz, 2005). According to Lefkowitz, male and female college students may experience greater freedom as they encounter new situations and make adult decisions without the watchful eyes of a parent or guardian; the excess freedom may cause students to experience naivety and vulnerability in regards to media messages and advertisements. The advertising industry targets college students and glorifies alcohol use and sex as they market products to this age group (Tahlil & Young, 2009). It is difficult for college students to avoid media messages regarding alcohol use and sex as they are bombarded by these images, and the media has “become part of a student’s lifestyle” (Tahlil & Young, p. 255). As traditionally-aged freshmen college students explore new freedoms, they are also exposed to new types of social pressures that encourage sex, which is highly correlated with alcohol consumption (Poulson, Eppler, Satterwhite, Wuensch, & Bass, 1998). Tahlil and Young discovered that the majority of male and female college students studied had been exposed to sexual content in movies, magazines, television, music videos, and the internet; these same students were more likely to partake in a higher frequency of sexual acts than those students who were not exposed to sexual content in the media.

College students are exposed to sexual content throughout the media every day in many ways, especially on the popular MTV network. Issues that promote college student sexual activity continue to be present in current television shows such as *Jersey Shore*, *The Real World*, and MTV’s spring break specials. College students are faced with the task of negotiating personal beliefs while at the same time developing those belief systems, which may conflict with social pressures and messages.

College and Religiosity

Self-identity. The limited available research states that female college students are less likely to engage in sexual intercourse if they identify themselves as religious (Helm et al., 2009; Mahoney, 2005; Murray-Swank et al., 2005; Pargament & Mahoney, 2002; Pluhar et al., 1998). Helm et al. attributed religious beliefs as the main reason why both male and female undergraduate and graduate college students did not engage in sexual activity, which shows how much power one's belief system holds in affecting sexual activity. On the contrary, in a study by Murray-Swank et al., 70% of the male and female college students who identified as moderately religious, which included frequency of prayer, frequency of religious service attendance, self-rated religiosity, and self-rated spirituality, reported engagement in sexual intercourse in loving committed nonmarital relationships. Thornton and Camburn (1989) studied individuals throughout a period of many interviews; the last interview took place when the emerging adult was 18 years of age. They concluded that these young people who identified themselves as being religiously involved held stronger beliefs toward abstinence until marriage and had less sexual experience compared to other young people who did not identify with a religious group; these young people have probably surrounded themselves with others who have had the same attitudes toward premarital sex, and these same young people may have been influenced by older adults in their faith communities to delay sexual activity.

Based on the results of a self-reported questionnaire in a study taking place over 20 years ago, Young (1986) concluded that women who identified as satisfied virgins reported high levels of religious behaviors compared to those who identified as satisfied nonvirgins. Women "with a high degree of religious commitment may feel a high degree of guilt

concerning sexual behavior and may be satisfied with their status as virgins or express regrets concerning their status as nonvirgins” (Young, p. 340). Regretful nonvirgins did not report a higher level of religiosity when compared to other groups of nonvirgins.

Specifically, females who were classified as regretful nonvirgins had a lower commitment level of religiosity than those females who were classified as satisfied virgins (Young).

Church attendance. The majority of the literature concluded that the more involvement both male and female college students have in their religious services, specifically, church attendance, the more likely they are to abstain from sex for a longer period of time or have more conservative beliefs about sexuality because they have been taught to develop beliefs that are consistent with the teachings of their religious affiliation (Davidson, Darling, & Norton, 1995; Davidson et al., 2004; Haerich, 1992; Jessor & Jessor, 1975; Murray-Swank et al., 2005; Paul, Fitzjohn, Eberhart-Phillips, Herbison, & Dickson, 2000), and the less likely they are to engage in premarital sexual intercourse (Haerich, 1992; Jensen, Newel, & Holman 1990; Thorton & Camburn, 1989). Research continues to show similar findings over time even as far back as over 35 years ago. For example, Jessor and Jessor found that nonvirgin female college students tend to be less religious and attend church services less frequently. Those who attended church less frequently were more likely to engage in sexual intercourse than those who attended church frequently (Robinson & Calhoun, 1983). Paul et al. assessed children beginning at age three, then every two years until age 15, and then at age 18 and again at 21 years old. They found that participants who were involved with religious activities throughout their childhood were likely to abstain from sexual intercourse until they were 21 years old.

Female college students who frequently attended church services highlighted the importance of committed relationships in determining the acceptability of premarital sex (Davidson & Moore, 1994). In other words, some college students attend church services weekly and believe that premarital sexual intercourse is acceptable if a strong relational bond exists. This group of college students is as likely to engage in sexual intercourse as frequently as a group of college students who do not (or infrequently) attend church services (Davidson & Moore). Thornton and Camburn (1989) found that acceptance of premarital sexual intercourse was correlated with a decline in religious involvement. According to the results of the research, young people who attend church on a regular basis may have increased contact with older adults who encourage their decision to delay sexual activity. They are then more likely to develop sexual attitudes and behaviors consistent with their religious beliefs and teachings. They also concluded that religious participation, such as church attendance, “is more important in determining sexual attitudes and behaviors than is religious affiliation” (Thornton & Camburn, p. 651).

Conservative beliefs. Male and female college students who have a high degree of religious commitment are more likely to have conservative values and beliefs regarding their sexuality compared to students who do not have a high degree of religious commitment (Beckwith & Morrow, 2005; Higher Education Research Institute, 2006). The research consistently states that male and female college students who hold strong, conventional religious beliefs and behaviors are generally less sexually active (Earle et al., 2007; Lefkowitz et al., 2004; Sack, Keller, & Hinkle, 1984; Zaleski & Schiaffino, 2000) and are less likely to engage in premarital intercourse (Pluhar et al., 1998; Schultz, Bohrnstedt, Borgatta, & Evans, 1977). Pluhar et al. found male and female undergraduate

college students who identified as religious held more negative views toward premarital intercourse; Schultz et al. found that male and female college students who entered college with strong, conservative religious beliefs were less likely to engage in premarital sexual intercourse.

Beliefs regarding spirituality are also correlated with premarital intercourse (Bassett et al., 2002). Male and female college students who took a questionnaire and scored high on the section pertaining to “Faith and Values” were less likely to report premarital intercourse; these students also held more negative beliefs about premarital intercourse (Bassett et al., p. 130). Spiritual identity has also been correlated with less frequent sexual activity (Murray-Swank et al., 2005). Male and female college students are more likely to hold conservative values about sexual intercourse if they believe that it is important to have spirituality present in their lives or those who have had significant life changing spiritual experiences (Beckwith & Morrow).

Religion as a predictor of sexual behavior

Much of the literature examines the influence of never-married female college students’ religious beliefs on their level of sexual activity and beliefs regarding sexuality (Lefkowitz et al., 2004; Mahoney, 1980; Notzer, Levran, Mashiach, & Soffer, 1984; Pluhar et al., 1998), indicating that religion is strongly correlated with sexual behavior (Earle et al., 2007).

Religiosity and sexual activity. Davidson et al. (1995) studied participants, identified as female nurses who were graduate students, employees of university schools, or teaching in schools, and found that these women who identify as highly religious and attend church on a regular basis are less likely to engage in oral sex. Davidson et al. (2004)

found the same results as Davidson et al. (1995) except they studied undergraduate women who were never married. In addition, Davidson et al. (2004) also found that these same women are also less likely to engage in anal sex and more likely to experience guilt regarding their sexual attitudes/behaviors. Murry-Swank et al. (2005) studied both male and female undergraduate students and found the same results as Davidson et al. (2004) in that highly religious students who attend church are less likely to engage in anal sex.

Conversely, according to Murray-Swank et al., of the male and female college student participants who were classified as moderately religious, “more than 85% had engaged in kissing, breast play, and genital play. More than 70% of the sample had engaged in oral sex, and 12.6% of the sample had engaged in anal intercourse” (p. 207). Murray-Swank et al.’s study was one of the few studies that looked at specific behaviors, so this study will contribute to research by also focusing on specific sexual behaviors. Religiosity is also positively correlated with the age of a female at the time of first intercourse (Simons, Burt, & Peterson, 2009). Regarding masturbation, Davidson and Moore (1994) found that women in their study did not masturbate because it was against their religious beliefs/values, but they did engage in sexual intercourse; their main reasons for not participating in masturbation included improper use of time, absurd behavior, and against one’s personal values and beliefs. In comparison, Davidson et al. (1995) also concluded that participants in their study who attended church weekly or monthly felt guilty about masturbation in comparison to those who only attended yearly or not at all; these students who attended church more often were more likely to identify masturbation as an unhealthy behavior and/or a sin than those who did not attend church on a regular basis.

Not only does religiosity influence sexual activity, it also plays a role in the number of one's sexual partners, contraceptive use, and sexual orientation. Other studies have looked at these topics (Davidson et al., 2004; Earle et al., 2007; Lefkowitz et al., 2004; Phular et al., 1998; Robinson & Calhoun, 1983; Sack et al., 1984; Simons et al., 2009; Zaleski & Schiaffino, 2000), which shows how influential religion can be in many areas of one's life.

Religiosity and number of sexual partners. The Center for Disease Control and Prevention (2003) stated, "More than one third (34.5%) of college students nationwide had had sexual intercourse during their lifetime with six or more sex partners" (p. 16). A female who identifies as religious is more likely to report fewer sexual partners when compared to a female who does not identify as religious (Davidson et al., 2004; Earle et al., 2007; Lefkowitz et al., 2004); females who identify as religious may require love to be a prerequisite to sexual intercourse, which is why they report to less sexual partners. Conversely, Simons et al. (2009) found that religiosity, for undergraduate females enrolled at large universities, was negatively associated with the number of sex partners one had in her lifetime.

Religiosity and sexual orientation. Much of the current research is heteronormative, which means it fails to include lesbian and bisexual women in their participant samples, and it does not make any reference to this population (e.g. Notzer et al., 1984; Pluhar et al., 1998; Robinson & Calhoun, 1983; Sack et al., 1984; Simons et al., 2009). Few of the current studies allow participants to identify as bisexual or lesbian (Davidson et al., 2004; Moore & Davidson, 2006); however, their responses were omitted from the data sample. Thus, the lesbian and bisexual populations are often absent from the

current literature and rarely shown significance. Although there wasn't a large sample of lesbian and bisexual women in this study, they were invited to participate, and this study also did not assume that all participants were heterosexual.

Research also uses the term "premarital" intercourse or sexual activity (Davidson & Moore, 1994; Jensen et al., 1990; Notzer et al., 1984; Pluhar et al., 1998; Thornton & Camburn, 1989); this assumes that participants are heterosexual and plan to get married, which excludes those who choose not to get married and those who legally cannot get married. Members of the LGBTQ population most often do not have the option to get married, thus excluding them. Intercourse also assumes heteronormative ideals and does not account for other forms of sexual activity.

The term "single" has also been infused with heteronormative assumptions. For example, Jensen et al. (1990) studied single male and female students who were between the ages of 17 and 25 years old. The term "single" was defined as "not living with someone, and not engaged" (p. 114). Their definition of single would be acceptable except for the fact that in this study single is also defined as "not engaged." This also assumes that some of the participants in the study were heterosexual and planned to marry at some point. Notzer et al. (1984) stated that the majority of male and female freshmen in their study were, what they termed, "unmarried." This use of heteronormative language assumes that the participants identify as only heterosexual. Excluding participants and/or using biased language may skew these data sets in a substantial manner that cannot be fully understood.

Research Question

The purpose of this study was to document and explore the relationship between religiosity and sexual activity among female college students. The first research question

that guided this inquiry was: Does the degree of religiosity differ between participants who have been sexually active and those who have not? The second research question that guided this inquiry was: Does the degree of religiosity differ for participants based on what they consider to be sex?

Hypothesis 1 predicted that there would be a significant difference in degree of religiosity when comparing participants who either reported never having been sexually active to those who reported having been sexually active.

1. There would be a significant difference in degree of religiosity when comparing participants who reported never having intercourse and those who reported having intercourse.
2. There would be a significant difference in degree of religiosity when comparing participants who reported never having anal sex and those who reported having anal sex.
3. There would be a significant difference in degree of religiosity when comparing participants who reported never having oral sex and those who reported having oral sex.

Hypothesis 2 predicted that there would be a significant difference in degree of religiosity based on whether participants considered anal sex as sex, oral sex as sex, or mutual masturbation as sex.

1. There would be a significant difference in degree of religiosity when comparing participants who defined anal sex as sex and those who did not consider anal sex to be sex.

2. There would be a significant difference in degree of religiosity when comparing participants who defined oral sex as sex and those who did not consider oral sex to be sex.
3. There would be a significant difference in degree of religiosity when comparing participants who defined mutual masturbation as sex and those who did not consider mutual masturbation to be sex.

CHAPTER THREE

Method and Methodology

This study used secondary data, which was collected as part of a larger study, to analyze the relationship between college women's sexual activity, beliefs about sexual activity, and their religiosity. The data for this study was part of the Body Image/Sexual Activity (BISA) Study data set, which investigated college women's sexual activities, sexual attitudes, body image, eating habits, and religiosity.

Participant Recruitment

The participants for this study were recruited via email sent to faculty members as well as through a student university list serve. Professors were asked to announce the study to students by showing an informational PowerPoint in their classes, which was also posted on Blackboard. The participants had to be female, at least 18 years of age, and enrolled as a graduate or undergraduate student at a university to participate in the study.

Sample Description

The sample included 451 female college students. Participants ranged in age from 18 to 25 years old with a mean age of 20.68 years ($SD = 1.77$). The majority of the sample was European American/Caucasian (94.2%). The sample included undergraduate students (91.8%) and graduate students (8%). Less than 5% of the sample identified as lesbian or bisexual, with a majority identifying as straight (95.3%). Most of the sample indicated they were single or dating (81.9%), not in a partnered or marital relationship. Participants were asked to write in their religious or spiritual affiliations to allow for an inclusive self-report of religious identities, and the majority indicated that they identify as Christian. (See Appendix A for demographic questionnaire).

Data Collection

Procedures. Participants were directed to a URL link where they read an informed consent form, filled out demographic information and completed several scales that measured their sexual activity, sexual attitudes, body image, eating habits, and degree of religiosity. Once the surveys were completed, the participants had an option to select a new URL link to enter a drawing to win a flat screen TV or a \$50 gift card to either the university bookstore, Target, or a local restaurant. All participants' identifying information was kept confidential, and the information that was collected for the drawing was not linked to the survey data.

Measures. The three variables of focus in this study were religiosity, sexual activity, and beliefs about what is considered sex. In order to measure religiosity, four items from the Personal Importance of Religion and Spirituality Scales (Prest, Russel, & D'Souza, 1999), and two items from the Gorsuch IE-R Scales, which has reliability that is equal to or better than the original scales, (Gorsuch & McPherson, 1989) were used. The degree of participants' self-reported religiosity was determined using a 5-point Likert scale that ranged from strongly disagree to strongly agree; a participant who had a high score would indicate that she was more religious than a participant who had a lower score. Example questions included: "I try hard to live all my life according to my religious beliefs" (Gorsuch & McPherson) and "I consider myself to be a religious person" (Prest, Russel, & D'Souza) (See Appendix B for religiosity scale).

The researchers for the larger study created a measure to assess sexual activity. This measure included three items, and participants indicated types of sexual activity they have engaged in by checking the option(s) that best described them. Example questions

included: “At least once I have had sexual intercourse, at least once I have had anal sex, and at least once I have had oral sex.” (See Appendix C for sexual activity scales).

A majority of the research examining college women’s sexuality and religiosity assumes that sex is synonymous with heterosexual intercourse (Jensen et al., 1990; Notzer et al., 1984). In an effort to determine how participants define sex, the following question designed by the researchers was asked: “What do you consider to be ‘sex?’” Response options included: intercourse, anal sex, oral sex, and mutual masturbation. (See Appendix C).

Data Analysis

The first hypothesis included independent-sample *t*-tests that were used to explore whether there was a statistical difference in the degree of religiosity between the means of two groups in the sample: (1) college women who are currently or have previously been sexually active, and (2) those who have never been sexually active. Specifically, an independent-sample *t*-test was used to test whether there was a statistical difference in the degree of religiosity between those who have never had intercourse and those who have had intercourse. Another independent-sample *t*-test was used to test whether there was a statistical difference in the degree of religiosity between those who have never had anal sex and those who have had anal sex. Lastly, an independent-sample *t*-test was also used to test whether there was a statistical difference in the degree of religiosity between those who have never had oral sex and those who have had oral sex.

The second hypothesis included independent-sample *t*-tests that were used to test whether there was a statistical difference in the degree of religiosity between what sexual activity participants define or consider to be sex. Specifically, an independent-sample *t*-test

was used to test whether there was a statistical difference in the degree of religiosity between those who do not think anal sex is sex and those who do think anal sex is sex. Another independent-sample *t*-test was used to test whether there was a statistical difference in the degree of religiosity between those who do not think oral sex is sex and those who do think oral sex is sex. Lastly, an independent-sample *t*-test was also used to test whether there was a statistical difference in the degree of religiosity between those who do not think mutual masturbation is sex and those who do think mutual masturbation is sex. PASW, Version 18, was used for analysis.

CHAPTER FOUR

Results

T-Test Results for Hypothesis 1

An independent samples *t*-test was conducted to evaluate the hypothesis that there would be a significant difference in degree of religiosity when comparing participants who reported never having intercourse and those who reported having intercourse. The test was significant, $t(446) = 7.80, p = .00$, and the results corresponded with the hypothesis.

Students who had engaged in sexual intercourse ($M = 17.53, SD = 6.22$) and those who had never engaged in sexual intercourse ($M = 22.43, SD = 5.83$) were statistically different in terms of religiosity, with those having never engaged in intercourse being more religious (see Table 1).

An independent samples *t*-test was conducted to evaluate the hypothesis that there would be a significant difference in degree of religiosity when comparing participants who reported never having anal sex and those who reported having anal sex. The test was significant, $t(446) = 4.00, p = .00$, and the results corresponded with the hypothesis.

Students who had engaged in anal sex ($M = 16.74, SD = 6.38$) and those who had never engaged in anal sex ($M = 19.65, SD = 6.39$) were statistically different in terms of religiosity, with those never having engaged in anal sex reporting higher levels of religiosity (see Table 1).

An independent samples *t*-test was conducted to evaluate the hypothesis that there would be a significant difference in degree of religiosity when comparing participants who reported never having oral sex and those who reported having oral sex. The test was significant, $t(446) = 5.18, p = .00$, and the results corresponded with the hypothesis.

Students who had engaged in oral sex ($M = 17.95$, $SD = 6.12$) and those who had never engaged in oral sex ($M = 21.27$, $SD = 6.72$) were statistically different in terms of religiosity, with those never having engaged in oral sex being more religious (see Table 1).

Table 1

Mean Score for Religiosity Based on Participants' Sexual Activity

Group	M (SD)	T-test
Sexual Intercourse		
Have Engaged	17.53 (6.22)	t (df) = 7.80, p = .00
Have Never Engaged	22.43 (5.83)	
Anal Sex		
Have Engaged	16.74 (6.38)	t (df) = 4.00, p = .00
Have Never Engaged	19.65 (6.39)	
Oral Sex		
Have Engaged	17.95 (6.12)	t (df) = 5.18, p = .00
Have Never Engaged	21.27 (6.72)	

T-Test Results for Hypothesis 2

An independent samples *t*-test was conducted to evaluate the hypothesis that there would be a significant difference in degree of religiosity when comparing participants who considered anal sex to be sex and those who did not consider anal to be sex. The test was significant, $t(446) = 2.05$, $p = .041$, and the results corresponded with the hypothesis, in

which there was a significant difference in religiosity when comparing participants who define anal sex as sex and those who do not consider anal sex to be sex. Students who considered anal sex to be sex ($M = 18.52, SD = 6.61$) and those who did not consider anal sex to be sex ($M = 19.82, SD = 6.25$) were statistically different in terms of religiosity, with those who do not consider anal sex to be sex being more religious (see Table 2).

An independent samples *t*-test was conducted to evaluate the hypothesis that there would be a significant difference in degree of religiosity when comparing participants who considered oral sex to be sex and those who did not consider oral to be sex. The test was not significant, $t(446) = 1.94, p = .053$. Students who considered oral sex to be sex ($M = 18.36, SD = 6.96$) and those who did not consider oral sex to be sex ($M = 19.55, SD = 6.04$) were not statistically different in terms of religiosity (see Table 2).

An independent samples *t*-test was conducted to evaluate the hypothesis that there would be a significant difference in degree of religiosity when comparing participants who considered mutual masturbation to be sex and those who did not consider mutual masturbation to be sex. The test was not significant, $t(446) = -.67, p = .51$. Students who considered mutual masturbation to be sex ($M = 19.42, SD = 6.71$) and those who did not consider mutual masturbation to be sex ($M = 18.91, SD = 6.45$) were not statistically different in terms of religiosity (see Table 2).

Table 2

Mean Score for Religiosity Based on Participants' Definitions of Sex

Group	M (SD)	T-test
Anal Sex		
Considered Sex	18.52 (6.61)	t (df) = 2.05, p = .041
Not Considered Sex	19.82 (6.25)	
Oral Sex		
Considered Sex	18.36 (6.96)	t (df) = 1.94, p = .053
Not Considered Sex	19.55 (6.04)	
Mutual Masturbation		
Considered Sex	19.42 (6.71)	t (df) = -.67, p = .51
Not Considered Sex	18.91 (6.45)	

CHAPTER FIVE

Discussion

This study explored the differences in college women's religiosity when examining sexual activity and definitions of sex. Women who did not engage in sexual activity were more religious than those who engaged in sexual activity. Participants who believed oral sex or mutual masturbation were sex did not differ significantly in religion; however, women who did not consider anal sex to be sex were more religious while those who did consider it to be sex were less religious.

Religiosity and Sexual Activity

This study examined how religiosity varied among college women who engaged in sexual activity. This is one of the first studies to look at the relationship between female college student's religiosity and specific types of sexual activity, including intercourse, anal sex, oral sex, and mutual masturbation. Our findings are consistent with current research (Helm et al., 2009; Mahoney, 2005; Murray-Swank et al., 2005; Pargament & Mahoney, 2002; Pluhar et al., 1998), which indicates that female college students' religiosity varies according to their sexual behavior and attitudes. While findings did not indicate a difference from previous research about college women's religiosity and engagement in intercourse, this study contributes more detailed information regarding specific sexual behaviors, such as anal sex, oral sex, and mutual masturbation. This study also contributes to the literature more than just examining a relationship between religiosity and sexuality by examining how religiosity varied between these groups (e.g., anal sex, oral sex, and mutual masturbation).

A significant difference was expected in the degree of religiosity when comparing participants who either report never having been sexually active to those who report having been sexually active. More specifically, findings of this study show a significant difference in the degree of religiosity when comparing participants who (1) reported never having intercourse and those who reported having intercourse; (2) reported never having anal sex and those who reported having anal sex; (3) reported never having oral sex and those who reported having oral sex. The results were statistically significant, and the results corresponded with the hypothesis. As Earle et al. (2004), Lefkowitz et al. (2004), Sack, Keller, and Hinkle (1984), and Zaleski and Schiaffino (2000) noted, this study compared women who were sexually active and those who were not sexually active and found that women who were not sexually active held strong religious beliefs and behaviors. While previous research has indicated that religiosity is a strong predictor of sexual behavior (Earle et al., 2007) this study found that when looking at groups based on behaviors and attitudes, religiosity varied.

The findings of this study were consistent with the findings of Davidson et al. (1995) and Davidson et al. (2004) in that women who identified with high levels of religiosity were less likely to engage in oral sex. In regards to anal sex, this study was consistent with the findings of Davidson et al. (2004) and Murry-Swank et al. (2005) in that women who identified with high levels of religiosity were less likely to engage in anal sex. In summary, we found that college women who had never engaged in intercourse were more religious than those who had engaged in intercourse; those who had never engaged in anal sex were more religious than those who had engaged in anal sex; and those who had never engaged in oral sex were more religious than those who had engaged in oral sex.

Religiosity and Definitions of Sex

This study found that there is no consensus regarding religiosity and what “counts” as sex when college women consider intercourse, oral sex, anal sex, and mutual masturbation. While there was no significant difference in participants’ degree of religiosity based on whether they considered oral sex and mutual masturbation to be sex, women who did not consider anal sex to be sex were more religious.

I hypothesized that there would be significant differences in the degree of religiosity based on what types of sexual activity participants considered to be sex. Specifically, I expected to find a significant difference in the degree of religiosity when comparing participants who (1) considered anal sex as sex and those who did not consider anal sex as sex; (2) considered oral sex as sex and those who did not consider oral sex as sex; and (3) considered mutual masturbation as sex and those who did not consider mutual masturbation as sex. Results regarding anal sex corresponded with the hypothesis in that those who did not consider anal sex to be sex were more religious than those who considered anal sex as sex. Results regarding oral sex were counter to the hypothesis in that those who considered oral sex to be sex and those who did not consider oral sex to be sex were not significantly different in terms of religiosity. Women may not consider oral sex to be sex as a way to still engage in the activity, but remain a virgin. It was also found that results regarding mutual masturbation were counter to the hypothesis in that those who considered mutual masturbation to be sex and those who did not consider mutual masturbation to be sex were not significantly different in terms of religiosity.

All of the participants indicated that intercourse, or vaginal penetration by the penis, is sex. While existing literature narrowly examines sexual activity as vaginal-penile

intercourse, this study included a broader range of sexual activity variables. For example, women who did not consider anal sex to be sex were more religious; sex was not determined by penetration, but rather by what part of the body is penetrated. Additionally, if sex is believed to only be defined as a part of procreation, then sexual behaviors that do not lead to pregnancy may not be defined as sex. For example, women who did not define oral sex as sex were more religious. Furthermore, the group of women who did consider mutual masturbation to be sex were also more religious which may reflect a belief that mutual masturbation is involved in foreplay leading to intercourse. Conversely, women who did not define mutual masturbation as sex were less religious.

Heterosexual assumptions which are implied by the limited definition of sex, equaling procreative intercourse, exclude the variations of sexual experiences many college women experience. Additionally, college women participate in a variety of sexual activities which cannot be explored when inquiry does not exist. It is crucial to know how college women both define and participate in sex to understand their experiences and develop relevant services and supports.

Limitations and Suggestions for Future Research

This study used an online self-report questionnaire to allow for anonymity while collecting data about a topic that is socially considered private. Even though questionnaires are a common self-report methodology, there are limitations to consider. One of the main limitations includes potential bias in reporting, such as social desirability and self-serving bias, or an unwillingness to report undesirable behavior (Hoyle, Harris, & Judd, 2002), especially around issues of sexuality. Another limitation of this self-report methodology is that it does not include a random sample, which can lead to selection bias.

The questionnaire used in this study did not specifically ask participants about relationship history and the context of the relationships in which engagement in sexual activity occurred. We could assume that access to a partner may influence a college woman's engagement in sexual activity; therefore, we suggest that future research examine relationship status as well as relationship history. Future research should also look at college women and their partners' religiosities in an effort to not only learn more about individual religious beliefs but also the influence of relational religious beliefs. Previous research indicates that college women who self-identify as religious tend to have fewer sexual partners (Davidson et al., 2004). This study did not inquire about number of sexual partners; however, future research should examine this using the broader definition of sexual activity from the present study.

Due to the Midwest location of the study, the participant sample was predominantly white, Christian, and heterosexual, thus lacking racial and religious diversity. Social science research, and more specifically sexuality research has historically focused on white men, and more recently even feminist sexuality researchers use a middle class white standard (McCormick, 1993). There is little literature available that examines multi-racial views of women's sexuality, so other studies need to look at greater diversity. We live in a multi-racial society and must be informed about the experiences of underrepresented populations who are often absent from the literature, such as women of color. Thus, future researchers should seek to use a more diverse sample. Additionally, we suggest this study be replicated with college men to compare findings allowing for further understandings of gender differences.

This study did not include religious diversity as it was predominantly Christian. However, this is important to include as religiosity offers differing perspectives on appropriate sexual beliefs and behaviors. A representative sample of religious affiliations from the larger population would help us to better understand broader implications of the findings. Additionally, future research may focus on how specific religions help shape understandings of women from a variety of faith communities.

This study found that religiosity varies based on sexual behaviors and attitudes. Future research could replicate this project specifically examining beliefs and attitudes regarding contraception. Contraception and safer sex methods were not examined; however, previous research shows that students who identify as religious are more likely to abstain or use less effective methods, such as the withdrawal method, than any other method of contraception (Phular et al.; Zaleski & Schiaffino, 2000). Similarly, Davidson et al. (2004) concluded that never-married, undergraduate female students who identify with a high level of “religiosity are most likely to use less effective methods of contraception” (p. 336). Therefore, female college students’ use of contraceptives appears to be negatively correlated to their degree of self-reported religiosity (Notzer et al., 1984), warranting further exploration of these variables.

An independent samples *t*-test was used to explore female college students’ religiosity when comparing those who considered anal sex to be sex and those who did not consider anal to be sex; future research should examine further details resulting from this finding. For example, more religious female college women do not define anal sex as sex; future research could explore what this means in the lives of young women. These women could be having anal sex and not “counting” it as sex to preserve virginity or they may not

be engaging in anal sex at all. Additionally, virginity is associated with discourse around young women's religiosity and sexuality (Valenti, 2009); therefore, future research exploring questions similar to this study could yield results that help educators and therapists better address gender differences in these beliefs and practices. For example, future research can examine questions from this study regarding sexual activity and ask participants to indicate if they are a virgin and also ask specific questions, such as "Would you consider a person who has engaged in oral sex to be a virgin?"

Clinical Implications

Therapy with emerging adult women should address religiosity and sexuality as relevant and important topics for this population. As college women are faced with new experiences and life challenges, therapy can provide a place to address the significance of these issues. Many therapists recognize the importance of religiosity and spirituality in the lives of their clients, yet shy away from addressing religiosity in therapy (Carlson, Kirkpatrick, Hecker, & Killmer, 2002). The findings of this study indicate that the degree of religiosity varies according to college women's beliefs about sex and engagement in sexual activities.

Religiosity is important in emerging adult relationships and should be discussed in therapy in order to better understand the roles that religiosity and sexuality play in clients' individual perspectives in addition to the influence they have in developing relationships. Religiosity can aid in the decisions regarding sexual activity in a partnered relationship. Therefore, the topic of religiosity should not be dismissed in therapy as it may play a role in what types of sexual activity, if any, a person chooses to engage in within their relationship. It is vital for partners in a relationship to know each others' beliefs and the

role religiosity plays within their relationship. It is also important for partners in a couple relationship to discuss how they each define sex and explore whether they share definitions as to what “counts” as sex.

Therapists’ awareness of religiosity and how it plays a role in what sexual activities young, emerging women, who are exploring new freedoms, “count” as sex will help to shape questions and interventions that explore how they make meaning and choices about sex. There is a vast variation in how young women define sex. Therefore, when having therapeutic conversations about sex, it is important for the therapists to understand how clients define sex. Given the unique issues college women face in a culture that emphasizes unrealistic beliefs and expectations about their bodies and sexual activity (Kilbourne, 1999), therapeutic conversations centering on personal beliefs and social pressures may be helpful.

Conclusion

This study examined the difference in the degree of religiosity of college women who have engaged in sexual activity and how they define sex. This study found that sexuality makes a difference in college women’s religiosity, as well as their decreased likelihood to consider anal sex to fit their definition of sex. Specific information about emerging adult women’s sexual experiences, rather than assumed universal definitions of sex, provides empirical evidence about women in order to aid in educational and supportive efforts.

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APPENDIX A

Demographic Questionnaire

Background information about yourself: please fill in the blanks below.

Age _____

Gender _____

Religious / spiritual affiliation _____

Height _____ (feet and inches)

Weight _____ (pounds)

What school do you currently attend? _____

Who do you currently live with? _____

Education level: please check one of the following.

_____ Undergraduate Student _____ Graduate Student

Race/Ethnicity: please check one of the following.

_____ Asian American / Asian

_____ African American / Black

_____ Latina / Chicano / Hispanic

_____ Pacific Islander

_____ Middle Eastern

_____ European American / Caucasian /
White

_____ Biracial / Multiracial

_____ Other

Sexual orientation: please check one of the following

_____ Straight _____ Lesbian _____ Bisexual

Relational status: please check all that apply.

_____ Single _____ Married _____ Engaged _____ Partnered

Divorced Remarried Cohabiting

If you are NOT married, engaged, or partnered, please indicate your dating status.

not dating anyone currently dating one person

currently dating more than one person

Please indicate where you currently live.

Metropolitan / Large City Small City

Rural / Country Other (please specify):

Please indicate where you grew up (spent the majority of your childhood).

Metropolitan / Large City Small City

Rural / Country Other (please specify):

Please indicate the type of family you were raised in for the majority of your childhood?

Step-family / blended family Single-mother family

Single-father family Two biological parent family

Same-gender parents Adoptive family

Foster family Grandparents

Relative(s) Other (please explain):

Please indicate how you would best describe your socioeconomic status (SES) while you were growing up.

low SES / poor middle SES / middle-class high SES / wealthy

APPENDIX B

Religiosity Measures

Please indicate your level of agreement with the following statements.

	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1.) I try hard to live my life according to my religious beliefs.	1	2	3	4	5
2.) My whole approach to life is based on my religion.	1	2	3	4	5
3.) I find it impossible to conceive of myself as not being religious.	1	2	3	4	5
4.) I consider myself to be a religious person.	1	2	3	4	5
5.) Participation in an organized religion is the primary source of my spirituality.	1	2	3	4	5
6.) I pray regularly.	1	2	3	4	5

APPENDIX C

Sexuality Measures

Please check all that apply.

At least once, I have...

- had sexual intercourse (e.g., vaginal penetration by the penis)
- had anal sex
- had oral sex

What do you consider to be “sex?” (Please check all that apply.)

- Intercourse
- Anal sex
- Oral sex
- Mutual Masturbation