

AN ABSTRACT OF THE DISSERTATION OF

Elizabeth Anne Stoddard for the degree of Doctor of Philosophy in College Student Services Administration presented on March 7, 1996. Title: Religious Orientation and Sexual Behavior of College Students.

Abstract approved: _____ Signature redacted for privacy.

J. Roger Penn /

The purpose of this study was to clarify the relationship between religiosity and sexual behavior of college students by using a measure of religious orientation to define religiosity. Religious orientation refers to individuals' motivations for religious involvement and personal faith. Religious orientations are characterized as being extrinsic, intrinsic, indiscriminately proreligious or nonreligious.

Four null hypotheses were formulated. It was hypothesized that there would be no significant difference in rates of premarital sexual intercourse or participation in oral-genital sexual activity between subjects of differing religious orientation. It was also hypothesized that the demographic variables of gender, grade point average, academic classification and ethnicity were not significantly related to religious orientation and virginity or religious orientation and participation in oral-genital sexual activity.

The sample consisted of 235 never married, heterosexual college students aged 17 to 24, enrolled at a west coast independent university. Subjects completed three self-report instruments: the Religious Orientation Scale, the Lifetime Sexual Behaviors Scale and a demographic survey. Data were analyzed using Pearson chi square, Fisher two-tail tests, t-tests and logistical regression.

Results indicate that there are significant differences in the sexual behavior of students of differing religious orientations. Intrinsic students were significantly less likely to participate in premarital sexual intercourse or oral-genital sexual activity. For females, students with GPA's of 3.0 or less, non-first year students, first year students and sophomores grouped together, seniors, non-seniors, Roman Catholics, non-Agnostics, non-Atheists, Caucasians, non-African-Americans, non-Latinos and non-Asian/Pacific Islanders, the relationship between intrinsic religious orientation and virginity is significant. The relationship between participation in oral-genital sex and intrinsic religious orientation is significant for non-first year students, non-Roman Catholics, non-Agnostics, Caucasians, non-African Americans and non-Latinos.

Other findings indicate that students stating that religion was an important factor in their lives were less likely to engage in premarital sexual intercourse. Intrinsic students were significantly more likely to be

virgins than nonvirgins. Scores on the Intrinsic Scale of the Religious Orientation Survey and academic class were significant predictors of virginity when combined with intrinsicness.

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College Students

by

Elizabeth Anne Stoddard

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I understand that my dissertation will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my dissertation to any reader upon request.



Elizabeth Anne Stoddard, Author

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RELIGIOUS ORIENTATION AND SEXUAL BEHAVIOR OF COLLEGE STUDENTS

Chapter 1

Introduction

All religions have specific doctrines regarding appropriate human behavior. Explicit in these tenets are guidelines regarding acceptable sexual behavior. These religious teachings influence individuals' decisions regarding their sexual behaviors (Hildebrand & Abramowitz, 1984).

The sexual behavior of college students has changed over the years along with the sexual behavior of American society. Horowitz (1987) views undergraduate sexuality as the aspect of college life which has undergone the most dramatic transformation during the twentieth century. She maintains "Changes in attitudes about sex and in sexual practices reshaped the form and content of college life for both men and women" (p. 123).

College student religious behavior, such as attendance at religious services and participation in Bible Studies, does not reflect American society's religious behavior as closely as college student sexual behavior reflects American society's sexual behavior. Hastings and Hoge (1976) compared changes in college student religious behavior with changes in religious behavior of national samples of adults. They discovered that the "college students' [religious] commitments exhibited more extensive swings upward or

downward from decade to decade than those of adults" (p. 246).

HISTORICAL OVERVIEW

A historical overview of college student religious and sexual behaviors reveals an evolution from restrictive attitudes and controlled behaviors to freedom of expression and choices of lifestyles.

Colonial Colleges

The origins of American higher education are embedded in organized religion. The first American colleges were the Colonial Colleges. The purpose of these colleges, founded and governed by religious denominations, was to train ministers and public servants. The presidents and faculties of the Colonial Colleges believed that although their public charge was to teach students the prescribed subject matter, the immortal souls of the students were their ultimate responsibility (Rudolph, 1962). Students at both private and publicly-supported institutions were expected to participate in daily religious services and prayers. Student discipline was moralistic and based on orthodox Christian tenets.

Religious groups called societies were formed on sixteen of the twenty-two Colonial College campuses

(Earnshaw, 1964). The societies were extra-curricular organizations with secret memberships. The goals of the societies were to pray, study the Scriptures and to examine the relationship between faith and academics.

Pre-1900

The Young Men's Christian Association (YMCA) was established at the Universities of Virginia and Michigan in 1857. Formation of the Young Women's Christian Association (YWCA) followed in 1886. The goal of these organizations was to develop Christian leadership on college campuses. Prior to World War I, the primary mission of the YMCA and YWCA was to recruit and financially support foreign missionaries. By 1900, there were 628 YMCA's and YWCA's on American college campuses.

Particular denominations established religious groups on campuses. In 1883 the Melvin Club, the forerunner of the Newman Movement, was founded at the University of Wisconsin to "defend Catholic faith and heritage" (Evans, 1980, p. 19). The student members learned about their faith and heritage through the study of Irish Catholic history and literature. The Episcopalians founded a residence hall at the University of Michigan in 1887 to further the work of their Hobart Guild. The Presbyterians established the Tappan Presbyterian Association at the University of Texas

in 1898. They, along with the Congregationalists, Methodists, Lutherans and Baptists, established pastorates at midwestern state-supported universities in the early 1900s. To meet the needs of the Jewish students, the Menorah Society was established at Harvard in 1906.

The 1910s

The decade of 1910 represents the first record of college faculty and administrators expressing concerns about sexual behavior on campus (Shields, 1907). Before the 1910s, the college world was a man's world, reserved primarily for the sons of the socio-economic elite. Men were able to increase their social stature if they brought the "correct" type of women to campus for prominent social events, although many colleges forbade mixed dances through the 1910s.

The 1920s

Sexual Behavior

In the 1920s the writings of Freud, Dewey and Lenin changed the intellectual climate of campuses. Women bobbed their hair, smoked cigarettes, danced and dated frequently. Women were granted the right to vote. The introduction of the automobile allowed students privacy from chaperons and

housemothers. The term "petting" was introduced during this decade. Participation in sexual intercourse was generally reserved for engaged couples.

Religious Behavior

College student involvement in religion reached a peak in the 1920s. In 1923, Dr. Harry Emerson Fosdick stated that he had never seen Harvard students so keenly interested in religion and religious problems. Attendance at chapel increased each year after World War I until it plateaued in 1923. In a 1923 study of Vassar women reported in the New York Times, religion was considered to be "vital to happiness" in life by 48.5% of the 200 women surveyed. Church attendance, however, was considered vital to happiness in life to only 20% of the women (What Makes College, 1923).

A 1926 poll of college presidents, student newspaper editors and campus ministers indicated that interest in religion increased since World War I, but church attendance declined. A spokesperson for the group stated:

It is obvious that these years (1900-1926) have witnessed a large decreasing interest in creeds. But I am inclined to think that there has been, and particularly in the last few years, an increasing interest in the fundamental religious problems....This shows itself in an eagerness to discuss the underlying problems of religious faiths and developments, and also in the responsibilities of services which the

applications of religion usually entail.
(Interest in Religion, 1926)

In keeping with the decline in church attendance, in 1925 and 1926 rules governing compulsory chapel attendance were challenged at Yale, Princeton, Dartmouth, Williams, Rutgers, Amherst, Dubuque, Brown, New York University, Smith, Wellesley and Vassar. Students argued that religion was personal and could not be regulated nor mandated. As a result of the student protests, many other colleges changed their policies regarding compulsory chapel attendance.

In 1923, in an atmosphere of anti-Semitism, Hillel was founded by Benjamin Frankel and Abram I. Sachar at the University of Illinois. Beginning in 1925, B'nai B'rith foundations were organized at the Universities of Illinois, Wisconsin, Michigan, California, West Virginia and Texas and at Ohio State and Cornell (Shedd, 1938).

The 1930s

Sexual Behavior

Sexual codes on college campuses in the 1930s were similar to those of the 1920s. The first study of the sexual attitudes and practices of undergraduates was published in 1938 by Dorothy Dunbar Bromley and Florence Haxton Britten. They reported that 75% of all college women were virgins, and 4% of the women were classified as

promiscuous. Thirty-eight percent of the women were insistent upon marriage before intercourse. Bromley and Britten identified a group they labeled as "The Experimenters". "The Experimenters" were women who wanted to have sexual intercourse so that they could feel its sensations and probe its meaning. "The Experimenters" were "intellectual and conscientious objectors to the time-honored belief that a woman's virtue is priceless" (p. 88).

Religious Behavior

Traditional religious participation declined in the 1930s. However, students remained interested in religion and religious issues. Their attention centered on philosophical and aesthetic levels rather than strictly theological levels (College Students Philosophical, 1933). Chamberlain (1930), examining college student disinterest in religion, cited the economic and social ease of the students, the absence of pressures, the rushed pace of American life and the students' high regard of the sophisticated, sensational and practical as reasons for the disinterest in religious participation.

The 1940s

Sexual Behavior

The year 1940 opened a decade of change. Men, away from home during World War II, found new opportunities for sexual experimentation. Many women worked outside the home for the first time and gained their financial independence. Penicillin was developed, alleviating fears of the debilitating effects of syphilis and gonorrhea. The Kinsey Report on male sexuality, the first scientific study of the actual sexual behavior of men, was published.

Religious Behavior

As in the years following World War I, participation in traditional religious activities increased in the years following World War II. The dean of the chapel at Princeton University noted in 1948 that "the present-day college undergraduate, to a far greater degree than his pre-war counterpart, has a readiness to identify himself with religion" (New Undergraduate Religion, 1948).

The 1950s

Sexual Behavior

D'Emilio and Freedman (1988) characterized the 1950s as a decade in which the values of marriage and family were emphasized. Any values conflicting with these traditional values were viewed with suspicion. At the same time that family and marriage were emphasized, an undercurrent of sexual liberalism began to surface. Open discussions of sexual matters were beginning to occur. Playboy was first published and hard-core pornography became readily available. As Arnstein (1989) describes, "It was an era in which sex for recreation was gradually being separated from sex for procreation" (p. 249).

College faculties and administrators of the 1950s believed that the regulation of sexual behaviors was not only appropriate, but necessary. Most of the prestigious colleges of the decade were not coeducational. Parietal rules governing student life were strictly enforced. At some institutions, students of the opposite sex were not allowed to visit in dormitory rooms. Other institutions allowed in-room visitation in the presence of a chaperon. Curfews for women students were common. At one institution, male and female students were not allowed to sunbathe together.

Studies of the 1950s report that 50% of the undergraduates were virgins and that most male students had their first experience of sexual intercourse with a prostitute or a "pick-up" (Arnstein, 1989). A double standard of sexual behavior demanded that men gain sexual experience while women remain virgins until marriage.

Sexually active college students in the 1950s lived with the fear of pregnancy. In some states, all methods of birth control were illegal. Although diaphragms were available to the general population, many physicians refused to prescribe them for young unmarried women. Condoms were the most utilized means of contraception used by college students.

Religious Behavior

Involvement in religion increased again and peaked from 1952 to 1955. This high point of religious orthodoxy is associated with the conservatism and caution prevalent in America in the early 1950s. In 1955, an article in the New York Times declared that religion had become intellectually respectable on college campuses:

The emphasis is on basic principles and theology. This interest in religion is more often evidenced by objective study and inquiry than by reverence. It does not necessarily mean a turning to the church. (Religion Respectable on Campus, 1955)

Newsweek (1957) reported on the increased interest and participation in religious activities by college students:

Voluntary chapel attendance is booming. At Northwestern University in Evanston, Ill., where chapel attendance is not required, almost twice as many boys and girls now attend the university chapel as did a decade ago. At the University of Michigan almost 5,000 of a total 22,000 students go to church at least once a week....The Wednesday night voluntary candlelight service at Stanford, which attracted as few as ten students in 1947, now draws 150 to 200 regularly. (Coeds Flock to Church, pp. 115, 120)

The 1960s

Sexual Behavior

The 1960s heralded changes in lifestyles for most Americans, although the more significant changes occurred in the last half of the decade. Modes of dress and hairstyles became increasingly androgynous. Degrees of political involvement and the use of legal and illegal drugs increased. The emerging Women's Movement and the Civil Rights Movement served as catalysts for the changes in sexual behavior. Both movements challenged the predominately white male standard of moral and ethical behavior. In the process of legitimizing other minority groups, the Civil Rights Movement helped to legitimize the gay and lesbian minority. The Women's Movement re-defined gender roles which immediately impacted sexual behavior.

The dating code which insisted on male courtship and initiation of sexual activity began to deteriorate. In addition, the double standard of acceptable sexual activity for men and women began to erode.

There was an increased level of comfort regarding sexual activity in the 1960s. Masters and Johnson's Human Sexual Response was published in 1966. Their report caused the American public to reexamine normative standards of female sexual response and male sexual performance. Earlier fears associated with sexually transmitted diseases were dismissed as antibiotics were developed. Anxiety regarding pregnancy decreased in the 1960's. In 1965, the Supreme Court of the United States (*Griswold v. Connecticut*) guaranteed married women nationwide the right to obtain and use contraception. The Court followed that decision in 1972 with *Eisenstadt v. Brand* which guaranteed unmarried women the right to obtain and use contraception. The use of an Inter-Uterine Device (IUD) or the birth control pill allowed for spontaneous sexual intercourse without fear of pregnancy. Birth control became the responsibility of the woman.

Arnstein (1989) reports that the arrangement of unmarried couples living together became popular during the late 1960s. As some students entered into exclusive sexual relationships and parietal rules were relaxed, they would spend the night with their partners. As these overnight

visits became routine, possessions would be brought over for convenience. The students were soon living together without making an overt decision to do so. Other students made deliberate decisions to live together outside of marriage for various reasons.

Some students believed they were not mature enough or sufficiently committed to the relationship for marriage. Women were postponing marriage and family to pursue careers or graduate degrees. Although students accepted living together as a normal stage in the development of a relationship, they realized that their parents may not accept this arrangement. Many students maintained their separate living quarters on campus while they were living with their partners in order to avert parental disapproval (Arnstein, 1989).

Religious Behavior

Hastings & Hoge (1976) report that traditional college student religious involvement fell rapidly in the late 1950s through the 1960s. Students moved away from the religious traditions of their childhoods. Beliefs in traditional Judeo-Christian doctrines weakened. Personal experimentation with alternate forms of spirituality led some students to become involved in Eastern religions, the occult and witchcraft.

The 1970s

Sexual Behavior

Arnstein (1989) lists three major trends regarding sexual behavior in the 1970s. The first trend was the increased popularity of unmarried couples living together. He cites studies which report that 11% of Americans who married between 1965 and 1974 lived with someone of the opposite sex prior to marriage, while 44% of Americans married between 1980 and 1984 lived with someone of the opposite sex prior to marriage. In a 1974 study of Cornell University students, it was found that 31% of the students reported they cohabited with a person of the opposite gender. Ninety percent of the cohabitants felt no disapproval from either other students or University administration (Macklin, 1974). It is noted that living with a member of the opposite sex did not necessarily presuppose a sexual relationship.

The second major trend was the increased emphasis on the importance of opposite sex friendships along with the increased occurrence of opposite sex friendships. Arnstein attributes these increases to the changes in sex-role expectations for women, the introduction of coeducational living on campuses and the increasing recognition of women as equals in the classroom and workplace.

Arnstein's third trend concerning sexual behavior in the 1970s was the increased acknowledgment of homosexuality. In 1974 the American Psychiatric Association removed homosexuality from the psychological disorder category. Gay and lesbian support and social organizations were established on many campuses. As gay and lesbian students became more visible and accepted on campuses, both heterosexual and homosexual students' lives were affected. Students unsure about their sexual orientation were often thrown into conflict as either sexual orientation was given credibility and acceptance. Some of these students chose to see themselves as bisexual and joined in sexual activity with either gender. This lifestyle led to conflict as the students sought long-term love relationships. As feminist ideology grew political, some women felt they could not be true feminists while involved in heterosexual sexual relationships. The pressure of political loyalty upon personal relationships was troubling to some women.

Religious Behavior

The trend of the 1960s away from mainstream religious participation continued into the 1970s. Students seemed to either experiment with differing forms of Eastern religions and personal spirituality or become caught up in the resurgence of orthodox Christian traditions. Hoge (1974)

describes the year of 1970 as a turning point in religion on campus:

Indications of a new personal spirituality began appearing about then on campuses. It took two general forms, either a revival of conservative Christianity or a turn away from all organized religion to new personal experimentation. Most conspicuous was the new Jesus movement. (p. 143)

The "Jesus movement" was a conservative movement subscribing to social and political views similar to those of fundamental Protestants and Catholic Pentecostals. Independent religious organizations formed during the past 50 years gained popularity. InterVarsity Christian Fellowship is the oldest independent religious organization, originating in England and founded in the United States in 1938. The Navigators were founded in 1950; Campus Crusade for Christ in 1951; Fellowship of Christian Athletes in 1954; Jews for Jesus in 1970; and Maranatha Christian Fellowship in 1972. Although these organizations are independent from one another and from all historic faith traditions, they each stress evangelism and personal piety.

Moberg and McEnery (1976) reported that Catholic students' attendance at Mass dropped from 95% in 1961 to 42% in 1971. Yankelovich (1974) noted a shift in students' personal beliefs. He surveyed students in 1969, 1971 and 1973 regarding the importance of religion in their lives. In 1969, 38% of the students stated that religion was a very important personal value. In 1971, 31% agreed that religion

was a very important personal value and in 1973 the percentage dropped to 28%. Hastings and Hoge (1976) analyzed college student involvement in religion in the 1970s:

The religious trends since the late 1960s are a continuing decline in support for the organized church but no change in personal religious beliefs. The detachment from the church seems due partly to the greater individualism and personal autonomy among college students in recent years. (p. 247)

The 1980s and Early 1990s

Sexual Behavior

Sexual abuse and HIV/AIDS have been cited as the major health risks that students face and the major student health related challenges that colleges and universities face at the end of the twentieth century (Guyton, Corbin, Zimmer, O'Donnell, Chervin, Sloane & Chamberlain, 1989; Struggling with Sex, 1994). Students listed love relationships as their major concern, second only to academics, in a Columbia University study (Bertocci, Hirsch, Sommer & Williams, 1992).

The 1980s were marked by the appearance of the human immunodeficiency virus (HIV). A 1990 study by the Center for Disease Control and The American College Health Association reported that 1 in 500 undergraduates were

infected with HIV, the virus which causes AIDS (Time and Place, 1992). The task of teaching college students safe sexual behaviors became the mission of many college and university health centers. The disease has impacted college student sexual relationships (Coburn & Tregler, 1992). Issues of fidelity, casual sex and promiscuity must be discussed and resolved in sexual relationships. Communication of sexual history and trust in the accuracy of the information is now imperative.

In spite of the prevalence of and attention to HIV, students are not practicing safe sexual behaviors. In a 1992 survey of 2,013 undergraduates at the University of Maryland, Kotloff found that only 48.5% of heterosexual students always or almost always used condoms (Time and Place, 1992). In a similar study at the University of Iowa, only 19% of heterosexual males reported using condoms in more than half of their sexual encounters (Struggling with Sex, 1994).

The other predominant issue in colleges and universities is the increased awareness of sexual violence and harassment against women. Although acquaintance rape and gang rape are not new phenomena, they are more frequently reported and addressed as both criminal and social issues on college campuses. Baier, Rosenzweig and Whipple (1991) found that 1.2% of college men and 11.9% of college women have been raped. Makepeace (1981, 1983) found

that more than one student in five has had direct experience with courtship violence.

Religious Behavior

A Gallup Poll conducted in 1987 revealed that young adults (18 - 29 years of age) and persons with a college background were most likely to point out the growing influence of religion on American life. In a Gallup Poll conducted for the Christian Broadcast Network (CBN) in 1989, 42% of college students surveyed stated that religion was very important in their lives. This finding is in accordance with trends noted in the 1987 national Gallup Poll in which 44% of all young adults (18 - 24 years) indicated that religion was very important in their lives.

Coburn and Treeger (1992) attribute this increase in religious and church related activity to students searching for meaning in their lives. They cite the growing popularity of campus religious organizations. They also note that students join religiously oriented organizations for companionship as well as spiritual growth.

Conclusion

A historical overview of college student behaviors in the Twentieth century indicates that college student involvement in both religious activity and sexual activity

has changed notably. While college student sexual activity has steadily increased, student involvement in religious activities has fluctuated. Historically, it appears that religious involvement has no influence on college students' sexual activity.

STATEMENT OF THE PROBLEM

Research findings regarding the relationship between sexual behavior and religiosity among college students are inconclusive. It is reasonable to expect that when students embrace a system of beliefs which places rigid controls on sexual behavior, they would be less likely to engage in premarital sexual activity. Some researchers have found this expected inverse relationship between religiosity and sexual behavior among college students. That is, the more religious the student is, the less sexually active the student is (Bell, 1966; Clayton, 1972; Curran, Neff, & Lippold, 1973; Davidson & Leslie, 1972; Earle & Perricone, 1986; Gunderson & McCary, 1979; Jackson & Potkay, 1973; Jessor & Jessor, 1975; Lindenfeld, 1960; Medora & Woodward, 1982; Prince & Shipman, 1958; Reiss, 1964; Young, M., 1981, 1986). Other researchers have found no relationship between college student religiosity and sexual behavior (Bell & Chaskes, 1970; Clayton, 1969; Daugherty & Burger, 1984; Digenan & Anspaugh, 1987; Kelly, 1987; King, Abernathy,

Robinson, & Balswick, 1976; Robinson & Jedlicka, 1982; Thomas, 1973). Cochran and Beeghley (1991) comment on the findings:

Research on the relationship between religion and/or religiosity and nonmarital sexuality (i.e., premarital, extramarital, and homosexual relations) has found an inverse relationship with enough consistency to qualify as an empirical generalization. However, while parsimonious, such a generalization is overly simplistic. (p. 45)

The definition of religiosity has been problematic for researchers. In some studies, religiosity was defined along a single dimension such as church attendance (Bell & Chaskes, 1970; Digenan & Anspaugh, 1978; Gunderson & McCary, 1979; Herold & Goodwin, 1981; Jackson & Potkay, 1973; Jensen, Newell, & Holman, 1990; Medora & Woodward, 1982; Staples, 1978; Tanfer & Cubbins, 1992; Thomas, 1973; Young, M., 1980), affiliation with a religious domination (Beck, Cole, & Hammond, 1991; DeLamater & MacCorquodale, 1979; Tanfer & Cubbins, 1992) or orthodoxy (Clayton, 1969; King, et al., 1976). Other studies utilized multi-dimensional definitions of religiosity, focusing on a combination of variables such as knowledge of church doctrine, belief in God, church attendance, emotionality, frequency of prayer and the transference of doctrine into everyday living (Cardwell, 1969; Curran, et al., 1973; Mahoney, 1980; Rohrbaugh & Jessor, 1975; Ruppel, 1969; Young, M., 1981, 1986). At least one researcher neglected to offer his definition of religiosity (Spanier, 1975; 1976).

Allen and Spilka (1967) faced this dilemma of defining religiosity while studying the high correlation between religiosity and prejudicial behaviors. They offer the following analysis:

Studies which define religiosity simply in terms of religious affiliation, membership, or denominational preference reveal little regarding the way religion and prejudice may be coordinated with the individual.... Whether or not an individual prays daily or only at times of stress, possesses more or less religious information, joins different kinds of clubs or societies, attends church regularly or irregularly, are assuredly important observations. But they do not reveal the functional role these observable differences have for the individual, nor do they indicate the reason for the differential relations to prejudicial attitudes and discriminatory practices. (pp. 192-193)

Following the logic of Allen and Spilka, it seems unrealistic to attempt to correlate religiosity to behaviors, whether religiosity is defined along one or several dimensions. Allport and Ross concur: "To know that a person is in some sense 'religious' is not as important as to know the role religion plays in the economy of his life." (1967, p. 432).

Gordon Allport (1954) studied the paradox that religious persons exhibit a high rate of prejudicial behaviors and attitudes. In an attempt to resolve this paradox, Allport proposed that individuals who are religious have different motivations for religious involvement and different manners of expressing personal faith. He identified these motivations and manners of expression as

"religious orientations". Allport labeled these orientations as "extrinsic" and "intrinsic" orientations. Extrinsically oriented persons view religion as being "strictly utilitarian: useful for the self in granting safety, social standing, solace and endorsement for one's chosen way of life" (Allport, 1966, p. 455). An intrinsically oriented person "regards faith as a supreme value in its own right. It is oriented toward a unification of being, takes seriously the commandment of brotherhood, and strives to transcend all self-centered needs." (Allport, 1966, p. 455). Allport and Ross sum up the distinctions between the two orientations: "the extrinsically motivated person uses his religion, whereas the intrinsically motivated person lives his religion." (1967, p. 434).

In addition to the extrinsic and intrinsic orientations, Allport and Ross (1967) identified two other categories of individuals: the indiscriminately proreligious and the indiscriminately antireligious (nonreligious). The indiscriminately proreligious regard any religious activity, belief or statement as valid and good. The nonreligious reject any activity, belief or statement that is religious.

PURPOSE OF THE STUDY

The purpose of this study was to define the relationship between religiosity and sexual behavior of college students by using a narrow measure of religiosity. This study used religious orientation as the measure of religiosity.

Previous research which focused on the relationship between various measures of religiosity and student sexual behavior provided inconclusive results. The analysis of religious orientation in relation to college student sexual behavior may provide information that would clarify the relationship between religiosity and sexual behavior.

RESEARCH QUESTION AND HYPOTHESES

What is the relationship between the premarital sexual activity of heterosexual college students and their religious orientation?

For the purpose of this study, four null hypotheses were formulated.

Hypothesis 1

It is hypothesized that there is no significant difference in the rate of participation in premarital sexual intercourse between intrinsically oriented, extrinsically

oriented, indiscriminately proreligious and nonreligious students.

Hypothesis 2

It is hypothesized that there is no significant difference in the rate of participation in oral-genital sex between intrinsically oriented, extrinsically oriented, indiscriminately proreligious and nonreligious students.

Hypothesis 3

It is hypothesized that the demographic variables of gender, GPA, academic classification, religious affiliation and ethnicity are not significantly related to religious orientation and virginity.

Hypothesis 4

It is hypothesized that the demographic variables of gender, GPA, academic classification, religious affiliation and ethnicity are not significantly related to religious orientation and participation in oral-genital sex.

SIGNIFICANCE OF THE STUDY

Previous research regarding the relationship between sexual behavior and religiosity is inconclusive. This study

intended to refine the focus of previous research and examine the relationship between religious orientation (Allport & Ross, 1967) and sexual behavior.

This research provided information on the nature of religious orientation in relation to sexual behavior. Additional examination of the relationship between religious orientation and specific behaviors has been called for by researchers of the psychology of religion (Gorsuch, 1990; Spilka, Hood, & Gorsuch, 1985).

The results of this study are intended to assist college and university administrators in evaluating student needs as well as provide a rationale for changes in campus resources and services. By providing information regarding the nature of the relationship between sexual behavior and religious orientation, this study proposed to assist Student Health, Campus Ministry and Counseling Center administrators in planning programs and services which meet students' health and spiritual needs.

A large number of college students are sexually active. College students do not regularly use birth control (Hornaday, 1986) or practice safe sex (Struggling with Sex, 1994; Time and Place, 1992). Ninety percent of pregnancies of college women are terminated in abortion (Dorman, 1981; Gallup Organization, 1989). Sexually transmitted diseases, including HIV, have reached epidemic proportions on college campuses (Keeling, 1991; Time and Place, 1992).

Keeling (1991) states "Confronting these health-related challenges demands that we understand the reasons behind the choices young people make" (p. B1). Only by understanding students' behavior can college and university administrators begin to assist them in addressing the spiritual, physical and emotional needs associated with the expressions of their sexuality. Guyton, et al., 1989, enumerate some of these needs, "students becoming sexually active face complex issues such as low self-esteem, peer pressure, underdeveloped communication skills, superficial relationships and loneliness" (pp. 9 - 10).

In light of this information, successful college administrators will demonstrate the ability to help students explore the value and consequences of their decisions regarding sexual activity. These decisions are critical life choices. Students who do not receive adequate information, support and assistance become attrition statistics due to emotional and physical health problems.

In order to address all the issues described, college and university administrators will improve their effectiveness with additional information about factors, such as religiosity, which influence student sexual behavior.

DEFINITION OF TERMS

The following list represents the operational terms frequently used in this study:

Oral-Genital Sex refers to contact where oral stimulation is performed either by the female on the male genitals or by the male on the female genitals (Sprecher, McKinney, Walsh, & Anderson, 1988).

Premarital Sexual Intercourse refers to the "intromission of the penis of a never-married male into the vaginal tract of a never-married female" (Davidson & Leslie, 1972, p. 16).

Religious Orientation refers to individuals' motivations in regard to their religious involvement and personal faith (Allport, 1966; Allport & Ross, 1967). Religious orientation is defined as being either extrinsic and intrinsic. Most individuals are not purely intrinsic or extrinsic, but are more inclined toward one orientation than the other orientation.

Persons with an *extrinsic orientation* see religion as being utilitarian in nature.

Persons with this orientation are disposed to use religion for their own ends....It serves other, more ultimate interests. Extrinsic values are always instrumental and utilitarian. Persons with this orientation may find religion useful in a variety of ways--to provide security and solace, sociability and distraction, status and self-justification. The embraced creed is lightly held or selectively shaped to fit more primary needs. In theological terms the extrinsic type turns to

God, but without turning away from self. (Allport & Ross, 1967, p. 242-243)

Persons with an *intrinsic orientation* find the meaning of their lives in religion.

Persons with this orientation find their master motive in religion. Other needs, strong as they may be, are regarded as of less ultimate significance, and they are, insofar as possible, brought into harmony with the religious beliefs and prescriptions. Having embraced a creed, the individual endeavors to internalize it and follow it fully. It is in this sense that he lives his religion. (Allport & Ross, 1967, p. 243)

Indiscriminately Antireligious individuals are often referred to as *nonreligious*. Indiscriminately antireligious persons respond negatively to any religious statement, concern or activity.

Indiscriminately Proreligious individuals "persist in endorsing any or all items that to them seem favorable to religion in any sense" (Allport & Ross, 1967, p. 434).

Sexual Attitudes reflect the feelings and values people have regarding sexual behaviors.

Sexual Behavior is used interchangeably with *Sexual Activity*. The terms refer to any behavior or activity which is sexual in nature. These activities include holding hands, kissing, light and heavy petting, sexual intercourse and oral-genital stimulation. Sexual behavior and activity refers to only heterosexual sexual behavior and activity.

OVERVIEW OF METHODOLOGY

A sample population of 235 subjects was drawn from an independent west coast university. The research required that subjects be never married heterosexual undergraduate college students.

Subjects were administered three self report instruments. The Religious Orientation Scale (ROS) developed by Allport and Ross (1967) was used to determine the religious orientation of subjects. The Lifetime Sexual Behavior Scale (LSBS), (DeLamater, 1975) was employed to determine whether or not subjects had engaged in specific sexual behaviors. A demographic survey was used to obtain information on marital status, sexual orientation, age, gender, religious affiliation, grade point average, academic classification, ethnicity and the importance of religious in subjects' lives.

Data were analyzed using Pearson chi square, Fisher two-tail tests, t-tests and logistical regressions.

A detailed description of the methodology used in this study is provided in Chapter 3. The results are presented in Chapter 4. Chapter 5 presents a discussion of the findings.

LIMITATIONS OF THE STUDY

1. This study is limited to never-married heterosexual college students aged 17 to 24 years engaging in heterosexual sexual activity.
2. The sample is limited to the student population at a mid-sized, independent, liberal arts university located on the west coast affiliated with the Roman Catholic Church. The institutional culture may have affected students' decisions to attend the institution and may therefore affect their religious orientation or sexual behaviors.
3. The subjects are volunteer subjects. Students who are not comfortable reporting on their sexuality or religious orientation may have chosen not to participate, thereby withholding information from a certain constituency.
4. A large number of subjects reported affiliation with the Roman Catholic Church. This affiliation of a substantial portion of the sample to one religious tradition may limit the ability to generalize the results.
5. The instruments used to measure religious orientation and sexual behavior are self-report. The accuracy of responses is therefore dependent on the respondents' self-awareness and honesty.

6. The instrument used to measure religious orientation is derived from a Judeo-Christian framework. The concept of religious orientation may not be appropriate or useful when applied to faith traditions outside of the Judeo-Christian realm.
7. The data used in this study were collected during two consecutive Spring semesters, 1991 and 1992. No students were surveyed twice.

CONCLUSION

This chapter presented a historical perspective of college student religious and sexual behavior. It also introduced the research question and hypotheses studied.

The following chapter presents a review of the literature on college student sexual and religious behavior.

Chapter 2

Review of Related Literature

This review of related literature is divided into five sections. The first section provides an overview of the sexual development of adolescents. The second section examines college students' attitudes toward premarital sexual behavior as well as the sexual behavior of college students. Section three presents the research on the relationship between religion and college student sexual behavior. The fourth section reviews the literature on religious orientation. In conclusion, section five discusses the interaction of religious orientation and college student sexual behavior.

ADOLESCENT SEXUAL DEVELOPMENT

The development of humans as sexual beings is a multifaceted process which begins at conception and continues through all life stages. Adolescence is a period of intense sexual development. Between the ages of approximately 10 to 20 years, adolescents experience social, psychological and physical sexual maturation. Sexual attractions and sexual considerations become dominant forces in their lives (Chilman, 1990).

First sexual intercourse is a developmental event of major personal and social significance (Jessor, Costa,

Jessor, & Donovan, 1983). Participation in sexual behavior is one of the fundamental ways in which adolescents break from the parent/child relationship and develop autonomy (Koch, 1988; Selverstone, 1989).

The average age for first intercourse ranges from 16.0 to 16.9 years (Hornaday, 1986). Thirty-three percent of 15 year old boys and 27% of 15 year old girls have had intercourse (Gibbs, 1993). More than half of high school students surveyed have had intercourse at least once (John, 1987). By age 20, 75% of Americans have had sexual intercourse (Gibbs, 1993). For college students, the age at first intercourse ranges from 13 to 21 years for men and 10 to 21 years for women (Darling, Davidson, & Passarello, 1992).

Chickering (1969) posits that for college students, the development of sexuality is critical in the task of developing identity. Only after students successfully complete the task of developing identity, which includes coming to terms with their physical appearance and sexual orientation, can they move to the tasks of "developing freeing interpersonal relationships", "clarifying purpose" and "developing integrity". Chickering and Reisser (1993) acknowledge that

Exploring what it means to be a man or a woman and coming to terms with the styles and roles appropriate for each is an absorbing and complex task...Students are exposed to a broader array of

images, roles, and relationships for men and women than ever before. (p. 184)

The freedom of the collegiate environment allows students the opportunity to experiment with sexual behaviors (Christopher & Cate, 1985; Libby, Gray & White, 1978; Reiss, 1967; Tanfer & Cubbins, 1992). As Walters states, "the perceived independence associated with college gives students the opportunity to explore a variety of new behaviors, and sex is one area students anticipate exploring" (1992, p. 91).

COLLEGE STUDENT SEXUAL ATTITUDES AND BEHAVIORS

The following narrative explores research on the sexual attitudes and sexual behavior of college students.

Sexual Attitudes

Research indicates that the norms regarding college student premarital sexual activity have become increasingly liberal (Bauman & Wilson, 1976; Sherwin & Corbett, 1985). There is less conviction among students that premarital sexual intercourse is wrong, immoral or sinful. After studying the sexual attitudes of college students in 1973, Thomas concludes "students do not see premarital sex as a moral or spiritual matter" (p. 464).

The number of college students believing that premarital sexual intercourse is morally wrong has decreased

significantly in the past twenty-five years. Walsh, Ferrell and Tolone (1976) and Ferrell, Tolone and Walsh (1977) studied changes in attitudes of two panels of students over their four years at college. One student group was impaneled from 1967 to 1971, the other from 1970 to 1974. They found that both panels became increasingly permissive over their college careers. The 1970-1974 panel was more permissive than the 1967-1971 panel. The researchers also noted movement away from the double standard that accepted, and even endorsed, premarital sexual activity for men, but was intolerant of premarital sexual activity for women.

Komarovsky's (1976) research supported the finding of increased sexual permissiveness. In 1969, 34% of the college students surveyed considered casual premarital sexual relations to be morally wrong. In 1974 only 12% of students surveyed considered casual premarital sexual relations to be morally wrong. Nutt and Sedlacek (1974) found greater opposition to premarital sexual intercourse than Komarovsky. In a sample of first year students, they reported 23% of male students and 31% of female students believed premarital sexual intercourse to be morally wrong.

In a longitudinal study, Robinson, Ziss, Ganza, Katz and Robinson (1991) surveyed students in 1965, 1970, 1975, 1980 and 1985. In 1965 they found 33% of the men and 70% of the women believed that premarital sexual intercourse was immoral. In 1985 the percentages dropped to 15.9% of the

men and 17.1% of the women who believed that premarital sexual intercourse was immoral.

Other researchers note a leveling of the increased liberalization of sexual attitudes which began in the late 1960s and accelerated in the early 1970s (King, Balswick, & Robinson, 1977). Comparing a 1980 sample of college students with the 1975 sample, Robinson and Jedlicka (1982) found a significant rise in the number of students who believed that premarital sexual intercourse was immoral. They also noted that attitudes do not reflect behavior, concluding "while more people are engaging in sexual intercourse with increasing numbers of partners, at the same time they are more likely to view it as immoral and sinful" (Robinson & Jedlicka, p. 240).

Reviewing the research on college student sexual values, Digenan and Anspaugh (1978) write, "Continuing throughout the literature is the concept that today's young adult does not question having sexual intercourse, but the framework within which it should take place is an important consideration." (p. 705). Students want sexual activity to occur in the context of a serious love relationship (Darling, et al., 1992; DeLamater & MacCorquodale, 1979; King & Sobel, 1975; Nutt & Sedlacek, 1974). They prefer there be affection between the individuals having sexual relations (Kaats & Davis, 1970; McBride & Ender, 1977; Robinson, et al., 1991). Sprecher, et al. (1988) report

that 82% of students surveyed feel that sexual intercourse is acceptable for an engaged couple, 72% percent feel it is acceptable for a couple dating seriously, and 28% feel sexual intercourse is acceptable on a first date. Astin (1994) found that 43.2% of entering first year students felt that sex was acceptable if two people liked each other, even if they have only known each other for a very short time. Additionally, 42% of freshmen at Catholic colleges and universities approved of premarital sexual intercourse if the people really liked each other (Astin, 1993).

With regard to specific sexual behaviors, college students consider heavy petting to be more acceptable than sexual intercourse and intercourse to be more acceptable than oral-genital sex (Sprecher, et al., 1988).

Sexual Behaviors

Many students arrive on campus for their first year as nonvirgins (Center for Disease Control, 1992; Gibbs, 1993; John, 1987). Of those students who come to campus as virgins, many of them soon become sexually experienced (Darling, et al., 1992; Walsh, et al., 1976). By age 19 over two-thirds of college students are no longer virgins (Baier, Rosenzweig & Whipple, 1991; King & Sobel, 1975). In a longitudinal study, Jessor and Jessor (1977) interviewed students during each of their four years in college. In the

first year 46% of the men and 51% of the women were nonvirgins. By their senior year 82% of the men and 85% of the women were nonvirgins. Baier, et al. (1991) found 70.3% of the first year students were nonvirgins compared to 85.3% of the seniors.

It is difficult to find consensus in the research on the rate of premarital sexual intercourse on college campuses. Kaats and Davis (1970) found an unchanging level of sexual intercourse for college men and a gradual increase of sexual intercourse for college women from the early 1960s through the late 1960s. Sherwin and Corbett (1985), researching college student sexual behavior in 1963, reported nonvirginity rates of 60% for men and 25% for women. Schulz, Bohrnstedt, Borgatta and Evans (1977) surveyed 2,112 first year students at the University of Wisconsin in 1964. They found 65% of the men and 56% of the women were nonvirgins. In the Spring of 1967, Simon, Berger and Gagnon (1972) surveyed 1,177 undergraduates from 12 campuses. They report 68% of the men and 44% of the women were nonvirgins. Hildebrand and Abramowitz (1984) found that in 1969, 45% of college students had engaged in premarital sexual intercourse.

In 1971, Sherwin and Corbett (1985) replicated their 1963 research. They found 63% of the men and 44% of the females surveyed were nonvirgins. Nutt and Sedlacek (1974) report that 52% of first year male students and 46% of

female first year students had engaged in premarital sexual intercourse. In a final replication of their research in 1978, Sherwin and Corbett (1985) found 66% of the men and 62% of the women were nonvirgins. DeLamater and MacCorquodale (1979) cite nonvirginity rates of 75% for men and 60% for women.

In 1981 the percentage of college students who had participated in sexual intercourse increased to 64% (Hildebrand & Abramowitz, 1984). Earle and Perricone (1986) report that 62% of college men and 52.6% of college student women are nonvirgins. In the same year, Darling and Davidson (1986) cite nonvirginity rates of 84% for men and 61% for women. The Gallup Organization, in a poll conducted for the Christian Broadcast Network (CBN), reports that 76% of college students are nonvirgins (1989). Bigler's (1989) research indicates that 80 to 91% of college men and 70 to 79% of college women have experienced sexual intercourse. Darling, et al. (1992) found nonvirginity rates of 84% for men and 60% for women.

In an extensive longitudinal study of college student sexual attitudes and behaviors, Robinson, et al. (1991) surveyed students in 1965, 1970, 1975, 1980 and 1985. Their findings show significant increases in male nonvirginity rates from 1970 to 1975. Significant increases in the number of female students participating in premarital sexual intercourse occur from 1965 to 1970, 1970 to 1975 and 1975

to 1980. Nonvirginity rates have risen from 61.5% and 28.7% for men and women respectively in 1965 to 79.3% and 63% for men and women respectively in 1985. Robinson, et al. (1991) predict that the increase in nonvirginity rates will continue to taper off. They feel the only virgins remaining on college campuses are "adamant virgins" and do not expect the number of adamant virgins to change.

College student participation in oral-genital sex has increased over the years (Hildebrand & Abramowitz, 1984). Newcomer and Udry found that 25% of virgin males and 15% of virgin females have participated in oral-genital sex (1985). McBride and Ender (1977) report 76% of all men and 49% of all women engage in oral-genital sex. In the 1985 sample of college students Robinson, et al. (1991) found that 81.2% of men and 74.1% of women reported engaging in oral-genital sex. Robinson, et al. observe "oral-genital sex would now appear to be an acceptable form of behavior" (1991, p. 218).

The number of sexual partners students have had provides information about their sexual behavior. Sexually active male college students report an average of five lifetime sexual partners, while sexually active female college students report an average of four lifetime sexual partners (Darling & Davidson, 1986).

In summary, the sharp rise in college student sexual activity in the late 1960s and early 1970s has leveled off, but has not decreased. As college students' sexual

attitudes have become more lenient, both male and female students have become increasingly sexually active. The rate of female student sexual activity has increased more dramatically than the rate of male student sexual activity. Bell and Coughy (1980) offer an explanation for the changes in the premarital sexual activity of college females. They state sexual experience "is not a part of a clearly articulated value system common to the college female. What seems to have happened is that the sanctions against it have been greatly reduced" (p.355). Robinson, et al. (1991) reflect that "the growing conservative atmosphere in America - the rise of the new right, the "new evangelism," and the antiabortion movement - had little impact on the sexual behavior and attitudes of the college student." (p. 216) Dorothy Savage, Director of the National Council of Churches Commission on Family Ministries and Human Sexuality, in an interview with the Los Angeles Times, also attempts to explain the change "sexuality is up for grabs; there are no longer clean guidelines for helping people know what is healthy sexual behavior" (Chandler, 1991, p. A26).

THE RELATIONSHIP BETWEEN COLLEGE STUDENT RELIGIOUS AND SEXUAL BEHAVIORS

At the same time that college students are increasingly sexually active, they appear to be increasingly involved in religious activities (Gallup Organization, 1989). Over 80%

of college students profess to have some religious involvement (Zern, 1987). The CBN/Gallup Poll (1989) reported 42% of college students maintain that religion is very important in their lives. Twenty-seven percent of the college students surveyed attended religious services four or more times in the preceding 30-day period. Schafer and King (1990), in their assessment of college students, found that 60% of the students reported that religion is important in their lives and 22% attend religious services once a week.

Involvement in religion influences sexual decision making (Hildebrand & Abramowitz, 1984; Michael, Gagnon, Laumann & Kolata, 1994). Religion is a critical factor in sexual decision making, as Judeo-Christian tradition prohibits sexual intercourse outside of marriage. Spilka, et al., describe the association between religion and sexual activity:

Indeed, their bond has been intimate with theologies and religious institutions restricting sexual activity at every turn. In the simplest terms, sexual responses, including thoughts, are supposed to be curtailed, if not prohibited, until one's faith bestows its blessing on the marriage covenant. (1985, p. 104)

Judeo-Christian tradition is based in the Old Testament of the Bible. The Old Testament dictates that sexual intercourse be reserved for the purpose of procreation within the covenant of marriage. A note in the Disciple's Study Bible (1988) states "Hebrew faith placed great

emphasis on women remaining virgins until marriage...parents made every effort to guard daughters against premarital sexual activities...sexual relations are intended for marriage" (p. 238). Sexual activity is to be limited to a context which preserves the welfare of children. Premarital sexual intercourse is regarded as a violation of the natural law which requires that children be reared within marriage and family and therefore is considered to be a serious sin. The book of Deuteronomy in the Bible lists punishments for involvement in premarital intercourse which range from fines to death by stoning. In more recent history, premarital intercourse could result in death or social ostracism for those involved (Bataille, 1962). Pope Pius X in Casti Connubi (1930) forbade premarital sexual intercourse. This position of the Roman Catholic Church was reinforced by Pope Paul IV in "Declaration on Certain Questions Concerning Sexual Ethics" (January, 1976).

The influence that religion has on college student premarital sexual behavior has been studied by many researchers. Kinsey, Pomeroy, Martin and Gebhard in 1953 were among the first to mention the relationship between sexual activity and religion. In Sexual Behavior in the Human Female they list religious background as one of the most influential factors in determining females' premarital sexual behavior. Sixty-three percent of religiously inactive females were nonvirgins as compared to 30% of

religiously active females (Kinsey, et al., 1953). Another early researcher, Lindenfeld, noted that students of higher religiosity were more restrictive with regard to premarital sexual attitudes and behaviors than those of lower religiosity (1960).

Religiosity is measured in different ways by different researchers. Mahoney (1980) wrote "much of the inconsistency in the research findings in this area may be attributable to the measurement of religiosity" (p. 99). As an example, Glock and Stark (1965) cite numerous studies which show that belief in God and church attendance are uncorrelated. Pascarella and Terenzini (1991) confront the same dilemma. Attempting to explain puzzling results in research on college students and religion, they state "the complexity of the phenomenon under study [religiosity] is not adequately reflected - and therefore measured - in terms of the rather global measures used" (p.280).

The following review of literature on the relationship between religion and premarital sex is divided according to the measure of religiosity used: (a) single dimension measures of religiosity, (b) multi-dimensional measures of religiosity and, (c) other religious influences on college student sexual behavior.

Single Dimension Measures of Religiosity

The factors identified as single dimension measures of religiosity include church attendance, religious affiliation, religious orthodoxy and religious beliefs.

The most common method of measuring religiosity is to measure church attendance. Burgess and Wallin (1953) found a negative relationship between premarital sexual intercourse and church attendance. The incidence of premarital sexual intercourse was higher for those students who attended church infrequently, whatever their religious affiliation, than for those students who attended church regularly (Prince & Shipman, 1958). Female college students who attended church regularly were less likely to be sexually experienced than those who did not attend church on a regular basis (Ehrmann, 1959).

Reiss (1964), in his first study of sexual permissiveness stated that as church attendance decreased there was a significant increase in sexual permissiveness for Caucasian students. In 1967 Reiss wrote that his conclusions were "congruent with other researchers' findings that religion exerts more control over the female's sexual life than it does over the male's" (p. 44).

Freeman and Freeman (1966) discovered an inverse relationship between premarital sexual intercourse and church attendance in their sample of senior college women.

Bell and Chaskes (1970) studied the sexual experience of female students in 1958 and 1968. In reference to the 1968 sample they wrote that "Those coeds...who had the highest rate of religious attendance had the lowest rates of premarital coitus" (p. 83). Bauman (1973) claimed a negative relationship between sexual intercourse and church attendance for females. In the same year, Curran, et al. found that students who were more sexually experienced were also more likely to be religiously inactive (1973).

Thomas (1973) approached the concept of church attendance in a different way. She examined the influence of church attendance before and after age sixteen. She determined that church attendance before the age of sixteen had no influence on the sexual behavior of male college students. Church attendance after the age of sixteen was significantly inversely related to the sexual behavior of female college students. As for current church attendance, she wrote that "The more regularly the student attended church, the less he was involved in sex" (p. 461).

Jackson and Potkay (1973) approached the issue of church attendance in yet another manner. They studied the students' motivations for church attendance. They found that if church attendance were self-initiated and voluntary there was a negative relationship between church attendance and premarital sex. If students attended church because of parental influence there was no relationship between church

attendance and premarital sex. No relationship between premarital sexual activity and church attendance was also reported if students attended church less than once a week.

In a study of the transition from virginity to nonvirginity, Jessor and Jessor (1975) found a significant inverse relationship between church attendance and high school and college nonvirgin students.

Davidson and Leslie (1977) defined religious orthodoxy by church attendance. They state "There is a negative relationship between religious orthodoxy and participation in premarital sexual intercourse among females" (p.23).

Digenan and Anspaugh (1978) measured religious devoutness by church attendance. They found that low sexually permissive subjects were more devout than subjects categorized as highly permissive. However, the relationship between sexual permissiveness and devoutness was not statistically significant.

Staples (1978) found that Caucasian students who attended church at least twice a month were less likely to be permissive than Caucasian students who attended church once a month or less. The inverse relationship between church attendance and permissiveness was stronger for women than it was for men.

Gunderson and McCary (1979) noted that both male and female students who had high levels of interest in religion

and church attendance were less sexually active than their counterparts.

Examining the attitudes and behaviors of students regarding oral-genital sex, M. Young (1980) concluded "Students reporting a low rate of church attendance were more likely to have both a favorable attitude toward and to have participated in receiving oral-genital sex than students reporting a high rate of church attendance." (p. 66).

In a study of attitudes about premarital sexual activity, Medora and Woodward (1982) defined as religious, students who attend church two or more times a month. They state "There is a significant difference between the opinions in the area of premarital sexual permissiveness of individuals who are religious and those who are nonreligious" (p. 219).

Jensen et al., (1990) studied the relationship between church attendance, permissiveness, and sexual behavior. Overall, they found a negative relationship between church attendance and sexual behavior. They added a cautionary note to the results:

The interaction between church attendance and permissiveness resulted because nonpermissive males and females who attended church had the lowest frequency [of sexual intercourse], but permissive subjects who attend church every week had one of the highest frequencies of sexual intercourse" (p. 113)

Tanfer and Cubbins (1992) found that church attendance was related to the frequency of sexual intercourse for single Caucasian females. The higher the rate of church attendance, the lower the frequency of sexual intercourse.

Many researchers have examined the effect of affiliation with particular religious denominations on premarital sexual permissiveness.

In 1959 Bell and Blumberg found that Catholic female students had higher rates of premarital sexual intercourse than their Jewish or Protestant counterparts. In later research, Bell (1966), Bell and Chaskes (1970) and Bell and Coughy (1980) determined that religious affiliation had no relationship to premarital sexual intercourse rates of college females. Some researchers supported Bell's original findings (Middendorp, Brinkman & Koomen, 1970; Tanfer & Cubbins, 1992), while other research reported that Catholics were more conservative and engaged in premarital sexual intercourse less frequently than other religious denominations (DeLamater & MacCorquodale, 1979). Tanfer and Cubbins explain this discrepancy: "Catholicism, which used to be regarded as a good barometer of conservatism on moral issues, has been found more recently to be a poor predictor of sexual experience." (1992, p. 235).

Denominations cited in the literature as being least likely to engage in premarital sexual intercourse are Pentecostal, Mormons and Jehovah's Witnesses (Beck, et al.,

1991); Dutch Reformed (Middendorp, et al., 1970); and Conservative Protestants (Tanfer & Cubbins, 1992).

Some researches defined religiosity as religious orthodoxy. Religious orthodoxy measures the similarity of a person's beliefs to the official creed of a specific religious institution.

Clayton (1969) studied the relationship between religious orthodoxy, premarital sexual intercourse and fraternity or sorority affiliation. He found that religious orthodoxy was not a restraining factor on premarital sexual activity for fraternity men or sorority women. Religious orthodoxy was related negatively to premarital sexual activity for students who were not affiliated with Greek organizations. Maranell, Dodder & Mitchell (1970) found no relationship between conservatism (as defined by fundamentalism) and sexual permissiveness.

King, et al., (1976) measured religiosity in terms of religious beliefs. Their research revealed no significant relationship between religiosity and premarital sexual behavior. They found religiosity to be strongly related to premarital sexual attitudes rather than behavior, especially for males. Using a student sample and a national sample, Kelley (1978) also found that the effect of religious beliefs on behavior was weak and nonsignificant for men. As in the King, et al. (1976) study, more religious people had

less permissive sexual attitudes, but the attitudes did not translate into less permissive sexual behavior.

In summarizing the research on single dimension measures of religiosity it can be stated that with the exception of Digenan and Anspaugh (1977) and Jensen, et al. (1990), research indicates that there is a negative relationship between religiosity, as defined by church attendance, and permissive attitudes, and church attendance and premarital sexual behavior. It can be generalized that the more conservative a religious denomination is, the less likely individuals affiliated with that denomination are to engage in premarital sexual intercourse. The literature reveals no consistent relationship between religious orthodoxy and premarital sexual behavior among college students. Research shows a significant relationship between religious beliefs and attitudes toward premarital sexual behavior. There appears to be no significant relationship between religious beliefs and premarital sexual behavior.

Multi-Dimensional Measures of Religiosity

The religious experience is multi-faceted and encompasses many areas of an individual's life. As early as 1909, Marett noted the need for a multidimensional view of religion to encompass the intellectual, emotional and behavioral aspects of religiosity. William James concurred

and called for an emphasis upon the "feelings, acts and experiences" of religion (1936, p. 53).

Cardwell (1969) employed a multi-dimensional measure of religiosity in the study of religiosity and attitudes of premarital sexual permissiveness. Religiosity and permissive attitudes correlated inversely at a significant level. The results indicated that religious knowledge and the perception of oneself as being religious were better predictors of religiosity than ritualistic behaviors such as church attendance and prayer. The belief dimension correlated the least with permissive attitudes, suggesting that a weak inverse relationship existed between religious beliefs and permissive attitudes toward premarital sexual intercourse.

Ruppel (1969, 1970) also studied the relationship between permissive attitudes and religiosity as defined by a multi-dimensional measure. Subjects of his study were first year and senior college students. A strong and significant inverse relationship was found between religiosity and permissive attitudes.

In a study involving high school and college students, Jessor and Jessor (1975) noted a significant inverse relationship between religiosity and sexual behavior of high school nonvirgins. The relationship between religiosity and sexual behavior in college students was apparent, but not as strong as it was for the high school students.

Rohrbaugh and Jessor (1975) found a negative relationship between religiosity and premarital sexual intercourse.

Mahoney (1980) studied the relationship between religiosity and sexual behavior. He found religiosity related negatively to sexual experience. Nonvirgins were less religious than virgins. Religious students were less likely to experience a wide range of sexual behaviors. However, highly religious males exhibited a significant tendency to reverse the sequence of normal sexual behavior by participating in oral-genital sexual experiences before participating in intercourse. This finding was attributed to the desire of religious students to remain virginal while succumbing to the pressures of male socialization to be sexually active.

In an attempt to predict sexual activity of college females, M. Young (1981) measured religiosity using a multi-dimensional instrument. College females having intercourse in the past calendar year with one partner, college females having intercourse in the past calendar year with more than one partner and college females not having intercourse in the past year were distinguished on the basis of religiosity.

M. Young (1986) investigated the relationship between religiosity and satisfaction with virginity among college students. Satisfied virgins and regretful nonvirgins were

more religious than satisfied nonvirgins and regretful virgins.

Earle and Perricone (1986), summarizing their findings, write:

Women with more permissive attitudes...were less religious in terms of both participation and devoutness. The religious variables were the most consistent correlates of coital behaviors.... Nonvirgins of both sexes were much less likely to be high with respect to religious participation...or religious devotion. (p. 308)

The literature is inconclusive in determining the relationship between religiosity defined multi-dimensionally and college student sexual behavior. Attitudes regarding premarital sexual behavior seem to be strongly related to multi-dimensional measures of religiosity.

Other Religious Influences on College Student Sexual Behavior

The following review of other religious influences on college student sexual behavior includes a discussion of social group and peer influence, the role of church doctrine, guilt related to sex and the importance of religion in the students' lives.

A number of researchers studied the influence of social groups on college students' decisions to engage in premarital sexual intercourse. The perceived peer group norms regarding sexual behavior were of significant influence on male sexual behavior. Peer group norms did not

significantly influence female student behavior (Clayton, 1972). The best predictor of virginity was the premarital sexual experience of peers, followed by the levels of dating commitment and church attendance (Herold & Goodwin, 1981).

Woodroof (1986) compared the impact of religious and sexual behaviors of peers with the impact of religious and sexual behavior of parents on college students. The influence of peer behavior completely overshadowed the influence of parental behavior (Woodroof, 1986). Woodroof concluded "parents no longer constitute an effective reference group by the time adolescents reach college" (p. 436).

Spanier found that religiosity while growing up is not a determinant of premarital sexual behavior, nor is parental conservatism (1975, 1976).

The influence of church teachings about premarital sexual behavior on the premarital sexual behavior of students enrolled at a university affiliated with the Baptist church was studied by Daugherty and Burger (1984). They stated "messages about sexuality that the students perceived as receiving from their churches did not seem to be related to their sexual attitudes, sexual behavior, or contraception" (p. 356). Heltsley and Broderick (1969) found the opposite to be true. Their research showed that when sexual abstinence is emphasized by a church, the students who attended that church were less permissive.

Studies of sex guilt attempted to ascertain if sex guilt were a predictor of college student premarital sexual behavior. The general hypothesis behind this research is that highly religious students will experience sex guilt when involved in sexual behavior. The sex guilt in turn would impact any subsequent sexual behavior. Gerrard (1987) describes sex guilt as being "manifested behaviorally in resistance to sexual temptations, inhibited sex in sex-related situations" (p. 975).

Students with high sex guilt limited their sexual practices to less intimate forms of sexual expression (D'Augelli & Cross, 1975). As sex guilt increased, sexual activity decreased (Gerrard, 1987).

Lindenfeld (1960) defined highly religious students as those who considered their religious groups to be important to them. He found students of higher religiosity to be more restrictive with regard to premarital sexual attitudes and behavior than those of lower religiosity.

In summarizing the other religious influences on college student sexual behavior, it can be seen that peer sexual behavior significantly influences student sexual behavior. This influence is stronger on male students' behavior than on female students' behavior. Parent sexual and religious behaviors do not have a significant influence on college student sexual behavior. There are no conclusive data on the relationship between church teachings about

sexual behavior and actual sexual behavior. Sex guilt is a better predictor of sexual behavior than church attendance and interest in religion (Gunderson & McCary, 1979).

Students who regard their religious group to be important to them are less attitudinally and behaviorally permissive (Lindenfeld, 1960).

The research on college student sexual behavior and religiosity examined thus far points in the direction of an inverse relationship, but the results are mixed. Spilka, et al. (1985) examining the research, conclude:

One might expect evidence of greater inhibition and limitation in sexual activity on the part of the devout than their less religiously committed fellows. Although this hypothesis gains much support, it finds considerable qualification in modern America. (p. 260)

As single dimension, multi-dimensional and other religious influences are not clearly related to college student sexual behavior, religious orientation will be examined in the next two sections to determine if it could be related to college student sexual behavior.

The following section defines religious orientation in general and characteristics of persons of the specific orientations: Extrinsic, Intrinsic, Indiscriminately Proreligious and Nonreligious. The next section looks at the relationship between college student sexual behavior and religious orientation.

RELIGIOUS ORIENTATION

Over 90% of adults in the United States of America believe in God (Spilka, et al., 1985). As each person is unique, each person has unique motivations for religious belief. Individuals are drawn toward a lifestyle which includes religion for a variety of purposes. Rohrbaugh & Jessor write:

An orientation toward religion can serve multiple and diverse functions for an individual, from providing meaning to one's life,...to securing access to social contacts and interpersonal relationships, to offering a set of standards against which to judge and guide one's actions. (1975, p. 136)

Gordon Allport (1954, 1959, 1966) analyzed motivations for religious involvement. His work came to focus on the paradox that highly religious people are highly prejudiced. In 1966 Allport delineated two types of motivations for involvement in religious activity working closely with Herberg's (1956) and Lenski's (1961) frameworks of communal and associational types of religious affiliation. These motivations cut across denominational lines. According to Lenski (1961), communal types are involved in religious activity because of a need to affiliate and identify with a communal group. These individuals see participation in religious activities as a way to gain status or provide themselves with companionship or business opportunities.

Associational types are involved in religion solely for the purpose of religious fellowship.

Allport (1966) went beyond Lenski's concepts of communal and associational types and defined intrinsic and extrinsic religious orientations. He adopted these terms from the field of axiology to differentiate between the motivations for religious involvement. Extrinsic religion "is something for an occasional Sunday morning, for High Holy days, or for moments of crisis. Since its function is to serve other needs, we call it an extrinsic value in the personal life" (Allport, 1966, p. 455). Allport defines the utility of extrinsic orientation as attending to personal as well as social needs. Extrinsically oriented individuals do not integrate religion into their everyday life.

A person with an intrinsic orientation "regards faith as a supreme value in its own right....A religious sentiment of this sort floods the whole life with motivation and meaning. Religion is no longer limited to single segments of self-interest" (Allport, 1966, p. 455).

Those individuals who are intrinsically oriented integrate their religious beliefs into every facet of their daily lives.

Allport and Ross (1967) developed the Religious Orientation Scale (ROS) to determine the religious orientation of individuals. In their examination of the relationship between religious orientation and prejudice,

they discovered four groupings of individuals: extrinsics, intrinsics, indiscriminately proreligious, and indiscriminately antireligious or nonreligious.

Indiscriminately proreligious subjects score highly on both the intrinsic and extrinsic subscales. They tend to agree with any religious statement. Allport and Ross explain, "Their mental set seems to be 'all religion is good.'" (1967, p. 442). Nonreligious subjects score low on both intrinsic and extrinsic subscales. These individuals tend to disagree consistently with religious items.

At the same time Allport and Ross were working with the concepts of extrinsic and intrinsic orientations, Allen and Spilka (1967) were studying the styles of religious beliefs, the behavior of college students and the relationship of these styles to prejudice. They defined two styles: consensual and committed. The consensual style is analogous to an extrinsic orientation and the committed style is analogous to an intrinsic orientation. Some later literature (Spilka, et al., 1985) even refers to religious orientations as "extrinsic-consensual" and "intrinsic-committed". Allen and Spilka (1967) found that both committed and consensual individuals feel that religion is important in their lives, although the committed individuals viewed themselves as being more religious than the consensual group.

Beginning with Allen and Spilka's and Allport and Ross'

work, descriptions of the extrinsically oriented, intrinsically oriented, indiscriminately proreligious and nonreligious persons were constructed. Other researchers furthered the depictions. Following is a summary of the descriptions of religious orientations as defined by the research findings.

Extrinsic Orientation

Persons with extrinsic orientations toward religion attend church on an irregular basis (Allen & Spilka, 1967; Allport & Ross, 1967). They are not strongly committed to religion (Baston & Ventis, 1982; Jackson, 1981; Spilka, Pelligrini & Daily, 1968). The extrinsic view of religion is concrete and restrictive (Allen & Spilka, 1967). Extrinsic are dogmatic (Hoge & Carroll, 1973; Kahoe, 1974; Kahoe & Dunn, 1975; Paloutzian, Jackson & Crandall, 1978; Thompson, 1974). Extrinsic are unlikely to interpret mystical experiences as having religious dimensions (Hood, Morris & Watson, 1990).

Extrinsic are more likely to be males (Watson, Morris, & Hood, 1990). They are prejudiced (Allen & Spilka, 1967; Allport & Ross, 1967; Brannon, 1970) and ethnocentric (Allen & Spilka, 1967). Extrinsic tend to believe in an external locus of control (Kahoe, 1974; Strickland & Shaffer, 1971), and are extrinsically motivated (Kahoe, 1974).

Extrinsicness is negatively correlated with self-control (Bergin, Masters & Richards, 1987). Extrinsicness is positively related to authoritarianism (Kahoe, 1974).

An extrinsic orientation is negatively related to responsibility and American College Test scores (Kahoe, 1974). Extrinsicness has been positively related to anxiety (Baker & Gorsuch, 1982; Bergin, et al., 1987), depression and narcissistic exploitiveness (Watson, Morris & Hood, 1989). Bergin, et al. found extrinsicness did not correlate with measures of depression (1987). Extrinsics are generally more psychosocially maladapted than non-extrinsics (Watson, Morris & Hood, 1990).

An extrinsic religious orientation is an indicator of a lack of meaning in life (Soderstrom & Wright, 1977). It is positively related to fear of death (Kahoe & Dunn, 1975; Magni, 1972; Nelson & Cantrell, 1980; Patrick, 1979). Extrinsics view death in terms of loneliness, pain, the unknown (Spilka, Stout, Minton & Sizemore, 1977) and failure (Minton and Spilka, 1976; Spilka, et al., 1977).

Intrinsic Orientation

Intrinsics are more likely to be females (Argyle & Beit-Hallahmi, 1975; Watson, Morris & Hood, 1990). Females are more likely than males to score higher on the intrinsic subscale (Baither & Saltzberg, 1978; Strickland & Shaffer,

1971; Thompson, 1974). Intrinsic are older (Watson, Morris & Hood, 1990) and better educated than extrinsic (Strickland & Shaffer, 1971).

Religion is important to persons with intrinsic orientations (Batson, 1976; Batson & Ventis, 1982; Digenan & Murray, 1975; Jackson, 1981; Spilka, et al., 1968). They attend church frequently (Allen & Spilka, 1967; Allport & Ross, 1967; Strickland & Shaffer, 1971). Religious orthodoxy is positively correlated with an intrinsic orientation (Batson, 1976; Batson & Ventis, 1982; Dodrill, Bean & Bostrom, 1973; Hoge & Carroll, 1973; King & Hunt, 1975; Spilka, et al., 1968). Intrinsicness correlates highly with measures of multidimensional religiosity (Donahue, 1985b). Intrinsic are more likely to interpret mystical experiences as religious experiences (Hood, et al., 1990).

Intrinsic hold abstract and philosophical views of religion. These view are open and flexible (Allen & Spilka, 1967). Intrinsic are able to integrate religion into their daily activities (Allen & Spilka, 1967; Allport & Ross, 1967). Hood (1985) describes intrinsic as having pure motivations: "Intrinsic have no ulterior motives for their faith" (p. 415).

Some researchers have found that intrinsic are not prejudiced (Allen & Spilka, 1967; Allport & Ross, 1967; Batson, Naifeh & Pate, 1978). Donahue (1985b), in a review

of literature, found that prejudice is not negatively correlated with intrinsicness, but rather it is uncorrelated.

Intrinsicness are likely to be emotionally healthy. Intrinsic religiousness has an indirect effect on psychosocial competence (Hathaway and Pargament, 1990). Intrinsicness believe in an internal locus of control (Kahoe, 1974; Strickland & Shaffer, 1971) and are intrinsically motivated (Kahoe, 1974). Intrinsic college students are more responsible and have higher grade point averages than students of other religious orientations (Kahoe, 1974). Intrinsicness is positively correlated to leadership and superiority (Watson, et al., 1989). Intrinsicness exhibit control over their impulses (Bergin, et al., 1978; McClain, 1978) and see themselves as being personally and socially adequate (McClain, 1978). They report a high degree of meaning in their lives (Soderstrom & Wright, 1977). Intrinsic orientation is negatively related to anxiety (Bergin, et al., 1987; Park, Cohen & Herb, 1990). Baker and Gorsuch (1982) state "intrinsicness is associated with the ability to integrate anxiety into everyday life in an adaptive manner" (p. 121). Narcissistic exploitiveness and depression are inversely related to an intrinsic orientation (Watson, et al., 1989). Watson, Morris, Hood and Biderman (1990) conclude "In summary, intrinsicness once again had demonstrable mental health advantages." (p. 45).

Intrinsics are concerned with their social desirability. They have a tendency to distort the way they see themselves and the way they intentionally present themselves (Batson, et al., 1978; Leak and Fish, 1989).

Kahoe and Dunn (1975) found that fear of death is negatively correlated to an intrinsic orientation to religion. Other researchers found no correlation between fear of death and an intrinsic orientation (Magni, 1972; Nelson & Cantrell, 1980; Patrick, 1979). Intrinsics view death in terms of an afterlife of reward, not as failure (Minton & Spilka, 1976; Spilka, et al., 1977).

Indiscriminately Proreligious

Indiscriminately proreligious persons are more prejudiced (Allport & Ross, 1967; Donahue, 1985b) and more dogmatic (Donahue, 1985b) than extrinsically and intrinsically oriented persons. They have undifferentiated cognitive styles (Allport & Ross, 1967; Pargament, et al., 1987). Extrinsics show intermediate scores on measures of narcissism (Watson, Morris, Hood, & Biderman, 1990).

Indiscriminately proreligious persons display stress when discussing whether or not they have had religious experiences (Hood, 1978). They report mystical experiences as religious in nature when they are prompted (Hood, et al., 1990).

Nonreligious

Nonreligious individuals are more likely to be males (Watson, Morris, & Hood, 1990) than females. They score moderately on narcissism scales (Watson, Morris, Hood, & Biderman, 1990). The nonreligious seem to be adjusted psychosocially (Donahue, 1985a).

Concluding this discussion of religious orientation, it can be stated that extrinsic, intrinsic, indiscriminately proreligious and nonreligious persons can be differentiated by a number of personality variables, although the literature is less descriptive of the indiscriminately proreligious and nonreligious. Intrinsic individuals generally exhibit greater mental health than the extrinsically oriented or indiscriminately proreligious individuals.

The basic difference between intrinsic and extrinsic orientation is the motivation for religious involvement. Donahue (1985b), discussing Hood's description of the different orientations, writes "one must manage the intrinsic and extrinsic orientations by accepting religion as either part of life (extrinsic) or as the meaning of life (intrinsic)" (p. 414). Kirkpatrick (1989), summarizes the differences between the two orientations stating

an extrinsically religious person uses religion as a means to other ends, such as personal security and social gain, whereas the intrinsically

religious person approaches religion as an ultimate end in itself. (p. 2)

SEXUAL BEHAVIOR AND RELIGIOUS ORIENTATION

Woodroof (1985) studied the relationship between religious orientation and sexual behavior of college students. He found a strong positive relationship between religious orientation and religious behavior. He further discovered strong negative relationships between religious behavior and sexual activity and between intrinsic religious orientation and premarital sexual intercourse.

The sample population used by Woodroof is distinct from other populations used in the research of college student sexual behavior. Woodroof's sample consisted solely of Caucasian first year students, aged 17 to 19 years who were enrolled at eight colleges affiliated with the Churches of Christ. One-third of the sample reported that their fathers held leadership positions in their local churches. Nine percent reported that their parents were divorced. Seventy-nine percent of the sample indicated that they attended church services three times a week. A national sample of college freshmen reported that 5.8% of freshmen attended church services 10 or more times in the past 30 days (Gallup Organization, 1989). Just over 25% of Woodroof's sample were nonvirgins, compared to 74.4% of the freshmen surveyed by Gallup (1989). Woodroof acknowledges that the sample was

drawn from an exclusive population. He writes "the religious and sexual characteristics of this conservative Christian sample...are found to differ markedly from most samples studied in this area." (1985, p. 343).

SUMMARY OF RELATED LITERATURE

College students are faced with resolving the important psychosocial task of developing identity. Key in the resolution of this task is the acknowledgment and acceptance of themselves as sexual beings. As students are faced with making decisions regarding their sexuality and sexual behavior, the variable of religion comes in to play. The review of literature suggests that the role religion has in influencing student sexual attitudes and behaviors varies, depending on the students, the students' religious involvement, the students' religious beliefs and the manner in which the involvement and beliefs are measured.

College students sexual attitudes have become increasingly liberal. Specifically, attitudes of permissiveness peaked during the 1970s and then leveled. The opinion among today's college students is that as the degree of commitment increases in a relationship, the acceptance of sexual relations in the relationship increases.

As college student attitudes toward sexual behavior have become increasingly permissive, college student virginity rates have decreased. Recent research reports that 76% of college students are nonvirgins (Gallup, 1989). This number has increased steadily since the early 1900s.

The relationship between religion and sexual behavior of college students has been studied by many researchers. General findings are:

1. There is a negative relationship between church attendance and permissive attitudes toward premarital sexual behavior.
2. There is a negative relationship between church attendance and premarital sexual activity.
3. The more conservative a religious denomination is, the less likely individuals affiliated with that denomination are to engage in premarital sexual intercourse.
4. There is no relationship between religious orthodoxy and premarital sexual behavior.
5. There is a significant inverse relationship between religious beliefs and permissive sexual attitudes.
6. There is no relationship between religious beliefs and premarital sexual behavior.
7. There is a strong negative relationship between religiosity defined by multi-dimensional measures and permissive sexual attitudes.

8. There is no consistent relationship between religiosity defined by multi-dimensional measures and sexual behavior.
9. The sexual behaviors of peers significantly influence the sexual behavior of college students.
10. Parent religious behaviors and sexual behaviors do not influence college student sexual behavior.
11. There are no conclusive data on the relationship between church teachings about sexual behavior and college student sexual behavior.
12. Sex guilt is a better predictor of sexual behavior than church attendance and interest in religion.

In an attempt to reconcile the disparate findings of the research on the relationship between religion and college student sexual behavior, the concept of religious orientation was examined. Reviewing the literature on college student involvement in religion, there is agreement with Gorsuch's statement that "The most empirically useful definitions of religion so far are the intrinsic and extrinsic concepts introduced by Allport" (p. 210).

Allport and Ross' work reveals a four-fold typology of motivations for religious involvement. Extrinsically oriented individuals become involved in religion to meet personal or social needs. Intrinsically oriented individuals integrate religion in all aspects of their lives. Indiscriminately proreligious and nonreligious

individuals endorse or reject beliefs, activities and attitudes based solely on their relation to religion.

People exhibit different psychosocial attributes depending upon their religious orientation. Intrinsic are generally believed to have greater mental health, followed by nonreligious, extrinsic and indiscriminately proreligious.

The only study examining the relationship between religious orientation and sexual behavior of college students employed students at colleges affiliated with the Churches of Christ as the sample population (Woodroof, 1986). It was found that intrinsically oriented students had a lower rate of premarital sexual intercourse. However, the selectivity of the sample makes it unwise to generalize the findings.

In conclusion, the literature reveals a vague inverse relationship between religiosity and sexual behavior. This study intended to further define the relationship by examining the impact of religious orientation on college student sexual behavior.

Chapter 3

Methodology

Chapter Three describes the research methodology used in this study. It provides information about the subjects, the variables examined, the measurement instruments, the data collection procedures and the methods of data analysis.

SUBJECTS

This research required that the subjects be never-married, heterosexual undergraduate college students, aged 17 to 24 years. A standard equation for determining sample size was used to determine that surveying 235 students would yield the appropriate number of subjects (McCall, 1982). Two hundred and fifty-five surveys were distributed, yielding 235 usable surveys, a usable rate of 92.2%. Twenty surveys were not usable: three due to age of subjects; three due to marital status of subjects; six due to the sexual orientation of the subjects; and eight surveys were returned incomplete.

THE VARIABLES

Religious orientation was the independent variable examined in this study. Sexual behavior was the dependent variable studied to determine its relationship to religious

orientation. The relationship between religious orientation and sexual behavior was analyzed in relation to the demographic independent variables of ethnicity, academic classification, grade point average, gender, reported importance of religion in subjects' lives and religious affiliation.

THE INSTRUMENTS

Religious Orientation Scale (ROS) - Allport and Ross, 1967

The Religious Orientation Scale (ROS) was used to measure religious orientation. The ROS was developed by Allport, Ross and members of a seminar at Harvard University to measure religious orientation on two subscales. It is a 20 item self-administered instrument. It takes approximately 10 minutes to complete. A copy of the ROS is included in Appendix A.

Spilka, et al. (1977) reported KR-20 reliabilities of .91 for the Intrinsic subscale (I) and .85 for the Extrinsic subscale (E). Cronbach alpha reliabilities ranging from .93 to .81 for I and from .82 to .69 for E were reported by Griffin and Thompson (1983). Batson (1976) and Kahoe (1974) reported reliabilities for the subscales ranging from .67 to .76. Item-to-subscale reliability correlations range from .18 to .58 (Robinson & Shaver, 1973).

Donahue (1985b) reported that I had an average correlation with measures of religiosity of .76, while the average correlation of E with the measures of religiosity was .03. Discussing the validity of the scale, Robinson and Shaver (1973) state "the Intrinsic-Extrinsic Scale appears consistently to demonstrate its construct validity" (p. 703).

Donahue (1985a), responding to the allegation that the ROS is denomination specific and embraces a Southern Baptist philosophy, writes "the present author found no significant differences between the six denominational groups they (Allport and Ross) studied concerning whether they were more likely to endorse I items, E items or both" (p. 419).

Within five years of its publication, the ROS was drawing criticism (Dittes, 1971; Hoge, 1972; Hood, 1970, 1971; Hunt & King, 1971). Central to the criticism was Allport and Ross' contention that I-E was a bipolar continuum. The critics' research was suggesting that the Intrinsic and Extrinsic subscales were two orthogonal factors, not bipolar opposites. These findings were consistent with the emergence of the indiscriminately proreligious (IP) and nonreligious (NR) groups. Although Allport and Ross recognized the existence of these groups, they could not account for their existence.

Hood (1970) was the first researcher to reverse score the I subscale. Through the use of sample median splits, he

developed the following four-fold typology:

High I, High E = Indiscriminately Proreligious

High I, Low E = Intrinsic

Low I, High E = Extrinsic

Low I, Low E = Nonreligious

Since Hood's decision to reverse score the I subscale, the majority of researchers use median splits to create the four-fold typology. Kirkpatrick and Hood (1990) state "Allport's theory clearly specified bipolar opposites, but the two-factor theory has predominated since the early empirical work of Allport and Ross (1967) and Feagin (1964)." (p.448).

The ROS scoring debate has continued to recent times (Kirkpatrick & Hood, 1990, 1991; Masters, 1991). There are three methods used to classify subjects into the four types of religious orientations. All methods are based on median-splits. The first method uses the median score of the specific research sample. As Kirkpatrick and Hood (1990) point out, this forces a segment of the population into classification as highly intrinsic whether the sample consists of seminary students or atheists. Donahue (1985a) suggested the use of theoretical midpoints (30 for E and 27 for I) rather than sample midpoints. This practice is not widely used because it can produce empty cells or no variance between groups. The third method employed to classify subjects uses medians produced by a normative

sample. Hood, et al. (1990) divided subjects into religious orientations based on the medians of a normative sample of over 2,400 college students. The medians established by the normative sample were 30 for both subscales.

This research classified subjects into religious orientations based on the medians of the normative sample used by Hood, et al. (1990) by using 30 as the median splits for each subscale.

Lifetime Sexual Behavior Scale (LSBS) - DeLamater, 1975

DeLamater's inventory of lifetime sexual behaviors determines whether or not an individual has engaged in specific sexual behaviors. The scale measures involvement in nine sexual behaviors: necking (kissing and hugging); french or deep kissing; breast fondling; male fondling female genitals; female fondling male genitals; genital apposition (genital contact without penetration); intercourse; male oral contact with female genitals; and female oral contact with male genitals. The Lifetime Sexual Behavior Scale (LSBS) is a self-administered instrument which takes approximately five minutes to complete. A copy of the LSBS can be found in Appendix A.

For the purposes of this study only responses regarding intercourse, male oral contact with female genitals and female oral contact with male genitals were considered.

Demographic Survey

A demographic survey was developed to obtain information on the subjects' marital status, sexual orientation, age, gender, religious affiliation, grade point average, academic classification, ethnicity and the importance of religion in their lives. A copy of the demographic survey is included in Appendix A.

DATA COLLECTION

Subjects were solicited through the Loyola Marymount University Psychology Department Subject Pool during Spring Semesters 1991 and 1992. To meet course requirements, students enrolled in certain upper and lower division Psychology classes had the choice of participating in the Subject Pool as research subjects or writing reviews of psychological research. Experimenters posted the general research topic, time and location of the experiment on a bulletin board. The general topic of this research was identified as college student psychosocial behavior. Subjects reported to a designated classroom at one of eleven designated times.

Upon arriving at the classroom, students received consent forms. The consent form reviewed the purpose of the research, the voluntary and confidential nature of the

research and instructions to subjects who may experience discomfort due to participation in the research. After signing the consent forms, students completed the surveys. When the students completed the surveys, they placed them in envelopes to ensure confidentiality and deposited them in a box at the front of the room. Students were seated at least two seats apart from each other while completing the instruments. All forms and instructions are included in Appendix A.

STATISTICAL ANALYSIS OF THE DATA

Data were analyzed using Pearson chi square. This statistic was used to assess if there were significant differences in the sexual behaviors of groups of intrinsic, extrinsic, indiscriminately proreligious and nonreligious students. The Pearson chi square is used to determine if differences in discrete categories are due to chance and if the categories are indeed independent of each other (Courtney, 1982).

The subjects were then grouped according to demographic variables. The data were further analyzed using Pearson chi square to determine if the relationship between the religious orientation and sexual behavior varied on the basis of demographic variables. Chi square was utilized as the variables were categorical in nature (Courtney 1982,

1984). Fisher two-tail tests and t-tests were utilized as required by the data.

A multivariate analysis tool was used to search for a variable which could be a predictor of virginity. Logistical regression was utilized as the variable of virginity is categorical in nature (Norusis, 1993; Pedhauzer, 1982).

Results were considered significant at a 0.95 level of confidence.

CONCLUSION

This chapter described the methods used to collect data and instruments employed in this study. It contained a review of the data collection process and analysis of the data.

The next chapter describes the results of the research.

Chapter 4

Results

The purpose of this study was to clarify the relationship between religiosity and sexual activity of college students. A popular notion is that the more religious students are, the less likely they are to engage in premarital sexual activity. However, a survey of literature has concluded that research has been unable to define the relationship between religious attitudes, beliefs and behaviors and college student sexual behavior. Previous research utilized a variety of measures of religiosity such as church attendance, orthodoxy of beliefs, and religious affiliation. This study employed a measure of religious orientation (Allport & Ross, 1967) to define religiosity.

This chapter presents the results of the data analyses. A description of the sample population is presented followed by the results of the study. The results of the study are presented in the order that the hypotheses were presented.

DESCRIPTION OF SAMPLE POPULATION

Subjects for this study were students at a mid-sized University affiliated with the Roman Catholic Church located on the West Coast. Subjects were enrolled in Psychology classes during the 1991 and 1992 Spring Semesters. Subjects volunteered to participate in the University Subject Pool to

fulfill the research component to their course requirements.

This study required subjects to be never married, heterosexual undergraduate college students, and age 17 to 24 years. Of the 255 surveys distributed, 235 subjects met the demographic criteria. Three subjects did not meet the age criterion; three subjects had been married; six subjects did not identify themselves as heterosexual; and eight subjects did not complete the survey.

Of the 235 students surveyed, 58.72% were female and 41.28% were male. Approximately half of the sample (49.1%) earned a GPA of 3.0 or less (on a 4.0 scale). The other half (50.9%) reported a GPA of 3.1 to 4.0.

The following tables depict the academic classification of the subjects (Table 1), ethnicity of the subjects (Table 2), importance of religion to the subjects (Table 3) and religious affiliation of the subjects (Table 4).

Table 1. Academic Classification of Sample Population

Class	Frequency	Percent
First Year	102	43.404%
Sophomore	64	27.234%
Junior	42	17.872%
Senior	27	11.489%
TOTAL	235	100.000%

As indicated in Table 1, the majority of the sample population (70.63%) was first year students and sophomores. Junior and senior students accounted for 29.36% of the sample population. The higher number of first and second year students can be explained by the high number of students enrolled in lower division Psychology classes at the institution from which the sample was drawn.

Table 2. Ethnicity of Sample Population

<u>Ethnicity</u>	<u>Frequency</u>	<u>Percent</u>
African American	21	8.94%
Asian/Pacific Islander	34	14.47%
Caucasian	139	59.15%
Latino	28	11.91%
Other*	13	5.53%
TOTAL	235	100.00%

*Other includes International Students, Native Americans and Others.

The ethnicity of the sample population reflects the ethnicity of the institution from which the sample was drawn. The institution enrolled 37% ethnic minority undergraduates in the years the sample was taken (Loyola Marymount University, 1992). The percentage of non-Caucasian students sampled was 40.85%.

Table 3. Importance of Religion to Sample Population

Level of Importance	Frequency	Percent
Very Important	81	34.5%
Somewhat Important	109	46.4%
Not Very Important	45	19.1%
TOTAL	235	100.0%

A majority of the students surveyed (80.9%) stated that religion was a very or somewhat important part of their lives.

Table 4. Religious Affiliation of Sample Population

Affiliation	Frequency	Percent
Jewish	5	2.13%
Atheist	9	3.83%
Agnostic	11	4.68%
Other	20	8.51%
Protestant	37	15.74%
Roman Catholic	153	65.11%
TOTAL	235	100.00%

The sample reflects the religious affiliation of the institution from which the sample was drawn. Sixty-five

percent of the undergraduate students at the institution identified themselves as Roman Catholic (Loyola Marymount University, 1992). The majority of the sample (65.1%) reported that they were affiliated with the Roman Catholic church. Protestant students made up 15.7% of the sample. Eight and one half percent of the sample classified themselves as either Agnostic or Atheist.

For further analysis of the religious affiliation of the sample population, see Appendix B.

Religious Orientation of Sample

The religious orientation of subjects was determined by their scores on the Religious Orientation Scale (ROS) (Allport & Ross, 1967). The Extrinsic (E) and Intrinsic (I) subscales were reverse scored per common practice (Donahue, 1985b). Subjects were then classified by religious orientation based on the medians of a normative sample population. This study utilized the normative sample of Hood, et al. (1990). Hood's normative sample was composed of over 2,400 college students. The medians established were 30 for both the I and E subscales. Table 5 describes the religious orientation of the sample population.

Table 5. Religious Orientation of the Sample Population

Religious Orientation	Frequency	Percent
Intrinsic	50	21.28%
Extrinsic	97	41.28%
Indiscriminately Proreligious	26	11.06%
Nonreligious	62	26.38%
TOTAL	235	100.00%

Sexual Behavior of Sample

According to the responses on the Lifetime Sexual Behavior Scale (LSBS) (DeLamater, 1975), 89 students (37.87%) reported that they had never participated in premarital sexual intercourse. One hundred and forty-six students (62.13%) reported that they had participated in premarital sexual intercourse.

Eighty-one students (34.47%) surveyed reported that they had never participated in oral-genital sexual activity. One hundred and fifty-four students (65.53%) reported that they had participated in oral-genital sexual activity.

Table 6 describes the sexual behavior of the sample by gender. Pearson chi square analyses were performed to determine if there were differences in sexual behavior due to gender. There were no significant differences in female and male sexual behavior.

Table 6. Sexual Behavior of Sample by Gender

Premarital Sexual Activity	Females	Males	TOTAL
Virgin	39.13%	36.08%	37.87%
Nonvirgin	60.87%	63.92%	62.13%
Pearson $\chi^2 = 0.225$ df = 1 p = 0.6353			
Oral-Genital Sexual Activity	Females	Males	TOTAL
Nonparticipation	34.78%	34.04%	34.47%
Participation	65.22%	65.98%	65.53%
Pearson $\chi^2 = 0.015$ df = 1 p = 0.9037			

PRESENTATION OF THE RESULTS

Hypothesis 1

There is no significant difference in the rate of participation in premarital sexual intercourse between intrinsically oriented, extrinsically oriented, indiscriminately proreligious and nonreligious students.

Hypothesis 1 is rejected. Table 7 illustrates the virginity of the subjects by religious orientation. Chi square analysis of the data indicates that there is a

significant difference in rates of participation in premarital sexual intercourse between students of different religious orientations.

Table 7. Chi Square Analysis of Virginitly by Religious Orientation

Religious Orientation	% Virgin	% Nonvirgin	TOTAL
Intrinsic	60.0%	40.0%	100.0%
Extrinsic	34.0%	66.0%	100.0%
Indiscriminately Proreligious	38.5%	61.5%	100.0%
Nonreligious	25.8%	74.2%	100.0%
TOTAL	37.9%	62.1%	100.0%

Pearson $\chi^2 = 14.856$

df = 3

p = 0.0019

Additional chi square analysis was performed comparing the intrinsic students with their non-intrinsic peers. Results of the analysis indicate that intrinsically oriented students were significantly more likely to be virgins than their non-intrinsic peers (Pearson $\chi^2 = 13.217$; df = 1; p = 0.0003).

Hypothesis 2

There is no significant difference in the rate of participation in oral-genital sex between

intrinsically oriented, extrinsically oriented, indiscriminately proreligious and nonreligious students.

Hypothesis 2 is rejected. Table 8 illustrates the subjects' participation in oral-genital sex by religious orientation. Chi square analysis of the data shows that there is a significant difference in rates of participation in oral-genital sex between students of different religious orientations.

Table 8. Chi Square Analysis of Participation in Oral-Genital Sexual Activity by Religious Orientation

Religious Orientation	Percent Nonparticipants	Percent Participants	TOTAL
Intrinsic	50.0%	50.0%	100.0%
Extrinsic	34.0%	66.0%	100.0%
Indiscriminately Proreligious	26.9%	73.1%	100.0%
Nonreligious	25.8%	74.2%	100.0%
TOTAL	34.5%	65.5%	100.0%

Pearson $\chi^2 = 8.063$

df = 3

p = 0.00447

Further chi square analysis indicated that when intrinsic students are compared with their non-intrinsic peers, intrinsic students were significantly less likely to

have engaged in oral-genital sexual activity (Pearson $\chi^2 = 6.783$; $df = 1$; $p = 0.0092$).

Hypothesis 3

The demographic variables of gender, GPA, academic classification, religious affiliation and ethnicity are not significantly related to religious orientation and virginity.

Hypothesis 3 is rejected. The relationships between religious orientation, virginity and the demographic variables of gender, GPA, academic classification, religious affiliation and ethnicity were examined using chi square analyses.

Table 9 indicates that for females, students with GPA's of 3.0 or under, non-first year students, first year students and sophomores grouped together, seniors, non-seniors, Roman Catholics, non-Agnostics, non-Atheists, Caucasians, non-African Americans, non-Latinos and non-Asian/Pacific Islanders the relationship between an intrinsic religious orientation and virginity is significant at the 0.05 level.

For males, students with GPA's over 3.0, first year students, juniors and seniors, non-Roman Catholics, Agnostics, Atheists, non-Caucasians, African Americans, Latinos and Asian/Pacific Islanders the relationship between

religious orientation and virginity is not significant at the 0.05 level.

Table 9. Analysis of Demographic Variables on Intrinsic Students' Participation in Premarital Sexual Intercourse

Variable	χ^2	p
Female	15.457	0.0015*
Male	3.249	0.3547
GPA > 3.0	4.264	0.2343
GPA ≤ 3.0	10.380	0.0156*
First Year	3.073	0.3805
Non-First Year	17.371	0.0006*
First Year/Sophomore	9.754	0.0208*
Junior/Senior	7.728	0.0520
Senior	9.856	0.0198*
Non-Senior	11.007	0.0117*
Roman Catholic	10.087	0.0178*
Non-Roman Catholic	6.312	0.0974
Agnostic	4.278	0.1091 ⁺
Non-Agnostic	14.883	0.0019*
Atheist	0.900	1.0000 ⁺
Non-Atheist	13.617	0.0035*
Caucasian	18.263	0.0004*
Non-Caucasian	4.333	0.2277
African American	5.018	0.1705
Non-African American	14.319	0.0025*
Latino	1.510	0.6799
Non-Latino	17.365	0.0006*
Asian/Pacific Islander	1.004	0.8002
Non-Asian/Pacific Islander	14.174	0.0027*

df = 3

* Significant at $p \leq 0.05$

⁺df = 1; Fisher two-tail test

Gender

Female intrinsic are significantly more likely to be

Female intrinsics are significantly more likely to be virgins than their non-intrinsic counterparts ($p = 0.0015$). Male intrinsics are no more likely to be virgins than their non-intrinsic counterparts.

Grade Point Average

Intrinsically oriented students with grade point averages 3.0 or under are more likely to be virgins than their non-intrinsic peers ($p = 0.0156$).

Academic Classification

Religious orientation is not a significant variable in the virginity rate of first year students. It is a significant variable for sophomore, junior and senior students ($p = 0.0006$). Sophomore, junior and senior intrinsically oriented students are more likely to be virgins than their extrinsic, indiscriminately proreligious or nonreligious peers.

Religious Affiliation

As Table 4 illustrates, 153 of the subjects in this study indicated they were affiliated with the Roman Catholic church. Due to the small cell size it was necessary to analyze religious affiliation and its relationship to

virginity by forming comparison groups as follows: Roman Catholic; non-Roman Catholic; Agnostic; non-Agnostic; Atheist; non-Atheist. These groups were compared to determine if there were a difference in the virginity rates of students of different religious orientations.

The religious orientation of Roman Catholic students is significantly related to their participation in premarital sexual intercourse ($p = 0.0178$). Intrinsic Roman Catholic students are more likely to be virgins than their extrinsic, indiscriminately proreligious or nonreligious counterparts.

The high number of Catholics in the non-Agnostic and non-Atheist groups influences the relationship between those groups, religious orientation and virginity.

Ethnicity

The relationship between ethnicity, religious orientation and virginity is stronger for Caucasians than for any other ethnic group. Intrinsically oriented Caucasian students are significantly more likely ($p = 0.0004$) to have not participated in premarital sexual intercourse than extrinsic, indiscriminately proreligious or nonreligious Caucasian students.

Grouping non-Caucasian students together for analysis reveals no difference in virginity based upon religious orientation. When ethnic groups are grouped together for

comparison (i.e., non-African American, non-Latino, non-Asian/Pacific Islander) the large number of Caucasians (139) influences the analysis. The strongly significant relationship between being Caucasian, religious orientation and virginity dominates the non-African American, non-Latino and non-Asian/Pacific Islander groups.

Hypothesis 4

The demographic variables of gender, GPA, academic classification, religious affiliation and ethnicity are not significantly related to religious orientation and participation in oral sex.

Hypothesis 4 is rejected. The relationships between religious orientation, participation in oral-genital sex and the demographic variables of gender, GPA, academic classification, religious affiliation and ethnicity were examined using chi square analyses. As Table 10 indicates, the relationship between participation in oral-genital sex and an intrinsic religious orientation is significant at the 0.05 level for non-first year students, non-Roman Catholics, non-Agnostics, Caucasians, non-African Americans and non-Latinos.

The variables of gender, GPA, first year students, first year and sophomore students grouped together,

junior/seniors, seniors, non-seniors, Roman Catholics, Agnostics, Atheists, non-Atheists, non-Caucasian, African American, Latino, Asian/Pacific Islander and non-Asian Pacific Islander have no significant effect on the relationship between religious orientation and virginity at the 0.05 level.

Table 10. Analysis of Demographic Variables on Intrinsic Students' Participation in Oral-Genital Sex

Variable	χ^2	p
Female	7.558	0.0561
Male	1.663	0.6519
Caucasian	15.677	0.0013*
Non-Caucasian	1.377	0.7110
African American	4.448	0.2170
Non-African American	9.764	0.0207*
Latino	1.603	0.6588
Non-Latino	12.742	0.0052*
Asian/Pacific Islander	0.907	0.8237
Non-Asian/Pacific Islander	7.077	0.0695
First Year	2.581	0.4608
Non-First Year	9.314	0.0254*
First Year/Sophomore	6.416	0.0930
Junior/Senior	2.000	0.5723
Senior	2.743	0.4330
Non-Senior	6.293	0.0982
Roman Catholic	4.055	0.2556
Non-Roman Catholic	7.947	0.0471*
Agnostic	4.278	0.1091 ⁺
Non-Agnostic	8.771	0.0325*
Atheist	0.900	1.0000 ⁺
Non-Atheist	7.535	0.0567
GPA > 3.0	3.344	0.3415
GPA ≤ 3.0	4.706	0.1946

df = 3

* Significant at $p \leq 0.05$

+ df = 1; Fisher two-tail test

Gender

Intrinsic females lose their distinction when it comes to participation in oral-genital sex. There are no differences in the rate of participation in oral sex between religious orientations for either females or males. The variable of gender has no effect on the relationship between participation in oral-genital sex and religious orientation.

GPA

The variable of GPA has no significant effect on the relationship between religious orientation and participation in oral-genital sexual activity.

Academic Classification

Intrinsic sophomore, junior and senior students, when grouped together, were less likely ($p = 0.0254$) to have participated in oral-genital sex than their extrinsic, indiscriminately proreligious and nonreligious counterparts. No significant difference was found between first year intrinsic students and their non-intrinsic peers.

Religious Affiliation

Compared to their non-intrinsic peers, non-Catholic intrinsically oriented students are less likely ($p = 0.0471$)

to participate in oral-genital sex. The same holds true for non-Agnostic intrinsic students. They are less likely ($p = 0.0325$) to have participated in oral-genital sex than extrinsic, indiscriminately proreligious and nonreligious non-Agnostic students.

Ethnicity

Significantly fewer intrinsically oriented Caucasian students have engaged in oral-genital sex than extrinsic, indiscriminately proreligious or nonreligious oriented Caucasian students ($p = 0.0013$).

The number of Caucasian students (139) in the non-African American and non-Latino groups impacts the significance of the relationship between an intrinsic religious orientation and participation in oral-genital sex. Non-African American and non-Latino intrinsic students are significantly less likely ($p = 0.0207$ and $p = 0.0052$ respectively) than their extrinsic, indiscriminately proreligious or nonreligious peers to have participated in oral-genital sex.

ADDITIONAL FINDINGS

Importance of Religion

As a portion of the demographic survey, subjects were

asked if religion were very, somewhat or not very important in their lives. Religion was reported as being very important to 34.5% of the subjects, somewhat important to 46.4% of the subjects and not very important to 19.1% of the subjects.

As Table 11 depicts, all intrinsic and indiscriminately proreligious students indicated that religion was very or somewhat important in their lives. Agreement with religion being important in the subjects' lives indicates a high score on the Intrinsic subscale of the ROS.

Table 11. Chi Square Analysis of Religious Orientation by Importance of Religion

	% Very Important	% Somewhat Important	% Not Very Important	TOTAL
Intrinsic	76.0%	24.0%	0.0%	100.0%
Extrinsic	15.5%	57.7%	26.8%	100.0%
Indiscriminately Proreligious	69.2%	30.8%	0.0%	100.0%
Nonreligious	16.1%	53.2%	30.6%	100.0%
TOTAL	34.5%	46.4%	19.1%	100.0%

Pearson $\chi^2 = 82.238$

df = 6

p = 0.0000

As Table 12 indicates, students who stated that religion is a very important factor in their lives are less

likely to engage in premarital sexual intercourse ($p = 0.0001$) than those stating that religion is somewhat or not very important in their lives.

Table 12. Chi Square Analysis of Virginity by Importance of Religion

	% Very Important	% Somewhat Important	% Not Very Important	TOTAL
Virgin	48.3%	41.6%	10.1%	100.0%
Non-virgin	26.0%	49.3%	24.7%	100.0%
TOTAL	34.5%	46.4%	19.1%	100.0%

Test for Linear Trend

= 14.631

df = 1

$p = 0.0001$

Table 13 illustrates that students who stated that religion is not very important in their lives were more likely to have participated in oral-genital sex than those for whom religion is more important.

Table 13. Chi Square Analysis of Participation in Oral-Genital Sex by Importance of Religion

	% Very Important	% Somewhat Important	% Not Very Important	TOTAL
Non-Participation	45.7%	44.4%	9.9%	100.0%
Participation	28.6%	47.4%	24.0%	100.0%
TOTAL	34.5%	46.4%	19.1%	100.0%

Test for Linear Trend

= 10.115

df = 1

p = 0.0015

Sexual Behavior of Intrinsic Students

A t-test was performed on the data to determine if the number of virgins and the number of nonvirgins in the intrinsic population were due to chance. Results of the t-test show that percentage of virgins and nonvirgins is not due to chance. Intrinsic students are significantly more likely to be virgins than nonvirgins ($t = -2.87$; $df = 1, 233$; $p = 0.0004$).

A t-test was similarly executed to determine if the number of students who had not participated in oral-genital sex and the number of students who had participated in oral-genital sex within the intrinsic population were due to chance. Results of the t-test show that the number of participants and nonparticipants was not due to chance. Intrinsic students are significantly less likely to have

participated in oral-genital sex than to not have participated in oral-genital sex ($t = 2.52$; $df = 1, 233$, $p = 0.0125$).

Predictors of Virginity

A multivariate analysis tool was required to distinguish which variables, if any, combine to predict virginity. A logistic regression was utilized to retain power, and therefore, significance, in searching for interactions between variables that cannot be seen in the chi square analyses.

Table 14 illustrates the search for a variable, which, when combined with Intrinsicness, is a better predictor of virginity than other variables.

Table 14. Hierarchical Stepwise Regression on Virginity

Potential Predictors	Approximate Chi Square	p Value
Intrinsic	12.87	0.0030*
Indiscriminately Proreligious	0.00	0.9443
Intrinsic Scale	8.18	0.0042*
Extrinsic Scale	1.84	0.1754
Academic Class	11.69	0.0006*

$df = 1$

* Significant at $p \leq 0.05$

As illustrated in Table 14, the Intrinsic Scale and academic class are significant predictors of virginity when combined with intrinsicness. As the Intrinsic Scale defines intrinsicness, this predictive relationship would be expected.

CONCLUSION

This study posed the following research question:
What is the relationship between the premarital sexual activity of heterosexual college students and their religious orientation?

The results of this study indicate that intrinsic students are less likely to have participated in both premarital sexual intercourse and oral-genital sex than their extrinsic, indiscriminately proreligious or nonreligious peers. Intrinsic students are more likely to be virgins and nonparticipants in oral-genital sexual activity.

The next chapter presents a summary of results, a discussion of the findings, conclusions and recommendations for further study.

Chapter 5

Summary, Discussion, Conclusions and Recommendations

SUMMARY OF THE STUDY

College student development theorists state that college is a time for solidifying personal identity (Chickering, 1969; Chickering & Reisser, 1993; Erikson, 1968, Gilligan, 1982). A major element of determining personal identity is resolving issues of sexual identity (Chickering, 1969; Chickering & Reisser, 1993). Rodgers describes the task of developing identity "Most 18- to 23-year-olds in our culture struggle to determine who they are (identity), who they will love (sexuality and intimacy), and what they will believe (values and lifestyle)" (1990, p. 55).

Intimate relationships are critical in defining identity, as identity and sexual identity are determined in part by discovering who we are in relation to others.

An important part of many peoples' identities is their relationship to their gods or God. This holds true for college students (Gallup Organization, 1989; Schafer & King, 1990; Zern, 1987). Many people make life decisions based on their religious beliefs (Hildebrand & Abramowitz, 1984; Kinsey, et al., 1953; Michael, et al., 1994). All major religions place prohibitions on premarital sexual

intercourse. Many people take these prohibitions under consideration when making decisions regarding premarital sexual activity.

Research shows that college students are active both sexually (Baier, et al., 1991) and religiously (Gallup Organization, 1989). Even the most religious of students are sexually active (Digenan & Anspaugh, 1978; Jensen, et al., 1990; Kelley, 19787; King, et al., 1976).

In an attempt to investigate this paradoxical relationship between religiosity and sexual behavior of college students, this study employed a measure of religious orientation to define religiosity. Religious orientation examines people's motivations for religious involvement. Allport and Ross (1967) identify four types of religious orientation: extrinsics are externally motivated to participate in religious activity; intrinsics are motivated by their religious faith; indiscriminately proreligious feel that anything and everything that is religious is good; and nonreligious turn away from any religious thought or activity. The purpose of this study was to clarify the relationship between religiosity, as defined by religious orientation, and sexual activity of college students.

This study analyzed the relationship between the independent variable of religious orientation and the dependent variable of sexual behavior. The relationship between religious orientation and sexual behavior was

further analyzed in relation to the demographic independent variables of ethnicity, academic classification, grade point average, gender, importance of religion in the subject's life and the subject's religious affiliation.

Subjects for this research were 235 never married heterosexual undergraduate college students, aged 17 to 24. Subjects were enrolled in psychology classes at a west coast university affiliated with the Roman Catholic Church.

The measurement instrument used to determine the subjects' religious orientations was the Religious Orientation Scale (ROS), (Allport & Ross, 1967). The measurement instrument used to determine subjects' sexual activity was the Lifetime Sexual Behavior Scale (LSBS), (DeLamater, 1975). Subjects also completed a demographic survey which provided information about subjects' gender, grade point average, ethnicity, age, religious affiliation, sexual orientation, importance of religion, academic classification and marital status.

The primary statistical tool used to analyze the data was the Pearson chi square. This statistic measures the differences between groups to determine if the differences are due to chance or to the impact of the variables. The Fisher two-tail test and the t-test were also used as required by the data. Results were considered significant at a probability level of 0.05.

DISCUSSION

Sample

In order to generalize research results to the general population, the sample population studied must be reasonably reflective of the general population (Courtney, 1984). This was a problem in Woodroof's 1985 research on religious orientation and sexual behavior of college students. Woodroof drew his sample from eight colleges affiliated with the religiously conservative Churches of Christ. The sample consisted of Caucasian first year college students, aged 17 to 19. Seventy-nine percent of the Woodroof sample reported they attended church 12 times a week. Only 5.8% of all first year college students attend church 10 or more times a week (Gallup Organization, 1989). Woodroof acknowledged that his sample was not representative of the general population and therefore caution should be used when generalizing the results.

To validate the results of this research it is necessary to compare the sample with the general college student population on measures of sexual activity, religiosity and ethnicity.

In this sample, 37.87% of the subjects reported they were virgins. Although research findings are quite mixed, they report virginity rates of 47.4% (Earle & Perricone,

1986) to 21% for women (Bigler, 1989) and 38% (Earle & Perricone, 1986) to 9% for men (Bigler, 1989). Nationally, the Gallup Organization (1989) found 24% of students to be virgins.

Students in this study were as likely to have participated in oral-genital sexual activity (65.53%) as to have engaged in sexual intercourse (62.13%). This is in keeping with the findings of previous research (Newcomer & Udry, 1985). Newcomer and Udry (1985) found that slightly more teenagers had participated in oral sex than premarital sexual intercourse.

Nationally 79% of students state that religion is very or somewhat important in their lives. In this sample, 80.95% of students stated that religion was very or somewhat important in their lives.

Comparing this sample's religious orientation with other samples is more difficult than the comparison of sexual behaviors. Bergin, et al., (1987) reviewed sample populations' distributions of religious orientation when they found their sample of Brigham Young University juniors and seniors was composed of 98.6% intrinsically oriented students. They found the intrinsic population to run from a high of 40.4% in Hood's 1972 sample of introductory psychology students who were primarily affiliated with American Baptist churches to a low of 28.11% in Donahue's 1981 sample of Purdue University undergraduates. They found

extrinsic populations to range from a high of 48.06% in Hood's 1972 sample of introductory psychology students who were primarily affiliated with Southern Baptist churches to a low of 21.13% in Shoemaker and Bolt's 1977 sample of introductory psychology students affiliated with conservative Protestant denominations. The current sample of 41.28% extrinsically oriented students fits within the ranges reported by Bergin, et al. (1987). The sample of 21.28% intrinsically oriented students is a little lower than the samples cited by Bergin, et al. (1987).

The sample population in this study was 59.15% Caucasian students and 40.85% students of color. In 1993, the national undergraduate population was 73.86% Caucasian students and 26.16% students of color and international students (The Chronicle of Higher Education, September 1, 1995). The institution from which the sample was taken is located in one of the most ethnically and culturally diverse regions of the United States. The University is committed to, and has been successful at, enrolling a highly diverse student body. The ethnicity of this sample population is not representative of the ethnicity of student populations in all regions of the country, or at all institutions.

Based on the dimensions of virginity, participation in oral-genital sex, the importance of religion and number of extrinsics, the sample used in this study is reasonably reflective of the general college student population.

Gender and Sexual Activity

As Table 6 (page 87) illustrates, there were no significant differences in sexual behavior between male and female subjects in this study. Robinson, et al., in an extensive longitudinal study of college student sexual behavior, found that the rate of females engaging in premarital sexual intercourse has increased more dramatically than the rate of male premarital sexual intercourse (1991). The sample in this research substantiated the findings of previous research which indicated that the standards of different acceptable sexual behavior for males and females are diminishing (Bigler (1989; Earle & Perricone, 1986; Jessor & Jessor, 1977; Sherwin & Corbett, 1985).

A double standard of participation in oral-genital sexual activity is not reflected by the following percentages. Males and females in this study participated in oral-genital sex at nearly the same rate with 65.22% of females and 65.98% of males participating in oral-genital sex.

Religious Orientation and Sexual Activity

Findings in this study show that intrinsically oriented students were more likely to be virgins than extrinsically oriented, indiscriminately proreligious and nonreligious

students. Results further indicate that intrinsic students were more likely to be virgins than nonvirgins. These results are in accordance with the popular notion that the more religious a person is, the less likely the person is to engage in premarital sexual intercourse. In this study "more religious" is defined as being intrinsically oriented toward religion. These results support the results of Woodroof's 1985 research.

Intrinsics have been noted to exhibit control over their impulses (Bergin, et al., 1978; McClain, 1978). Control over impulses could have an impact on premarital sexual activity. Christopher and Cates (1985) studied the factors that virgins would consider when making the decision to engage in premarital sexual intercourse. One of the principal decision making factors was found to be physical arousal. Physical arousal is, for the most part, a spontaneous reaction. Intrinsic students could be less likely to respond impulsively to physical arousal by engaging in sexual intercourse.

Intrinsic students were less likely than extrinsic, indiscriminately proreligious and nonreligious students to have engaged in oral-genital sex.

This finding challenges Mahoney's observation (1980) that highly religious male students had a tendency to participate in oral-genital sex prior to participating in intercourse. He attributed this sequencing of sexual acts

to highly religious males' desire to maintain virginity while at the same time succumbing to the pressures of male socialization to be sexually active. Mahoney measured religiosity using a single item scale in which subjects indicated the intensity of their religious beliefs. This item correlated highly with a multi-dimensional religiosity scale. Although intrinsic students are highly religious, Mahoney's highly religious group probably included non-intrinsic students and therefore different findings would result.

Gender, Religious Orientation and Sexual Activity

When the intrinsic group was examined by gender, the inverse relationship between an intrinsic religious orientation and participation in premarital sexual intercourse was significant only for females. Female intrinsics were more likely to be virgins than were females who are extrinsics, indiscriminately proreligious and nonreligious.

Throughout the literature, the influence of religion on females' attitudes toward sex and sexual behavior has been stronger than religion's influence on males' attitudes (Earle & Perricone, 1986; Kelley, 1978; King, et al., 1976) and behaviors (Davidson & Leslie, 1977; Ehrmann, 1959;

Reiss, 1964; Staples, 1978; Tanfer & Cubbins, 1992; Thomas, 1973).

Research on religious orientation has shown that intrinsic are more likely to be female than male (Argyle & Beit-Hallahmi, 1975; Watson, Morris & Hood, 1990). The current study is in agreement with the findings of previous research, as 64% of the sample intrinsic population is female. It could be concluded that females' sexual attitudes and behaviors are more strongly related to religiosity because more females are intrinsically oriented toward religion. Intrinsically oriented persons incorporate their belief system into their lives (Allen & Spilka, 1967; Allport & Ross, 1967) and would be less likely than otherwise oriented persons to dismiss or disregard doctrinal teachings, such as those regarding premarital sexual activity.

Academic Classification, Religious Orientation and Sexual Activity

The results of this study regarding the relationship between academic classification, virginity and religious orientation were somewhat confusing. Table 1 (page 82) depicts the academic classification of the subject pool. The pool was composed of 43.404 % first year students, 27.234% sophomores, 17.872% juniors and 11.489% seniors. The number of students in each class reflected the number of

students enrolled in the psychology classes from which the pool was drawn. The majority of the classes were introductory psychology classes, with the remainder being upper division psychology research classes.

Table 15 illustrates virginity by academic classification.

Table 15. Virginity of Sample by Academic Classification

Academic Classification	Frequency	Virgin	Nonvirgin
First Year	102	49.02%	50.98%
Sophomore	64	37.50%	62.50%
Junior	42	19.05%	80.95%
Senior	27	25.93%	74.07%

Research has demonstrated that older students are more likely than younger students to have engaged in premarital sexual intercourse (Baier et al., 1991; Darling, et al., 1992; Jessor & Jessor, 1977; Walsh, et al., 1976). As loss of virginity is seen as a rite of passage into adulthood, (Koch, 1988; Selverstone, 1989) and the college environment allows students opportunities to experiment with sexual behaviors, (Christopher & Cate, 1992; Libbey, et al., 1978; Reiss, 1967; Tanfer & Cubbins, 1992; Walters, 1992) it follows that the longer the students are in an opportunistic

environment and the closer to adulthood they feel they are, the more likely it is that they will engage in sexual intercourse. However, it was noted in this study that junior students were most likely to have participated in premarital sexual intercourse. This finding is inconsistent with general research.

This study found that first year intrinsic students were not more likely to be virgins than their non-intrinsic peers, whereas senior intrinsics were more likely to be virgins than their non-intrinsic peers. This difference in the first year and senior intrinsic students may be due to the concept of "adamant virginity" referred to by Robinson, et al. (1991). Robinson, et al. held that the only virgins remaining on college campuses were students who had made deliberate decisions to preserve their virginity. First year students who were virgins (but not adamant virgins) would be likely to engage in sexual intercourse in due time. Seniors who were virgins were virgins because they made an intentional choice to be virgins. Intrinsic students would be more likely to be adamant virgins than their non-intrinsic peers. Their commitment to religious doctrine (Batson. 1976; Batson & Ventis, 1982; Dodrill, et al., 1973; Hoge & Carroll, 1973; King & Hunt, 1975; Spilka, et al., 1968) and their application of the doctrine to their personal lives is greater than the commitment of persons of

other religious orientations (Allen & Spilka, 1967; Allport & Ross, 1967).

The small number of junior virgins is puzzling. Two speculations come to mind in an attempt to explain this anomaly. The number of senior virgins may be extraordinarily high, implying that the number of junior virgins is low. The junior population may be extraordinarily sexually active due to a variable that is unique to their time and place in the university culture.

Ethnicity, Religious Orientation and Sexual Activity

As indicated in Table 2 (page 83), the sample population in this study was 59.15% Caucasian, 14.47% Asian/Pacific Islander, 11.91% Latino and 8.94% African American. The findings of this study show that intrinsic Caucasian students were more likely to be virgins than their extrinsic, indiscriminately proreligious and nonreligious peers. The same held true for intrinsic Caucasian's involvement in oral-genital sexual activity. Latino, African American and Asian/Pacific Islander intrinsic virgins were not differentiated from their peers with different religious orientations. The results of this study show that when ethnicities were grouped together for comparison the large Caucasian population affected the groups.

No research was discovered which pertained to the sexual behavior of college students of color. Staples (1978), Tanfer and Cubbins (1992) and Woodroof (1985) specifically state that their findings apply solely to Caucasian students. A safe assumption would be that many of the research sample populations did not include students of color. Research on non college students by agencies such as the Center for Disease Control would not be applicable to college students, as only a small portion of the general population is enrolled in colleges and universities. Research on religious orientation of non-Caucasians was not found either.

Religious Affiliation, Religious Orientation and Sexual Activity

Over half (65.1%) the students participating in this study declared affiliation with the Roman Catholic Church. Study results indicated that intrinsic students who claimed affiliation with the Roman Catholic church were more likely than their non-intrinsic Roman Catholic peers to be virgins. The large number of Roman Catholic students in the sample affected the grouping of students of other religious affiliations for comparison.

There was no difference in the rate of participation in oral-genital sexual activity between intrinsic Roman Catholics and their non-intrinsic peers. Differences were

seen in the rate of participation in oral-genital sexual activity between non-Roman Catholic intrinsic and non-Agnostic intrinsic and their extrinsic, indiscriminately proreligious and nonreligious peers.

These results support the research showing that there is no conclusive evidence that Roman Catholic students are more or less sexually permissive than non-Roman Catholics (Bell, 1966; Bell & Blumberg, 1959; Bell & Chaskes, 1970; Bell & Coughy, 1980; DeLamater & MacCorquodale, 1979; Middendorp, et al., 1970; Tanfer & Cubbins, 1992). Tanfer and Cubbins (1992) explain that Catholicism is no longer a predictor of conservative moral behaviors, such as sexual behavior.

It must be noted that the sample population was overwhelmingly Roman Catholic and Judeo-Christian in nature. Non-Western religious traditions do not necessarily have the same religious prohibitions on sexual behavior. Findings should be generalized with caution.

Grade Point Average, Religious Orientation and Sexual Activity

Results of this study indicated that intrinsic students who earned a grade point of 3.0 or above were more likely than their non-intrinsic peers who earned a GPA of 3.0 or above to be virgins. This finding did not hold true for participation in oral-genital sexual activity.

There was no difference in the sexual activity of students who earned GPA's below 3.0 based on their religious orientations.

Importance of Religion, Religious Orientation and Sexual Activity

Over three-fourths of students who engaged in premarital sexual intercourse (75.3%) and oral-genital sexual activity (76.0%) reported that religion was very or somewhat important in their lives. Students who considered themselves religious were sexually active.

The students' self-report of religiosity was in agreement with the definition of religiosity used in this study. All intrinsic and indiscriminately proreligious students stated religion was very or somewhat important in their lives. Only 15.5% of extrinsic and 16.1% of nonreligious students reported that religion was very important in their lives.

Based solely on their behavior, it seemed that students had no difficulty reconciling religious and sexual behavior. The two behaviors were not mutually exclusive.

CONCLUSIONS

The results of this study allow two important conclusions to be drawn.

1. Highly religious students (as defined by an intrinsic religious orientation) were less likely to have engaged in premarital sexual intercourse or oral-genital sexual activity than their less religious (as defined by extrinsic, indiscriminately proreligious and nonreligious religious orientations) peers.
2. Many students who considered religion to be an important part of their lives are engaged in sexual activity.

This study supports, with great reservation, the popular belief that religious students do not engage in premarital sexual activity. Intrinsically oriented students were the only group of religious students who were less likely to engage in sexual activity.

The results of this study stress that the popular belief that religious students do not engage in premarital sexual activity is misleading. The mixed results of previous research on college student religious and sexual behavior may have allowed some administrators to be lulled into the belief that religious students are not sexually active. College and university administrators need to be aware that students who are identified as being religious are in fact sexually active.

The findings of this study probably have the most implications at institutions affiliated with particular religious denominations. Those institutions sometimes

mistakenly believe that because the mission of the institution embraces a certain religious doctrine, the students are in agreement with and abide by the doctrine. This union of institutional beliefs and student behaviors is not necessarily true of all religiously affiliated institutions. As this study shows, even students who do hold the institutional religious beliefs are sexually active.

This shift from looking at religious orientation as opposed to religious behavior impacts many areas of Student Affairs, such as Counseling and Residence Life, but has primary impact in the areas of Student Health and Campus Ministry.

Any applications of these findings should be formulated with caution. Findings are not necessarily generalizable beyond the sample population.

Impact on Student Health Services

Student health administrators could use the results of this research to aid in convincing the college or university administration that increased emphasis must be placed on sex education, contraception and sexually transmitted diseases. Sexual health is an important component of student health. Sexual health risks are the greatest health risks facing college students today (Guyton, et al., (1989). In

addition, love relationships and sexual relations are important in students' lives. As the results of this study show, even in populations of highly religious students, the rate of sexual activity is high.

Impact on Campus Ministry Programs

Campus ministers can no longer assume that because students are in church and attending retreats, prayer services and bible studies that they are not having sexual relations. Attention must be given to the spiritual component of sexual decision making. Although some religious students abide by church doctrine, such doctrine does not seem to have an impact on a large proportion of students.

Campus ministers may wish to take care not to alienate the large portion of their students who are sexually active. They may want to design interactions and reflections which facilitate discussion or thought on love relationships and sexual behaviors.

RECOMMENDATIONS FOR FURTHER STUDY

1. A measure of religious orientation which addresses a multi-cultural population may produce different results. The ROS was developed in 1967. Since that time, college student populations have diversified in

terms of gender, race, culture and religious affiliation (Chronicle of Higher Education, September, 1, 1995).

2. The construct of religious orientation as it applies to persons affiliated with religious traditions other than Judeo-Christian needs to be explored. The research on religious orientation focuses on Judeo-Christian traditions.
3. The relationship between ethnicity, religious orientation and religious affiliation needs to be investigated. Differences (if any) between students of differing ethnic groups with regard to religious orientation should be investigated.
4. Further examination of the relationship between indiscriminately proreligious students' sexual behavior and intrinsic students' sexual behavior is called for. Both types score high on the Intrinsic subscale. Investigation into behavioral similarities such as sexual behaviors would be enlightening.
5. This study used lifetime sexual behaviors as an indicator of sexual activity. It does not consider students who have changed patterns of sexual activity for whatever reason. Some reasons for changes in sexual behavior could be associated with religious experiences. A study which acknowledges current and lifetime sexual behaviors would be appropriate.

6. A study of how the different religious orientations make decisions regarding sexual activity would provide Student Affairs practitioners more knowledge about how they can assist students in making important life decisions.

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APPENDICES

Appendix A**Memorandum to Psychology Faculty Regarding Research**

DATE: February 18, 1992

MEMO TO: Dr. Mary Catherine Fitzgerald
Dr. Judy Foy
Dr. Michael Foy
Dr. Steven Hutchinson
Dr. Michelle Jackson
Ms. Pamela Pennington
Dr. Sandra Lyons-Rowe
Mr. George Sharp
Dr. Alan Swinkels
Dr. Patricia Walsh

FROM: Beth Stoddard

I would appreciate it if you could make the following announcement to your classes which have the opportunity to participate in the Subject Pool:

A study entitled "College Student Behaviors" is available for your participation. It will fulfill 1/2 hour of your research requirement. This study will examine college student attitudes and social behaviors through the use of three pencil and paper instruments. Your anonymity is guaranteed. Sign up sheets are posted on the research bulletin board in the south end of the first floor of Seaver Hall. These sign up sheets will provide information about the times and location of the experiment.

Thank you very much.

Appendix A**Description of Research Posted On Research Bulletin Board**

Title of Study: College Student Behavior

Principal Investigator: Beth Stoddard

Faculty Sponsor: Dr. Bernard

Contact Person: Beth Stoddard

Telephone Number: 338-2963

Description of Study: This study will examine college student attitudes and social behaviors through the use of three paper and pencil surveys.

Length of Study: 30 minutes

Number of research hours the study is worth: 1/2 research hour

Special Subject Requirements: Subjects should be never married undergraduate students 17 to 24 years old.

Please sign up on the sheets below for a day and time which is convenient for you.

Approved by Human Ethics Committee of
Loyola Marymount University

Appendix A

Sample Sign Up Sheet

**SIGN UP SHEET
COLLEGE STUDENT BEHAVIOR**

**MARCH 2, 1992, MONDAY
5:00 P.M.
SEAVER 201**

- | | | |
|-----|--|--|
| 1. | | REMINDER: Monday 3/2/92
5:00 p.m. S201
College Student Behavior |
| 2. | | REMINDER: Monday 3/2/92
5:00 p.m. S201
College Student Behavior |
| 3. | | REMINDER: Monday 3/2/92
5:00 p.m. S201
College Student Behavior |
| 4. | | REMINDER: Monday 3/2/92
5:00 p.m. S201
College Student Behavior |
| 5. | | REMINDER: Monday 3/2/92
5:00 p.m. S201
College Student Behavior |
| 6. | | REMINDER: Monday 3/2/92
5:00 p.m. S201
College Student Behavior |
| 7. | | REMINDER: Monday 3/2/92
5:00 p.m. S201
College Student Behavior |
| 8. | | REMINDER: Monday 3/2/92
5:00 p.m. S201
College Student Behavior |
| 9. | | REMINDER: Monday 3/2/92
5:00 p.m. S201
College Student Behavior |
| 10. | | REMINDER: Monday 3/2/92
5:00 p.m. S201
College Student Behavior |
| 11. | | REMINDER: Monday 3/2/92
5:00 p.m. S201
College Student Behavior |
| 12. | | REMINDER: Monday 3/2/92
5:00 p.m. S201
College Student Behavior |

Appendix A
Sample Consent Form

CONSENT FORM

Religious Orientation and Sexual Behavior of College Students

I understand that this form explains the purpose of the study, the nature of my participation, and my rights as a participant in this study.

This research examines the relationship between religious orientation and sexual behavior of college students. The research is designed to determine if certain sexual behaviors are influenced by individuals' motivations for religious behavior. Various demographic variables are also examined in light of religious orientation and sexual behavior.

Participation in this study will consist of privately reading and responding to a series of three questionnaires about religious orientation, sexual behavior and demographic background. The time required for this participation will not exceed 30 minutes.

One half hour of research credit will be given to each participant in this research. If participants choose to withdraw from the experiment prior to completing the questionnaires, they will still earn the research credit. Participation is voluntary and confidential.

After all the data have been collected and analyzed the results of the study will be available from the investigator. Only group results will be revealed. No individual results will be disclosed.

Participation in this study should not pose any risks to participants. However, if participants do experience any discomfort with the subject matter as a result of this research, they are encouraged to contact the investigator so that she may direct them to a counselor at the LMU Counseling Center.

Any questions or concerns regarding the research should be directed to the investigator.

Subject Initials

Date

Principal Investigator:

Beth Stoddard
Malone 105
338-2963

Appendix A

Sample Cover Sheet of Survey Packets

This study concerns social and religious views and behaviors. Some of the survey items involve views and behaviors which many people consider to be private. If you would prefer not to complete the survey materials, please feel free to leave. If you choose to remain and complete the survey, if, at any time, you feel uncomfortable with the survey items please stop, fold the survey, place it in the envelope, seal the envelope and return it to me.

Because some of the survey items are of a sensitive nature, I ask that you respect the privacy of the people sitting near you. Please refrain from looking at others' responses.

When you finish the survey, please place it in the envelope, seal the envelope and place it in the box in the front of the room.

Thank you.

Appendix A**Lifetime Sexual Behavior Scale, DeLamater, 1975**

Please respond "yes" or "no" to the following questions.

1. Have you ever participated in necking (kissing and hugging)?
 Yes
 No
2. Have you ever participated in French or deep kissing?
 Yes
 No
3. Have you ever participated in petting involving male fondling female's breasts?
 Yes
 No
4. Have you ever participated in petting involving male fondling female's genitals?
 Yes
 No
5. Have you ever participated in petting involving female fondling male's genitals?
 Yes
 No
6. Have you ever participated in male oral contact with female's genitals?
 Yes
 No
7. Have you ever participated in female oral contact with male's genitals?
 Yes
 No
8. Have you ever participated in genital apposition (contact between genitals without penetration)?
 Yes
 No
9. Have you ever participated in heterosexual intercourse?
 Yes
 No

Appendix A**Religious Orientation Scale, Allport and Ross, 1967****Cover Sheet****INQUIRY CONCERNING SOCIAL AND RELIGIOUS VIEWS AND BEHAVIORS**

The following items deal with various types of religious ideas and social opinions and behaviors. We should like to find out how common they are.

If none of the choices exactly expresses your feelings or behaviors, then indicate the one which is closest to your own views or behaviors. If no choice is possible you may omit the item.

There are no "right" or "wrong" choices. There will be many religious people who will agree with all the possible alternative answers.

Appendix A

Religious Orientation Scale, Allport and Ross, 1967

Please indicate the response you prefer, or most closely agree with, by circling the letter corresponding to your choice.

1. What religion offers me most is comfort when sorrows and misfortune strike.
 - a. I definitely disagree
 - b. I tend to disagree
 - c. I tend to agree
 - d. I definitely agree

2. One reason for my being a church member is that such membership helps to establish a person in the community.
 - a. Definitely not true
 - b. Tends not to be true
 - c. Tends to be true
 - d. Definitely true

3. The purpose of prayer is to secure a happy and peaceful life.
 - a. I definitely disagree
 - b. I tend to disagree
 - c. I tend to agree
 - d. I definitely agree

4. It doesn't matter so much what I believe so long as I lead a moral life.
 - a. I definitely disagree
 - b. I tend to disagree
 - c. I tend to agree
 - d. I definitely agree

5. Although I am a religious person I refuse to let religious considerations influence my everyday affairs.
 - a. Definitely not true of me
 - b. Tends not to be true
 - c. Tends to be true
 - d. Clearly true in my case

6. The church is most important as a place to formulate good social relationships.
 - a. I definitely disagree
 - b. I tend to disagree
 - c. I tend to agree
 - d. I definitely agree

7. Although I believe in my religion, I feel there are many more important things in my life.
 - a. I definitely disagree
 - b. I tend to disagree
 - c. I tend to agree
 - d. I definitely agree

8. I pray chiefly because I have been taught to pray.
 - a. Definitely not true of me
 - b. Tends not to be true
 - c. Tends to be true
 - d. Clearly true in my case

9. A primary reason for my interest in religion is that my church is a congenial social activity.
 - a. Definitely not true of me
 - b. Tends not to be true
 - c. Tends to be true
 - d. Clearly true in my case

10. Occasionally I find it necessary to compromise my religious beliefs in order to protect my social and economic well-being.
 - a. I definitely disagree
 - b. I tend to disagree
 - c. I tend to agree
 - d. I definitely agree

11. The primary purpose of prayer is to gain relief and protection.
 - a. I definitely agree
 - b. I tend to agree
 - c. I tend to disagree
 - d. I definitely disagree

12. I try hard to carry my religion over into all my other dealings in life.
- I definitely disagree
 - I tend to disagree
 - I tend to agree
 - I definitely agree
13. Quite often I have been keenly aware of the presence of God or the Divine Being.
- Definitely not true
 - Tends not to be true
 - Tends to be true
 - Definitely true
14. My religious beliefs are what really lie behind my whole approach to life.
- This is definitely not so
 - Probably not so
 - Probably so
 - Definitely so
15. The prayers I say when I am alone carry as much meaning and personal emotion as those said by me during services.
- Almost never
 - Sometimes
 - Usually
 - Almost always
16. If not prevented by unavoidable circumstances, I attend church:
- more than once a week
 - about once a week
 - two or three times a month
 - less than once a month
17. If I were to join a church group I would prefer to join (1) a Bible Study group, or (2) a social fellowship.
- I would prefer to join (1)
 - I probably would prefer (1)
 - I probably would prefer (2)
 - I would prefer to join (2)

18. Religion is especially important to me because it answers many questions about the meaning of life.
- a. I definitely disagree
 - b. I tend to disagree
 - c. I tend to agree
 - d. I definitely agree
19. I read literature about my faith (or church).
- a. Frequently
 - b. Occasionally
 - c. Rarely
 - d. Never
20. It is important to me to spend periods of time in private religious thought and meditation.
- a. Frequently true
 - b. Occasionally true
 - c. Rarely true
 - d. Never true

Appendix A
Demographic Survey

Please respond by checking the answers which most accurately describe you.

1. What is your gender?

- Male
 Female

2. What is your current age?

- | | |
|-----------------------------|--------------------------------------|
| <input type="checkbox"/> 17 | <input type="checkbox"/> 22 |
| <input type="checkbox"/> 18 | <input type="checkbox"/> 23 |
| <input type="checkbox"/> 19 | <input type="checkbox"/> 24 |
| <input type="checkbox"/> 20 | <input type="checkbox"/> 25 and over |
| <input type="checkbox"/> 21 | |

3. What is your ethnicity?

- African American
 Asian/Pacific Islander
 Latino
 Native American
 International Student
 Caucasian
 Other _____

3. What is your current cumulative GPA?

- 4.0 to 3.1
 3.0 to 2.1
 2.0 to 1.1
 Below 1.0
 Don't know

4. What is your academic classification?

- Freshman
 Sophomore
 Junior
 Senior

5. What is your current marital status?

- | | |
|-----------------------------------|------------------------------------|
| <input type="checkbox"/> Married | <input type="checkbox"/> Separated |
| <input type="checkbox"/> Single | <input type="checkbox"/> Widowed |
| <input type="checkbox"/> Divorced | |

6. What is your sexual orientation?

- Heterosexual
- Homosexual
- Bisexual
- Not Certain

7. What is your religious preference?

- Jewish
- Roman Catholic
- Greek or Roman Orthodox Catholic
- Baptist
- Episcopalian
- Lutheran
- Methodist
- Presbyterian
- Other Protestant _____
- Mormon
- Christian Science
- Other Christian _____
- Islam
- Buddhist
- Hindu
- Other Eastern Religion
- New Age
- Agnostic
- Atheist
- Other _____

8. How important would you say religion is in your own life?

- Very important
- Somewhat important
- Not very important

Please place the completed survey in the attached envelope and seal the envelope.

Thank you for your assistance.

Appendix A
Debriefing Script

DEBRIEFING

Thank you for participating in this research. Before you leave, I would like to give you more information about the research.

Previous research has asked the question "Are students religious and how does their religiosity relate to their sexual behavior?" It has been determined that there is no relationship between religiosity as defined by religious affiliation, attitudes, church attendance or beliefs and sexual behavior.

This research asks "Why are students religious and what is the relationship between their motivation for being religious and their sexual behavior?" It is hypothesized that students who have internal motivations will be less likely to engage in sexual behaviors than those who have external motivations for engaging in religious behaviors.

Again, thank you for your participation. If you have any further questions regarding the research, I would be happy to answer them on an individual basis immediately following the session.

Thank you and good-bye.

Appendix B

Religious Affiliation of Sample Population

<u>Affiliation</u>	<u>Frequency</u>	<u>Percent</u>
Christian Scientist	1	0.43%
Islamic	1	0.43%
Greek/Roman Orthodox Catholic	2	0.85%
Buddhist	2	0.85%
Episcopalian	4	1.70%
Methodist	4	1.70%
Jewish	5	2.13%
Lutheran	5	2.13%
Other Protestant	5	2.13%
Baptist	6	2.55%
Presbyterian	6	2.55%
Other Christian	6	2.55%
Atheist	9	3.83%
Agnostic	11	4.68%
Other	15	6.38%
Roman Catholic	153	65.11%
TOTAL	235	100.00%