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CHRISTIAN ORTHODOXY AND PREMARITAL SEXUAL BEHAVIOR
AMONG HETEROSEXUAL COLLEGE STUDENTS

By

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ABSTRACT

CHRISTIAN ORTHODOXY AND PREMARITAL SEXUAL BEHAVIOR AMONG HETEROSEXUAL COLLEGE STUDENTS

By

Paul Andrew Eckert

Past research concerning the relationship between religiosity and sexual behavior has suffered because important aspects of both religiosity and sexual behavior have been overlooked. The present study alleviates this problem by employing more comprehensive measures of each phenomenon. Christian orthodoxy was assessed by means of a multidimensional scale measuring religious belief, experience, and practice. Sexual behavior was assessed using a multidimensional inventory measuring degree of physical intimacy in sex, frequency of sexual activity, number of sexual partners, and affection for sexual partners.

Data analysis revealed the following major findings. First, religiosity is negatively related to degree of physical intimacy in sex, frequency of sexual activity, and number of sexual partners. Second, religiosity is positively related to affection for sexual partners. Third, a nonsignificant trend suggests that, as religiosity increases, a positive relationship between affection and degree of physical intimacy also increases.

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INTRODUCTION

The relationship between religiosity and premarital sexual behavior has been the subject of scientific study at least since Kinsey published his groundbreaking work on male sexuality in 1948. Religiosity has generally been considered to be the degree of Judeo-Christian orthodoxy (Clayton & Gladden, 1974). Sexual behavior has for the most part been measured as degree of permissiveness (Mahoney, 1980; Reiss, 1967).

Because of the traditional Judeo-Christian tendency to restrict sexual behavior outside marriage (Bullough, 1976), it seems that a negative relationship would exist between religiosity and premarital sexual behavior, i.e. that an individual's sexual permissiveness would decrease as religiosity increased. Numerous correlational studies have sought to determine whether or not such a negative relationship does in fact exist (King, Abernathy, Robinson, & Balswick, 1976; Mahoney, 1980). Mahoney notes that the results of such studies have been mixed, with some research revealing a negative relationship and other research revealing no significant relationship at all.

It seems that at least part of this confusion has resulted from a failure to define and measure religiosity and sexual behavior adequately. In exploring this state of affairs, it will be useful to consider what aspects of religiosity and sexual behavior should be subjects of scientific study and then to see which of these factors have actually been dealt with effectively in the research literature.

In the early 1960's, Glock (1962, 1965) observed that it was simplistic

to conceptualize Christianity as unidimensional--as consisting only of belief, or ritualistic behavior, or emotional experience. Instead he conceptualized it as multidimensional. The five dimensions he identified were: experiential (emotions), ritualistic (e.g., church attendance), ideological (beliefs), intellectual (knowledge), and consequential (moral effects). Since that time, some critics have rejected the multidimensional approach in favor of a unidimensional concept (Clayton, 1971; Clayton & Gladden, 1974). However, although different sets of dimensions have been suggested, research has been strongly supportive of the multidimensional viewpoint (DeJong, Faulkner, & Warland, 1976; Demerath & Letterman, 1969; Faulkner & DeJong, 1966; Fukuyama, 1961; Glock & Stark, 1966; Goldsen, 1960; Gorlow & Schroeder, 1968; King & Hunt, 1972; Lehman & Shriver, 1968; Lenski, 1961; Marx, 1967; Stark & Glock, 1968; Yinger, 1969).

Surprisingly, relatively few studies of the relationship of religiosity to premarital sexual behavior have employed the multidimensional approach (e.g., Clayton, 1972; Faulkner & DeJong, 1968; Hornick, 1978; Rohrbaugh & Jessor, 1975; Young, 1981). It is perhaps understandable that studies published prior to Glock's work would have used unidimensional scales, but the continued use of such simplistic measures into the late 1960's and 1970's seems difficult to justify. Regrettably, most of the published research has conceptualized religiosity either in terms of church attendance alone (e.g., Bell & Chaskes, 1970; Burgess & Wallin, 1953; Davidson & Leslie, 1977; Ehrman, 1959; Jackson & Potkay, 1973; Kanin & Howard, 1958; Kinsey, 1948, 1953; Spanier, 1976) or in terms of belief alone (e.g., Clayton, 1969; Curran, Neff, & Lippold, 1973; King et al., 1976; Lindenfeld, 1960).

Sexual behavior, like religiosity, is best conceptualized as a multivariate, or multidimensional, phenomenon. The most obvious variable of

importance is the degree of physical intimacy experienced. Sexual behavior clearly involves much more than coitus, with non-coital behavior ranging anywhere from kissing to the most intimate oral-genital contact. To use experience of coitus as the only standard of measurement would be to consider the differences between the broad range of non-coital behaviors to be insignificant. To argue that there is no important difference, between a woman kissing her boyfriend and performing felatio on him, is absurd.

Degree of physical intimacy is, however, not the only variable of interest. One must also consider the frequency with which a given behavior is performed. Given two men who have "experienced coitus", one man may have done so only once, "in a moment of weakness," whereas the other may deliberately seek and gain the experience every weekend.

The number of partners with whom a behavior is experienced is also important. Without reference to this variable, the significance of degree and frequency of behavior is hard to gauge. For example, of two women who have experienced coitus four times in the last month, one woman may have done so with her steady boyfriend, while the other may have done so with four strangers she "picked up" at local bars.

The discussion of number of partners also raises the issue of the relationship with those partners, the most salient variable being level of affection. In our last example, what may stand out more clearly than the difference in number of partners is the difference in level of affection felt for them. The first woman had intercourse with her boyfriend, for whom she had strong affection, whereas the second woman sought coitus with men for whom she had no particular affection at all. To measure affection is not to mix attitudes with behavior. Rather, it is to assess a vital non-motor component of behavior--the emotional state of the organism when engaged in

a particular kind of motor activity. Affection is not measured as an adjunct to behavior but as a part of behavior.

The foregoing discussion of multidimensional sexual behavior measurement has identified four variables as particularly relevant: degree of physical intimacy, frequency of occurrence, number of partners, and level of affection for them. Just as in the case of the religiosity variable, most studies comparing religiosity and sexual behavior have been surprisingly simplistic in their assessment of sexual behavior. Most have ignored at least one of the salient variables, and the measures of variables which were included have been less than comprehensive. For example, regarding the "degree of physical intimacy" variable, the majority of researchers have dealt only with coital experience (e.g., Clayton, 1969, 1972; Davidson & Leslie, 1977; Faulkner & DeJong, 1968; Jackson & Potkay, 1973; Jessor & Jessor, 1975; Rohrbaugh & Jessor, 1975). Spanier (1976) dealt with both coital and noncoital behavior, but his measure of noncoital experience used vague terms such as "light" and "heavy" petting. Such terms may mean a wide variety of things to different subjects, and important distinctions are obscured.

Mahoney's (1980) recent study represents perhaps the best attempt to measure all four relevant sexual behavior variables. He employed the quite specific and detailed Bentler Heterosexual Behavior Inventory (Bentler, 1968a, 1968b), and thus was one of very few studies to use a satisfactory measure of the "degree" variable. Mahoney also directed attention to the frequency, number of partners, and affection variables.

However, his measurement of these variables fell far short of the kind of comprehensiveness he employed with the degree variable. He explored the number of coital partners but not the number of noncoital partners. He

examined the frequency of both noncoital and coital behavior but only dealt with the broad categories of "coitus", "light petting (above waist)", and "heavy petting (below waist)" (p. 102), rather than asking for the frequency of each of the specific behaviors in the Bentler inventory. Mahoney also investigated affection for partners, but only for the first and most recent coital partners.

The foregoing survey of the methods used to measure religiosity and sexual behavior has revealed that they have for the most part been inadequate. If religiosity and sexual behavior are in fact multidimensional, it is clearly simplistic to search for a single relationship, negative or otherwise, between them. It is more appropriate to ask which specific dimensions of religiosity relate to which specific dimensions of sexual behavior. Only then can this important issue be explored in depth rather than superficially.

To satisfy the rigorous requirements outlined above, the present study employs two quite effective measurement instruments. The DeJong et al. (1976) Religiosity Scale is used as a measure of religiosity. Sexual behavior is assessed by means of a new instrument, which is based in part on the Bentler Heterosexual Behavior Inventory (Bentler 1968a, 1968b) and the work of Mahoney (1980). The structure of these measures will be discussed in detail later.

Assuming that these multidimensional measures adequately assess Christian religious orthodoxy and sexual behavior, what pattern of relationships between them may we expect to find? Prior research is of little help in forming specific hypotheses because the religiosity measure has never been used in the context of a religiosity--sexuality study, and the sexual behavior scale has never been used at all. Furthermore, the few other multidimensional religiosity studies which have been done do not appear to

have directly examined the relationship of the separate dimensions of religiosity to sexual behavior. They have instead for the most part used a composite religiosity score which pools scores on measures of the individual dimensions. Thus any hypotheses concerning the separate dimensions of religiosity would be purely speculative. Since no pattern of relationships seems intuitively obvious, no analysis will be attempted until data collection is complete.

It is easier, however, to speculate concerning the relationship of religiosity to the different dimensions of sexual behavior, without distinguishing between the different dimensions of religiosity. Because of the previously described sexual restrictiveness of the Judeo-Christian religious tradition, it seems reasonable to expect that religiosity would correlate negatively with the degree of physical intimacy in sex, the frequency of sexual activity, and the number of sexual partners. Because of the Judeo-Christian emphasis on the value of love (Beach & Niebuhr, 1973), it also seems likely that religiosity would correlate positively with the degree of affection felt for sexual partners.

Further, it seems to follow from the prominent Judeo-Christian idea of sexual behavior as an expression of love, that greater emotional intimacy would be associated with a higher degree of physical intimacy in sex and a higher frequency of sexual activity. This speculation leads to two additional expectations. As religiosity increases, the correlation between affection and degree of physical intimacy will grow more positive. Also, as religiosity increases, the correlation between affection and frequency of sexual activity will grow more positive.

One final issue of importance has not yet been discussed. The potential effect of gender on the relationship between religiosity and sexual

behavior must be considered. Mahoney (1980) notes that prior research has yielded conflicting results concerning both the existence and nature of a gender effect. Furthermore, as previously noted, because the measures employed in the present study have not been used before in a religiosity-sexuality context, the relevance of prior research would be questionable in any case. Thus it seems unwise to offer a specific hypothesis concerning the role of gender as an intervening variable between religiosity and sexual behavior. Nevertheless, because gender may potentially prove an important factor, it will be taken into account in data analysis.

In sum, four hypotheses are offered concerning relationships among religiosity and sexual behavior: (1) Religiosity will correlate negatively with the degree of physical intimacy in sex, the frequency of sexual activity, and the number of sexual partners. (2) Religiosity will correlate positively with the degree of affection felt for sexual partners. (3) As religiosity increases, the correlation between affection and degree of physical intimacy in sex will grow more positive. (4) As religiosity increases, the correlation between affection and frequency of sexual activity will grow more positive.

METHOD

Subjects

Questionnaires were completed by 266 undergraduate subjects at Michigan State University during the Spring Term and Fall Term of 1983. The subjects were unpaid volunteers enrolled in introductory psychology courses. Their participation allowed them to gain extra credit toward their course grades.

Because the present study was intended to deal specifically with the premarital heterosexual behavior of college-age students, subjects' data were included in the analysis only if they (1) had never been married, (2) were exclusively heterosexual in orientation, and (3) were between the ages of 18 and 22, inclusive. Prior to data analysis, questionnaire data were excluded for subjects not satisfying all of these requirements.

Of the 266 initial participants, 72 (or 27% of the original total) were excluded from data analysis for the following reasons: 25 (9%) either specified a sexual orientation other than "exclusively heterosexual" or failed to specify their orientation; 7 (3%) were over the upper age limit of 22; 1 (0.4%) failed to specify gender; and 39 (15%) completed the questionnaire incorrectly. After exclusion of the above subjects, 194 acceptable subjects remained. However, because one subject's questionnaire was apparently lost during the process of computer data entry, data for 193 subjects were actually available.

These 193 subjects had the following characteristics. There were 76 (39%) males and 117 (61%) females. Subjects' ages had a mode of 18 and a mean of 19.1. Class standing ranged from Freshman through Senior, with the largest percentages comprised of Freshman (54%) and Sophomores (23%).

The religious affiliations of subjects were as follows: Baptist (7%), Methodist (7%), Presbyterian (7%), Lutheran (9%), Episcopal (4%), Other Protestant (20%), Catholic (32%), Orthodox (1%), Jewish (5%), Hindu (1%), Other Religions (2%), and No Religious Affiliation (7%).

Instruments

Religiosity scale. Because DeJong et al. (1976) seem to offer the most carefully constructed multidimensional religiosity measure, it was used in the present study. The scale's authors claim that it conceptualizes religiosity as Judeo-Christian orthodoxy. While this is for the most part true, a few items do employ explicitly Christian terminology or make specific references to Jesus. As a result, the scale appears to be oriented more toward Christians than toward Jews. For this reason, in the present study the DeJong et al. Religiosity Scale will be considered a measure of specifically Christian orthodoxy.

The scale contains six subscales, each of which measures one of six different dimensions of religiosity: belief, knowledge, experience, practice, individual moral consequences, and socio-moral consequences. If the two consequential dimensions are considered as one, then the DeJong et al. Scale measures the five dimensions of religiosity originally outlined by Glock (1962, 1965).

Despite its strengths, the scale is not without problems. DeJong et

al. refer to the argument that the consequential dimensions ought to be excluded because they actually measure the effect of religion on secular life rather than measuring a component of religion itself. This argument appears to have considerable merit. Nevertheless, DeJong et al. include these dimensions in their scale. Furthermore, the content of some items is sufficiently controversial that responses might not accurately reflect subjects' degree of orthodoxy. Even within religious groups which would generally be considered conservative, moral debates continue over such issues as capital punishment and civil disobedience.

The foregoing arguments cast considerable doubt on the usefulness of the consequential subscales. However, they were included in the questionnaire used for data collection so that their psychometric properties could be evaluated in detail.

The original format of the DeJong et al. Scale is available in their 1976 publication. This format has been altered slightly to suit the purposes of the present study. The full text of the modified scale appears in Appendix A.

Sexual behavior inventory. A new sexual behavior scale was developed and employed for the first time in the present study. Although based on the Bentler Heterosexual Behavior Inventory (Bentler 1968a, 1968b), the instrument represents an extensive modification and expansion of the basic Bentler approach. Because of its novelty, the new inventory will be referred to as the Eckert Heterosexual Behavior Inventory (EHBI).

In order to understand the structure of the EHBI, it is necessary to have some familiarity with the original Bentler inventory and the problems associated with it. The Bentler inventory is a Guttman scale which

specifies twenty-one different heterosexual behaviors. The behaviors form a hierarchy reflecting the sequence in which they are usually experienced as sexual development progresses. Indicating experience with a given behavior also indicates that all the other behaviors below that one in the hierarchy have most probably also been experienced. There are two twenty-one item scales--one for females and one for males--and their sequence of behaviors differs slightly. However, Bentler has also developed a ten-item short form of the scales which is identical for males and females.

This ten-item male-female sexual behavior scale may at first seem quite adequate as a measure of the degree of physical intimacy in sexual activity. Closer examination, however, reveals two important shortcomings. First, the sequence of behaviors is such that oral-genital contact and manipulation occur later in the sequence than ventral-ventral sexual intercourse. Mahoney (1980) found, however, that high religiosity males tend to experience many or all of the inventory's oral-genital behaviors before they experience intercourse. He suggests that this sequence reversal may occur because highly religious males are pressured by religious values and institutions to refrain from premarital coitus but are also pressured by non-religious social forces to gain extensive sexual experience. In any case, Mahoney's finding suggests that the sequence assumed in the Bentler scale cannot be expected to occur for all subjects.

This difficulty can be overcome by separating noncoital behavior from coital behavior. It is, after all, only the placement of coital behaviors relative to noncoital behaviors in the hierarchy which renders the sequence different for high and low religiosity males. The sequence of noncoital behaviors is essentially the same for both groups; the sequence of coital behaviors is also nearly identical.

There is a second major difficulty with the Bentler sequence of sexual behaviors. Bentler admits that his scale is not a perfect Guttman scale. Behaviors immediately adjacent to one another may occur in reverse sequence. One way to alleviate this problem is to eliminate some of the finer distinctions between very similar adjacent items by consolidating them into a single item. Following this strategy, it is possible to eliminate the distinction between a given noncoital behavior performed by one partner on the other, and mutual performance of that behavior on each other.

There must, however, be one exception to this consolidation. In the original 21-point scale, "mutual manual manipulation of genitals to mutual orgasm" occurs after some oral-genital activities. To preserve the Guttman character of the condensed scale, it is necessary to eliminate mutual manual manipulation from consideration altogether.

By separating coital from noncoital behavior and consolidating similar noncoital behaviors, the ten-item Bentler scale can be converted into two subscales: a five-item noncoital behavior subscale and a two-item coital behavior subscale. If a zero point is then added to both scales to allow for subjects who have had no coital or noncoital experience during the period of time assessed, the noncoital scale expands to six points and the coital scale expands to three. These changes in the Bentler scale are summarized in Appendix B.

The foregoing modifications of the Bentler inventory create an effective measure of the degree of physical intimacy in sexual behavior. However, a sexual behavior inventory in this form overlooks three other important aspects of such behavior: the frequency of sexual activity, the number of sexual partners, and the affection felt for sexual partners. The ESBI takes a major step beyond Bentler by addressing these issues in detail.

For each degree of physical intimacy experienced, the subject indicates the number of partners with whom that activity has been experienced, the number of times it has been done with each partner, and the level of affection felt for each partner. When the questionnaire is scored, an overall frequency value for that behavior is calculated by summing the number of times it has been done with all partners in that behavior.

An overall affection score for each degree of behavior is determined as follows. In a manner similar to that described by Mahoney (1980), the subject assigns to each partner a value of 1 for "no particular affection," 2 for "moderate affection," 3 for "strong affection," 4 for "in love," or 5 for "in love and engaged to be married." During questionnaire scoring, a weighted average is calculated across all partners in that degree of behavior. Each partner's affection score is weighted by the frequency with which the behavior was carried out with that partner.

The foregoing discussion has outlined the process of determining the frequency, number of partners, and affection values for each degree of physical intimacy experienced. The next step in processing sexual behavior data is to determine one value for the "degree of physical intimacy" variable. This is done by determining which of the behaviors experienced is the highest in the hierarchy of physical intimacy. Then the numerical value associated with this degree is designated as the value of the variable. This process is carried out separately for noncoital and coital behavior. For example, if an individual's highest noncoital degree is breast kissing and highest coital degree is ventral-ventral coitus, that person will receive a noncoital degree value of four and a coital degree value of two.

Although the method of determining the value of the degree variable is relatively straightforward, assigning a single value to each of the other three

sexual behavior variables is not so simple. Because most subjects will have experienced more than one degree of sexual behavior, they will have a different frequency, number of partners, and affection value for each of those behaviors. In some manner, each subject must be assigned a single frequency value, a single number of partners value, and a single affection value.

Perhaps the most obvious solution is simply to compute a sum or average of variable values for all degrees of behavior experienced by a given subject. The problem with this approach is that the various degrees of behavior are to some extent qualitatively different, and mixing them in a sum or an average might seriously distort the measurement process.

An example may serve to elucidate this admittedly complex issue. The significance of behavioral frequency is not necessarily the same for kissing as it is for oral-genital manipulation. Because oral-genital behavior is much more physically intimate than kissing, persons may tend to exercise more care and consideration before engaging in oral-genital contact. Thus, the significance of engaging in five separate oral-genital encounters may be considerable greater than that of kissing someone on five separate occasions. Clearly, the same numbers may mean quite different things.

A similar argument may be made concerning the number of sexual partners and affection for those partners. The number of partners and affection associated with kissing may have a different significance for subjects than the number of partners and affection associated with oral-genital contact.

Because of the serious problems associated with summing or averaging across degrees of sexual behavior, the ESBI employs a different method to calculate scores for frequency, number of partners, and affection. For each subject, the value for each variable is considered to be the value associated

only with the highest degree of behavior experienced. This is done separately for noncoital and coital degree. For example, if breast petting is the most physically intimate noncoital behavior experienced, then the values of frequency, number of partners, and affection would be those associated only with breast petting. If ventral-dorsal coitus is the highest degree of coital behavior experienced, then the variable values would be only those associated with that particular behavior.

Before proceeding further, one final issue of importance must be addressed. This concerns the time period about which the subject is to provide information concerning sexual behavior. Religiosity and sexual behavior are not static elements, especially during the college years, when social and intellectual development are proceeding at a rapid pace. For example, a year-long romance may end abruptly, thus radically reducing the extent of an individual's sexual behavior. Or an individual with no previous sexual experience may develop a physically intimate relationship for the first time and rapidly engage in extensive sexual experimentation.

The challenge of measurement is to select a time period which is short enough to capture only the individual's current behavior patterns but still long enough to provide a meaningful sample of the activities of interest. Care must also be taken not to overtax subjects' memory capacities by asking them to recall the exact number of instances of a particular behavior over an extended period of time. Past research has varied widely in the handling of this issue. Clayton (1972), for example, used a one-year period. Mahoney (1980), on the other hand, examined a period as short as one month. For the ESBI, a period of two months has been selected as a reasonable compromise which fits the requirements discussed above.

The final segment of the ESBI consists of two items which are designed

to help evaluate the instrument's validity. The first item asks subjects to indicate the accuracy of the sexual behavior inventory in assessing their sexual behavior, on a scale from 1 ("Not At All A Good Picture") to 5 ("A Very Good Picture"). The second item asks subjects to indicate the extent to which the last two months are typical of their general sexual behavior, on a scale from 1 ("Not At All Like Me") to 5 ("Very Much Like Me").

The full text of the ESBI is presented in Appendix C.

Procedure

Prior to recruitment of subjects, their participation was approved by the Michigan State University Committee On Research Involving Human Subjects (UCRIHS). Subjects were then recruited, during the Spring and Fall terms of 1983, by means of posted sign-up sheets. The sign-up sheets did not indicate that the study concerned religion and sexuality. In fact, the study was described only with the words "Questionnaire--Interesting." This initial lack of disclosure was intended to avoid bias in subject self-selection.

Upon arrival at the testing site--a large lecture hall--subjects received both an oral and a written explanation of the nature of the measures. The written explanation of the measures was contained in a consent agreement, which constituted the first page of each questionnaire (see Appendix D). Subjects desiring to withdraw from the study were offered the opportunity to do so, but none chose to exercise this option. All subjects detached and retained the first page of the questionnaire as proof of their informed consent to participate in the study. They then completed the questionnaire anonymously. To insure privacy, subjects were required to sit with at least one empty seat separating each person from the next.

During each testing session, the male experimenter was accompanied by a female assistant. Consequently, any subject who became upset while responding to sexual behavior items would have had immediate access to supportive counseling by a member of the same sex. No subjects did in fact become visibly upset or seek such counseling.

RESULTS

Religiosity Variables

As previously noted, the DeJong et al. Religiosity Scale consists of six separate subscales. Each subscale is composed of several different items. For each item, a subject must choose one response from among several alternative responses. Each response alternative is associated with a number indicating the degree of orthodoxy which that alternative represents. The higher the number, the higher the degree of orthodoxy. (For some items, DeJong et al. reversed this order to minimize the possible effects of subject response set, but this reversal is routinely corrected during data analyses.) The numerical value of the response chosen for a particular item represents the raw score for that item.

In order to obtain a given subscale score, one might simply sum the raw scores of all the items in that subscale. For the following reason, such a summation of raw scores is not appropriate. In some subscales, different items contain different numbers of responses. For example, in the Belief subscale, some items contain only five alternatives and other items contain seven. For an item with five alternatives, a raw score of five is associated with the most orthodox response. For an item with seven alternatives, a raw score of seven is associated with most orthodox response. If raw scores are summed, items with seven responses will receive greater weight

than items with five responses.

In the present study, this problem was avoided by standardizing scores for each item. When standard item scores for a given subscale were summed to obtain a subscale score, each item score received equal weight.

After the six subscale scores had been calculated in the manner just described, the correlation matrix of the subscales was created (see Table 1). Then reliability values were calculated for each subscale and for various sums of subscales (see Table 2). These figures suggested that the most reliable measures of religiosity were the Belief, Experience, and Practice subscales and their sum. The Knowledge, Socio-Moral Consequences, and Individual Moral Consequences subscales each had reliabilities below acceptable psychometric limits and thus had to be excluded from data analysis. It is interesting to note here that the poor reliability of the consequential subscales serves to strengthen the argument, stated earlier, that the content of these subscales renders them unacceptable as measures of religious orthodoxy.

When one compares the correlation matrix (see Table 1) and the reliability figures (see Table 2) for the three most reliable subscales and their sum, it becomes evident that the intercorrelations are less than the associated reliabilities. Thus it is justifiable to consider each subscale as a conceptually distinct measure of religiosity.

On the basis of reliability and intercorrelations, the Belief, Experience, and Practice subscales and their sum were selected as the only measures of religiosity to be employed in data analysis.

Study of the range and standard deviation of each of these four religiosity variables revealed considerable variation across subjects. Also, a gender effect was suggested by the fact that males had lower means than

Table 1: Correlation Matrix for the Six Religiosity Subscales (N = 155 due to missing data.)

	BEL.	EXP.	PRAC.	KNO.	IND.*	SOC.*
BEL.	1.000	.753	.559	.234	.453	-.193
EXP.	.753	1.000	.621	.223	.490	-.179
PRA.	.559	.621	1.000	.297	.460	-.184
KNO.	.234	.223	.297	1.000	.206	-.051
IND.*	.453	.490	.460	.206	1.000	-.115
SOC.*	-.193	-.179	-.184	-.051	-.115	1.000

*"IND." = "Individual Moral Consequences"; "SOC." = "Socio-Moral Consequences"

Table 2: Reliability of Each Religiosity Subscale and of Various Sums of Subscales (N = 155, due to missing data.)

SUBSCALE OR SUBSCALE SUM	CRONBACH'S ALPHA	SUBSCALE SUM RELIABILITY
Belief	.893	-
Experience	.838	-
Practice	.737	-
Knowledge	.542	-
Individual Moral Consequences	.654	-
Socio-Moral Consequences	.642	-
Sum of All Subscales	.664	.886
Sum of Belief, Experience, Practice, and Knowledge	.733	.898
Sum of Belief, Experience, and Practice	.803	.930

females on all four religiosity measures. However, none of these between-gender differences was statistically significant.

Sexual Behavior Variables

As previously noted, subjects were asked to indicate the accuracy of the sexual behavior inventory in assessing their sexual behavior, on a scale from 1 ("Not At All A Good Picture") to 5 ("A Very Good Picture"). The mean response for all subjects was 3.11. This value corresponds most closely to the point on the scale corresponding to "A Moderately Good Picture." The mean for males (2.97) was slightly lower than the mean for females (3.04), but this difference was not statistically significant.

Subjects were also asked to indicate the extent to which the last two months were typical of their general sexual behavior, on a scale from 1 ("Not At All Like Me") to 5 ("Very Much Like Me). The mean response for all subjects was 3.34. This value corresponds most closely to the point on the scale corresponding to "Somewhat Like Me." Once again, males (3.30) were slightly lower than females (3.37), but this difference was not significant.

Taken together, the above results indicate that subjects perceived the inventory to be at least a moderately valid measure of their sexual behavior.

Table 3 presents frequency data for the highest degree of noncoital and coital behavior experienced by suspects during the two-month period preceding their participation in the study. Considering noncoital behavior only, and pooling across genders, one can observe that almost half (47%) of the subjects had engaged in oral-genital activity--the highest level on the noncoital behavior scale. When the gender distinction is made, two differences become evident. First, whereas over one-fourth (26%) of males

Table 3: Raw Frequency and Percentage of Subjects Indicating a Given Degree of Sexual Behavior as the Highest Experienced

TYPE OF BEHAVIOR	DEGREE OF BEHAVIOR	RAW FREQUENCY			PERCENTAGE		
		----- TOTAL MALES FEMALES			----- TOTAL MALES FEMALES		
N O N C O I T A L	1 = Nothing	30	20	10	16	26	9
	2 = Kissing	15	6	9	8	8	8
	3 = Breast Petting	13	4	9	7	5	8
	4 = Breast Kissing	11	4	7	6	5	6
	5 = Manual- Genital Contact	4	8	26	18	11	22
	6 = Oral- Genital Contact	90	34	56	47	45	48
Total*		193	76	117	100	100	100
=====							
C O I T A L	1 = Nothing	111	46	65	58	61	56
	2 = Ventral- Ventral Coitus	40	19	21	21	25	18
	3 = Dorsal- Ventral Coitus	42	11	31	22	14	26
Total*		193	76	117	100	100	100

*Due to rounding, figures sometimes do not add exactly to totals.

had not experienced any of the noncoital behaviors, less than one-tenth (9%) of the females fell into this category. Second, whereas only 11% of males had engaged in manual genital manipulation, fully 22% of females had done so. Overall, males in this sample appear to have experienced somewhat less physical intimacy than females.

Turning to coital behaviors, one can make the following observations. When the sample is considered as a whole, it is clear that over half of the subjects (58%) had not experienced coitus at all during the two-month period measured. When gender differences are taken into account, it becomes evident that a higher percentage of females (26%) than males (14%) had experienced dorsal-ventral coitus. Thus, just as with noncoital behavior, males appear to have been somewhat less physically intimate than females.

Turning to examine the second sexual behavior variable--number of sexual partners--one must remember that this variable was considered only for each subject's highest degree of noncoital and coital behavior. Consequently, raw frequencies and percentages had to be calculated separately for each degree, showing these figures only for subjects who listed that degree as their highest. The result of this process was the subdivision of the sample into a large number of categories, most of which contained a small number of subjects.

Perusal of Table 4 reveals that, during the two-month period measured, the great majority of subjects had only one partner, regardless of the degree of sexual behavior involved. For only one degree--kissing--does the percentage of two-partner subjects (40%) even approach the percentage of one-partner subjects (60%). Only a very small percentage of subjects at any degree had more than two partners. Subjects are not categorized by gender in Table 4 because this further subdivision does not alter the generalizations

Table 4: Raw Frequency and Percentage of Subjects Indicating a Given Number of Sexual Partners

TYPE OF BEHAVIOR	DEGREE OF BEHAVIOR	NUMBER OF PARTNERS							
		(RAW FREQUENCY)				(PERCENTAGE)*			
		1	2	3	>3	1	2	3	>3
N O N C O I T A L	1 = Nothing	-	-	-	-	-	-	-	-
	2 = Kissing	9	6	0	0	60	40	0	0
	3 = Breast	10	3	0	0	77	23	0	0
	Petting								
	4 = Breast	10	1	0	0	91	9	0	0
O I T A L	Kissing								
	5 = Manual- Genital Contact	30	3	1	0	88	9	3	0
	6 = Oral- Genital Contact	72	11	3	0	80	12	3	0
C O I T A L	1 = Nothing	-	-	-	-	-	-	-	-
	2 = Ventral- Ventral Coitus	31	6	2	1**	77	15	5	2
	3 = Dorsal- Ventral Coitus	36	1	1	0	86	2	2	0

*Due to missing data, percentages do not add to 100 per cent for some degrees of behavior.

**The number of partners here was 7.

made above.

Considering frequency of sexual activity, one encounter the same need for subdivision of subjects into highest-degree categories that was encountered earlier with the number of partners variable (see Table 5). With or without categorization by gender, the most salient feature of the frequency variable is its high variability, both within and across different degrees of sexual behavior.

As for the affection variable, the problem of subdivision of subjects into small categories is again present (see Table 5). However, a general pattern seems clear. As the degree of physical intimacy increases, the level of affection also tends to increase. The pattern is clearest when subjects are not categorized by gender. For noncoital behavior, the level of affection increases from 2.44 for kissing to 3.40 for oral-genital manipulation. For coital behavior, affection increases from 2.93 for ventral-ventral intercourse to 3.76 for dorsal-ventral intercourse. This pattern suggests a significant correlation between degree and affection, an issue which will be discussed later.

Relationships Between Religiosity and Sexual Behavior

Hypothesis one. Hypothesis One stated that religiosity would be negatively correlated with degree of physical intimacy, number of sexual partners, and frequency of sexual activity.

Table 6 presents correlations between religiosity measures and the degree of physical intimacy variable. All statistically significant correlations are negative. However, these correlations are quite low, accounting for only a very small proportion of the total variance.

Table 5: Means and Standard Deviations of Frequency of Sexual Activity and Affection for Sexual Partners, For Each Degree of Noncoital and Coital Behavior

TYPE OF BEHAVIOR	DEGREE OF BEHAVIOR	MEAN, S.D., N	FREQUENCY			AFFECTION		
			TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES
N O N C O I T A L	1 = Nothing	-	-	-	-	-	-	-
	2 = Kissing	Mean	5.13	6.33	4.33	2.44	2.35	2.50
		S.D.	7.23	9.31	5.96	.75	.76	.79
		N	15	6	9	15	6	9
	3 = Breast	Mean	2.85	2.50	3.00	2.54	2.75	2.44
	Petting	S.D.	2.04	3.00	1.66	.75	1.26	.47
		N	13	4	9	13	4	9
	4 = Breast	Mean	1.64	2.00	1.43	2.97	2.75	3.10
	Kissing	S.D.	.92	1.16	.79	.94	.96	.98
		N	11	4	7	11	4	7
	5 = Manual-	Mean	4.24	3.75	4.39	2.96	2.38	3.14
	Genital	S.D.	4.31	4.80	4.24	1.04	1.06	.99
	Contact	N	34	8	26	34	8	26
	6 = Oral-	Mean	9.99	11.27	9.21	3.39	3.23	3.49
	Genital	S.D.	14.83	17.50	13.05	.92	1.02	.84
	Contact	N	90	34	56	90	34	56
=====								
C O I T A L	1 = Nothing	-	-	-	-	-	-	-
	2 = Ventral-	Mean	8.88	7.21	10.38	2.93	2.92	2.94
	Ventral	S.D.	12.89	12.28	13.54	1.16	1.06	1.27
	Coitus	N	40	19	21	40	19	21
	3 = Dorsal-	Mean	6.29	4.73	6.84	3.76	3.82	3.74
	Ventral	S.D.	6.56	8.45	5.84	.88	.60	.97
	Coitus	N	42	11	31	42	11	31

Considering the entire sample, the following observations may be made. There is a significant correlation between religiosity subscale sum and both noncoital ($-.15, p < .05$) and coital ($-.13, p < .05$) degree. Examination of the individual religiosity subscale correlations reveals that noncoital degree is significantly related to Belief ($-.16, p < .05$) and Experience ($-.13, p < .05$) but not to Practice ($-.12$). However, one should not hastily conclude from this that the correlations of noncoital degree with Belief and Experience are significantly stronger than the correlation of noncoital degree with Practice. In face, there is no significant difference between these correlations.

Coital degree is significantly related to Practice ($-.13, p < .05$) but not to Belief ($-.12$) or Experience ($-.06$). Just as with noncoital degree, there is no significant difference between the three subscale correlations.

Table 6: Correlations of Religiosity Subscales With Degree of Noncoital and Coital Behavior

		BELIEF			EXPERIENCE			PRACTICE			SUM		
DEG	C, N	TOTAL	MALES	FEMA	TOTAL	MALES	FEMA	TOTAL	MALES	FEMA	TOTAL	MALES	FEMA
NC*	r	-.16*	-.15	-.18*	-.13*	-.10	-.21*	-.12	-.03	-.20*	-.15*	-.10	-.23**
	N	187	74	113	193	76	117	192	75	117	186	73	113
C*	r	-.12	-.17	-.08	-.06	-.04	-.10	-.13*	-.03	-.20*	-.13*	-.12	-.15*
	N	187	74	113	193	76	117	192	75	117	186	73	113

*Symbol Key: NC = Noncoital Behavior; C = Coital Behavior

*Significant, $p < .05$

**Significant, $p < .01$

When gender differences are taken into account, it is immediately clear that only correlations involving females were significant. Although all

correlations involving males were negative, none reached the level of significance. Whenever a correlation was significant for sexes pooled, this appears to have been due to the significance of the correlation for females alone. In one case--involving the correlation of noncoital degree with Practice--the correlation for males ($-.03$) was so low as to counterbalance the significant correlation for females ($-.20$, $p < .05$), so that the correlation for sexes pooled ($-.12$) is not significant. However, just as with the religiosity subscales considered above, correlations involving males and correlations involving females were not in any case significantly different.

Turning to number of partners and frequency, one must first remember that these variables are considered only within the subject's highest degree of noncoital and coital behavior. As noted earlier, in the discussion of descriptive statistics for these variables, this organizational schema results in subdividing the sample into a large number of categories, most of which contain very few subjects. Unfortunately, the small number of subjects per category tends to make sampling error a major problem which may seriously distort the nature of relationships which could exist in the populations sampled.

It might appear that the following method would provide a solution to the problem of subdivision. First, one would (as usual) assign each subject the values for number of partners and frequency of activity associated with the subject's highest degree of physical intimacy. Then, one could simply pool all subjects, regardless of which degree of physical intimacy was the highest for any given subject, and correlate religiosity with number of partners and frequency. The problem of small sample size would thus be eliminated.

There are two major difficulties with this approach. First, as noted earlier, because of the qualitative differences in the various degrees of

physical intimacy, it may be unwise to pool data involving different degrees.

A second difficulty, related to the first, is as follows. When subjects having different highest degrees of intimacy are pooled, it is possible to correlate the degree of intimacy variable with the number of partners and frequency variables. In other words, correlations can measure the changes which occur in the number of partners variable and the frequency variable as the highest degree of physical intimacy varies across subjects. When these correlations are calculated, they are for the most part statistically significant (see Table 7). Thus, when one calculates the correlations of number of partners and frequency with the religiosity variables, degree of physical intimacy may act as a moderator variable, confounding the relationship between religiosity and the other two sexual behavior variables.

Table 7: Correlation of Degree of Noncoital and Coital Behavior With Number of Partners, Frequency of Activity, and Affection (For That Degree)

DEG*	r, N	NUMBER OF PARTNERS			FREQUENCY			AFFECTION		
		TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES
NC	r	-.13	-.10	-.14	.20**	.19	.22*	.37***	.28*	.44***
	N	163	56	107	163	56	107	162	56	106
C	r	-.26**	-.31*	-.20	-.13	-.11	-.18	.42***	.45**	.38**
	N	82	30	52	82	30	52	78	29	49

*"DEG" = "Degree"; "NC" = "Noncoital"; "C" = "Coital"

*Significant, $p < .05$

**Significant, $p < .01$

***Significant, $p < .001$

In order to remove the potentially confounding effects of variation in the degree variable, that variable must be held constant. Holding degree constant

requires considering as a separate category all subjects for whom a particular degree is the highest.

Since subdivision of subjects by highest degree of sexual behavior cannot be avoided, the problem of small sample size is also unavoidable. Given the major risk of sampling error, the precise pattern of relationships across different categories may be due in large part to chance and may thus have questionable generalizability. Therefore, use of these results to draw conclusions concerning the nature of relationships among particular religiosity scales, particular aspects of sexual behavior, and gender would not be justified.

In light of these serious methodological problems, the most which can justifiably be said is the following (see Tables 8 and 9). First, few correlations between religiosity and number of sexual partners are significant. Second, as predicted, all significant correlations are negative. The same two observations can be made regarding the correlation of religiosity with frequency of sexual behavior.

Hypothesis two. Hypothesis Two stated that religiosity would be positively correlated with affection for sexual partners. Unfortunately, one encounters here the same problem previously faced with regard to number of partners and frequency. The significant correlation of affection with the degree variable (see Table 7) requires subdivision of subjects according to the highest degree of noncoital and coital behavior experienced. As a result, the same limitations of meaningful analysis apply to affection as applied to the other two sexual behavior variables.

With this caveat stated the following general patterns are evident (see Table 10). First, only a very small number of correlations were significant.

Table 8: Correlations of Religiosity Subscales With Number of Sexual Partners,
For Each Degree of Noncoital and Coital Behavior

D#	r	N	BELIEF			EXPERIENCE			PRACTICE			SUM		
			TOTAL	MALES	FEMA.	TOTAL	MALES	FEMA.	TOTAL	MALES	FEMA.	TOTAL	MALES	FEMA.
N1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N2	r		.14	-.34	.22	-.02	-.35	.27	-.24	-.59	-.05	-.00	-.45	.22
	N		15	6	9	15	6	9	14	5	9	14	5	9
N3	r		.02	@	.18	-.08	@	-.17	-.22	@	-.26	-.00	@	.06
	N		11	3	8	13	4	9	13	4	9	11	3	8
N4	r		-.32	@	-.76*	-.39	@	-.61	-.46	@	-.82*	-.41	@	-.86**
	N		11	4	7	11	4	7	11	4	7	11	4	7
N5	r		-.32*	-.90***	.03	-.19	-.69*	-.01	-.07	-.72*	.17	-.25	-.86**	.09
	N		34	8	26	34	8	26	34	8	26	34	8	26
N6	r		.12	.32*	.03	.16	.23	.13	-.01	.17	-.10	.10	.29*	.01
	N		86	33	53	90	34	56	90	34	56	86	33	53
C1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C2	r		.03	.11	-.14	-.17	-.20	-.12	.05	.19	-.25	-.01	.07	-.21
	N		39	19	20	40	19	21	40	19	21	39	19	20
C3	r		.13	.00	.16	.12	-.15	.18	.04	-.06	.11	.10	-.06	.15
	N		41	11	30	42	11	31	42	11	31	41	11	30

@Correlation Coefficient Not Computable

*Symbol Key: D = Degree of Physical Intimacy, N1 = No Noncoital Behavior, N2 = Kissing,
N3 = Breast Petting, N4 = Breast Kissing, N5 = Manual-Genital Contact, N6 = Oral-Genital Contact;
C1 = No Coital Behavior, C2 = Ventral-Ventral Coitus, C3 = Dorsal-Ventral Coitus

*Significant, $p < .05$

**Significant, $p < .01$

***Significant, $p < .001$

Table 9: Correlations of Religiosity Subscales With Frequency of Sexual Activity, For Each Degree of Noncoital and Coital Behavior

D*	r	N	BELIEF			EXPERIENCE			PRACTICE			SUM		
			TOTAL	MALES	FEMA.	TOTAL	MALES	FEMA.	TOTAL	MALES	FEMA.	TOTAL	MALES	FEMA.
N1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N2	r		-.09	-.76*	.09	-.29	-.07	-.50	-.63**	-.45	-.83**	-.44	-.43	-.53
	N		15	6	9	15	6	9	14	5	9	14	5	9
N3	r		.19	.35	-.01	-.14	.62	-.58*	.00	.35	-.18	.19	.45	-.12
	N		11	3	8	13	4	9	13	4	9	11	3	8
N4	r		-.51	-.06	-.91**	-.39	-.12	-.63	-.41	-.36	-.55	-.50	-.17	-.89**
	N		11	4	7	11	4	7	11	4	7	11	4	7
N5	r		.16	-.04	.27	-.06	-.21	-.02	.18	-.02	.22	.14	-.07	.23
	N		34	8	26	34	8	26	34	8	26	34	8	26
N6	r		-.11	-.38*	.13	-.03	-.27	.18	-.07	-.17	.01	-.09	-.33*	.13
	N		86	33	53	90	34	56	90	34	56	86	33	53
C1	r		-	-	-	-	-	-	-	-	-	-	-	-
C2	r		.13	.14	.09	-.04	-.11	-.01	-.07	.14	-.23	.05	.10	-.04
	N		39	19	20	40	19	21	40	19	21	39	19	20
C3	r		.27	.31	.23	.19	.22	.15	.06	.19	.01	.22	.28	.17
	N		41	11	30	42	11	31	42	11	31	41	11	30

*Symbol Key: D = Degree of Physical Intimacy, N1 = No Noncoital Behavior, N2 = Kissing, N3 = Breast Petting, N4 = Breast Kissing, N5 = Manual-Genital Contact, N6 = Oral-Genital Contact; C1 = No Coital Behavior, C2 = Ventral-Ventral Coitus, C3 = Dorsal-Ventral Coitus

*Significant, $p < .05$

**Significant, $p < .01$

Table 10: Correlations of Religiosity Subscales With Affection for Sexual Partners, For Each Degree of Noncoital and Coital Behavior

D*	r, N	BELIEF			EXPERIENCE			PRACTICE			SUM		
		TOTAL	MALES	FEMA.	TOTAL	MALES	FEMA.	TOTAL	MALES	FEMA.	TOTAL	MALES	FEMA.
N1	-	-	-	-	-	-	-	-	-	-	-	-	-
N2	r	-.08	.17	-.10	-.01	.48	-.35	.04	.21	-.06	-.06	.30	-.23
	N	15	6	9	15	6	9	14	5	9	14	5	9
N3	r	.07	-.35	.36	.06	.25	.01	-.35	-.47	-.39	-.06	-.24	.04
	N	11	3	8	13	4	9	13	4	9	11	3	8
N4	r	.46	.65	.26	.11	.39	-.13	.35	.29	.47	.38	.50	.24
	N	11	4	7	11	4	7	11	4	7	11	4	7
N5	r	.03	.26	.04	.09	.38	.06	.22	.38	.22	.13	.33	.14
	N	34	8	26	34	8	26	34	8	26	34	8	26
N6	r	.19*	.17	.19	.12	.21	.04	.01	.17	-.12	.15	.20	.10
	N	86	33	53	90	34	56	90	34	56	86	33	53
C1	-	-	-	-	-	-	-	-	-	-	-	-	-
C2	r	-.02	.03	-.09	-.07	-.02	-.10	-.13	-.06	-.18	-.07	-.00	-.15
	N	39	19	20	40	19	21	40	19	21	39	19	20
C3	r	.08	.48	-.01	.06	.66*	-.09	.12	.73**	-.04	.10	.64*	-.04
	N	41	11	30	42	11	31	42	11	31	41	11	30

*Symbol Key: D = Degree of Physical Intimacy, N1 = No Noncoital Behavior, N2 = Kissing, N3 = Breast Petting, N4 = Breast Kissing, N5 = Manual-Genital Contact, N6 = Oral-Genital Contact; C1 = No Coital Behavior, C2 = Ventral-Ventral Coitus, C3 = Dorsal-Ventral Coitus

*Significant, $p < .05$

**Significant, $p < .01$

Second, as predicted, all significant correlations were positive.

Hypothesis three. Hypothesis Three stated that, as religiosity increased, the correlation between affection and degree of noncoital and coital behavior would become more positive. In order to test this hypothesis, subjects were divided into Low, Medium, and High Religiosity groups. The groups were formed on the basis of scores on the religiosity subscale sum, each group containing an equal number of subjects.

Visual inspection of the data reveals a clear pattern in the expected direction (see Table 11). For sexes pooled, there is a clear increase both in size of correlation and in level of statistical significance, as the level of religiosity increases.

Table 11: Correlation of Affection for Sexual Partners With Degree of Noncoital and Coital Behavior, At Three Levels of Religiosity

		LOW RELIGIOSITY			MEDIUM RELIGIOSITY			HIGH RELIGIOSITY			CHI-SQUARE		
DEG	r, N	TOTAL	MALES	FEMA.	TOTAL	MALES	FEMA.	TOTAL	MALES	FEMA.	TOTAL	MALES	FEMA.
NC*	r	.25*	.21	.31*	.33**	.22	.40**	.58***	.55*	.64***	4.29	1.40	2.86
	N	50	18	32	52	15	37	47	16	31	-	-	-
C*	r	.25	.13	.27	.45**	.60	.40*	.70***	.87**	.40	3.32	4.33	.19
	N	27	11	16	29	7	22	17	8	9	-	-	-

*Symbol Key: NC = Noncoital Behavior; C = Coital Behavior

*Significant, $p < .05$

**Significant, $p < .01$

***Significant, $p < .001$

For example, the correlation of noncoital degree with affection increases from .25 ($p < .05$) for low religiosity subjects to .33 ($p < .01$) for medium

religiosity subjects and finally to .58 ($p < .001$) for high religiosity subjects. When females are considered separately, the same pattern is evident. The pattern is not as evident for males, but the smaller number of male subjects may have been in part responsible for this.

Although Hypothesis Three appears to be supported by visual inspection, Chi-Square tests revealed no statistically significant differences among correlations at different religiosity levels. The levels were compared for correlations with sexes pooled, for correlations involving females only, and for correlations involving males only. It may be that the relatively small number of subjects in each religiosity category rendered an adequate test of the hypothesis impossible.

Hypothesis four. Hypothesis Four predicted that, as religiosity increased, the correlation between affection and frequency of sexual activity would grow more positive. Here the problem of subdivision into categories containing few individuals was more severe than in any of the other analyses. It was necessary to subdivide subjects by gender, by their highest degree of sexual behavior, and by their level of religiosity. Some categories contained no subjects at all, and others contained so few subjects that correlations were meaningless. As a result, Hypothesis Four could not be effectively evaluated.

DISCUSSION

Instruments

The DeJong et al. Religiosity Scale was not found to be useful as a complete unit. Because of problems with face validity and reliability, the two moral consequences subscales and the knowledge subscale had to be discarded. After this modification had been made, the instrument consisted of belief, experience, and practice subscales. As such, the DeJong instrument appears to be a reasonably effective measure of religiosity.

The Eckert Sexual Behavior Inventory--which was used for the first time in this study--was also found to be an effective instrument. Subjects perceived it as at least moderately valid. The behavioral schema and the time frame of two months made possible, in their judgment, a moderately adequate assessment of their sexual behavior.

However, the possible effects of a "social desirability" response set cannot be overlooked. It may be that many subjects did not respond accurately but instead responded in ways they considered socially desirable. Because no attempt was made to measure subjects' tendency to answer in socially approved ways, it is not possible to assess with any accuracy the role this factor may have played.

It is, however, possible to offer the following observations. Different subjects may very well see different modes of sexual behavior as

socially laudable. If a subject perceives sexual restraint as socially desirable, then the subject may tend to under-report the extent of actual sexual behavior. On the other hand, if the subject believes that sexual self-indulgence is socially admired, then the subject may tend to exaggerate the actual degree of sexual experience. It is possible that the opposite effects of under-reporting and exaggeration would cancel each other out. Nevertheless, in future research, social desirability effects should be carefully measured so as to assess their impact on self-report of sexual behavior.

Religious and Sexual Behavior Profile of Sample

There is marked diversity in subjects' religiosity. This state of affairs is not surprising, since one might expect that a large Midwestern state university would tend to attract a religiously heterogeneous student population.

Subjects' reported sexual behavior during the two-month period prior to participation in the study indicates the following. Subjects appeared to be somewhat more active noncoitally than coitally, with almost half experiencing even the most intimate oral-genital behaviors. Contrary to the stereotype, females experienced somewhat more physical intimacy than males.

Subjects were for the most part not promiscuous. Almost all subjects had only one partner, regardless of the degree of noncoital or coital behavior. The one exception to this general pattern involved kissing, for which nearly half of the subjects had two partners. It seems likely that

subjects made this exception because kissing was the least physically intimate of the behaviors measured.

The more physically intimate students were with their partners, the more affection they felt toward these partners. Of course, the correlational nature of the data precludes definitive statements regarding cause and effect, but it is tempting to speculate as to causal relationships which might be operating. It may be that increasing affection gives rise to a desire for greater physical intimacy. On the other hand, it may be that increasing physical intimacy encourages greater affection (or at least the tendency to attribute greater affection to the relationship).

Relationships Between Religiosity and Sexual Behavior

The present study made an important advance beyond most prior religiosity-sexuality research by employing considerably more sophisticated measures of both religiosity and sexual behavior. The DeJong et al. Religiosity Scale had not been used before in the context of religiosity-sexuality research. The Eckert Sexual Behavior Inventory was developed specifically for this study and thus had not been used in previous research of any kind.

Although such methodological advances were certainly desirable, they did create some difficulty in comparing the results of the present study to those of past research in this field. The following situation was encountered when reviewing past literature. Studies whose religiosity measures were most similar to the DeJong et al. measure did not employ comparable sexual behavior measures (e.g., Faulkner & DeJong, 1968; Rohrbaugh & Jessor, 1975; Young, 1981). On the other hand, studies whose sexual behavior measures

were most similar to that used in the present study did not use comparable religiosity measures (e.g., King et al., 1976; Mahoney, 1980; Spanier, 1976).

Because of these difficulties, detailed comparison of the present study's results with those of prior research is not possible. It is, however, possible to offer broad comparisons concerning three major issues addressed by earlier studies. First, the present study found a negative relationship between religiosity and degree of physical intimacy, frequency of activity, and number of partners. This finding is in agreement with the majority of earlier studies, dating from Kinsey's (1948, 1953) groundbreaking efforts up to the present day (e.g., Faulkner & DeJong, 1968; Kannin & Howard, 1958; Lindenfeld, 1960; Rohrbaugh & Jessor, 1975; Young, 1981). The present study's results are in contrast to those of a small minority of earlier studies which have not detected any relationship--either negative or positive--between religiosity and sexual behavior (e.g., Hornick, 1978; King, 1976). Clearly, the weight of the evidence indicates that a negative relationship between religiosity and sexual behavior does in fact exist.

The second major finding relating to prior research is the suggestion of a gender effect in the relationship between religiosity and degree of physical intimacy. In the present study, the relationship was significant only for females. However, the difference between correlations involving females and correlations involving males did not reach the level of statistical significance. Thus, the data can only be said to contain a non-significant trend suggesting that females relate religiosity and degree of physical intimacy more closely than do males.

A few earlier studies have suggested such an effect (e.g., Reiss, 1967; Bell, 1966). Many other studies, however, have indicated either that the relationship between religiosity and sexual behavior is the same regardless

of gender (e.g., Curran et al., 1973; King et al., 1976) or that the relationship is stronger for males (e.g., Clayton, 1972). Mahoney noted in 1980 that the role of gender in the religiosity-sexuality relationship was unclear, and the present study's results fail to clarify the situation.

The third finding relating to prior research concerns the relationship between religiosity and affection for sexual partners. The present study found the direct relationship to be positive. Further analysis also raised the possibility of a positive indirect relationship between religiosity and affection. A non-significant trend in the data suggested that, as religiosity increased, subjects tended to associate physical intimacy more closely with affection. As noted earlier, the strong Judeo-Christian emphasis on love as the basis of relationships seems a likely explanation for such a trend.

Affection has not often been the focus of religiosity-sexuality research, but Mahoney (1980) did address it to a limited extent. Contrary to the present study's results, he failed to find a statistically significant relationship of any kind. The importance of his finding is, however, diminished by the fact that he measured affection only with regard to coital partners and did not explore its role in noncoital activity.

On balance, it seems reasonable to conclude that neither Mahoney's research nor the present study constitutes an optimal test of the relationship of religiosity to affection for sexual partners. Mahoney failed to address noncoital behavior, and the present study was plagued by methodological difficulties associated with small sample size. In any case, the phenomenon seems sufficiently important to merit the attention of further, more carefully designed research.

Having compared the findings of the present study to those of prior research, it is now appropriate to turn to an issue which prior research has

apparently not addressed. As previously noted, because of the limitations of earlier studies' religiosity measures, they have not analyzed relationships between sexual behavior and specific dimensions of religiosity. The present study's more detailed approach generated an intriguing result. When subjects are not separated according to gender, degree of noncoital intimacy is significantly related both to Belief and Experience . The degree of coital intimacy, however, is significantly related only to Practice.

Although these differences among religiosity subscales are not statistically significant, they do represent an interesting non-significant trend in the data. The trend suggests that noncoital behavior relates more strongly to certain internal aspects of religious life (i.e., belief and experience). Coital behavior, on the other hand, may relate more to external facets of religiosity (i.e., practice, including church attendance and participation in church-related activities). Before proceeding , it should be noted that the terms "internal" and "external" are used here in a purely descriptive sense and are not meant to convey any positive or negative connotations.

In exploring the possible causes of such a pattern of relationships among aspects of religiosity and sexual behavior, two important questions must be addressed. First, what is it that sets internal and external religiosity apart? One distinguishing feature is that belief and experience are primarily individual phenomena, whereas practice involves a strong social component. With social interaction generally comes an element of pressure from co-participants to conform to the behavioral strictures of the religious group.

A second question of import is as follows. What is it, in orthodox Christian morality, which sets noncoital and coital behavior apart? Generally

speaking, prohibitions of premarital sexuality tend to focus on coital rather than noncoital behavior (Mahoney, 1980). Whereas coitus is explicitly forbidden, noncoital activity is for the most part tolerated.

Based on the foregoing discussion, it is possible to explain why religious practice might be related more strongly to coital than to noncoital behavior. To the extent that an individual is involved in religious practice, that individual will be subject to social pressure for conformity to orthodox Christian sexual morality. As noted, this morality tends to prohibit coital more than noncoital behavior. Thus, it stands to reason that persons active in religious practice would respond to social pressure by limiting their coital more than their noncoital behavior.

It is more difficult to explain why religious belief and experience would be related more strongly to noncoital than to coital behavior. Here social pressure toward conformity to Christian sexual morality would not necessarily be a salient factor. As a result, coitus might not be seen as specially prohibited. Following this line of reasoning, one might expect that belief and experience would relate with roughly equal strength to both noncoital and coital behavior. Certainly, there is no obvious reason to predict that noncoital behavior would relate more strongly than coital behavior to belief and experience. However, this counterintuitive result is exactly what the present study found. Apparently, questions have been raised which cannot be satisfactorily resolved at present. Perhaps further research and theoretical speculation will shed more light on this issue.

In closing, a brief comment is appropriate concerning the generalizability of the present study's findings. The study dealt specifically with the premarital heterosexual behavior of college-age individuals. Also, the only form of religiosity measured was Christian orthodoxy. Given these

limitations, it would certainly be unwise to generalize the present study's findings to individuals having characteristics different from those of the subject sample. For example, one should not make generalizations concerning the relationship of Christian orthodoxy to homosexual behavior. Likewise, it would not be legitimate to generalize concerning the relationship of non-Christian forms of religiosity to heterosexual behavior. However, this is not to say that such relationships are unimportant. The effects of variation in age, marital status, sexual orientation, and religious tradition are clearly significant issues which have been, and should be, addressed by scientific research.

Conclusion

Despite the methodological limitations of the present study, it represents a major attempt to investigate religiosity and sexual behavior more systematically and comprehensively than has been the rule in past research. The major difficulties stemmed not from the measurement instruments or procedures but rather from sample size. Future research can certainly overcome this problem. As inquiry continues, the present study's religiosity and sexual behavior measures can serve as powerful tools for exploring vital dimensions of human experience.

APPENDICES

APPENDIX A

THE DEJONG, FAULKNER, AND WARLAND RELIGIOSITY SCALE

INSTRUCTIONS: Please circle only one response number for each question.

PART I

1. What do you believe about immortality?
 1. I do not believe in immortality in any sense.
 2. I believe in reincarnation.
 3. I believe immortality is the continued influence of a person's life on family or society.
 4. While its meaning is somewhat imprecise, I believe in the continued existence of the personality as a part of a universal spiritual principle.
 5. I believe in the resurrection of one's being and life after death.
2. What do you feel will probably happen to you after death?
 1. Simply stop existing.
 2. Reincarnation.
 3. I have no idea.
 4. Uncertain.
 5. My "spirit" will have some continuation in the universe.
 6. Depending on the will of God, I will go to heaven or hell.

3. What do you believe about God?
 1. I don't believe in God.
 2. I don't know whether there is a God and there probably is not a way to find out.
 3. "God" is a "spirit" within us.
 4. I don't believe in a personal God, but I do believe in a higher power of some kind.
 5. I feel that I do believe in God even though I am not able to explain fully who or what God is.
 6. I know God really exists and I have no doubts about it.
4. What do you believe about Jesus?
 1. Frankly, I am not sure the historical Jesus existed.
 2. I think Jesus was only a man.
 3. I think Jesus was only a man, although an extraordinary one.
 4. I feel that Jesus was a great religious prophet, but I don't feel He was the Son of God any more than all of us are the Children of God.
 5. Jesus is best understood as a symbol of goodness; whether he existed or not is unimportant.
 6. I feel basically that Jesus is Divine, but I have some problems understanding the concept of His Divinity.
 7. Jesus is the Divine Son of God and I have no doubts about it.
5. What do you believe about the idea that God has and continues to act in the history of man?
 1. There is no evidence of any intervention of "God" in human history.
 2. People who have believed in God have influenced history.
 3. I believe the unfolding history of man has been within a natural order established by a higher power.
 4. While I am unable to explain fully who or what God is, I believe He has an influence in the history of man.
 5. I believe God has and continues to intervene directly and indirectly in the history of man.

6. Which of the following comes closest to expressing your conception of prayer?
 1. "Prayer" is not a meaningful term to me.
 2. Prayer is self-evaluation and working out one's problems.
 3. Prayer is meditation in which thought is directed toward beauty, goodness, comfort, etc.
 4. Prayer is directing one's thoughts toward a higher power.
 5. Prayer is speaking to God.

7. Which of the following statements comes closest to expressing your conception of sin?
 1. I do not believe in "sin."
 2. I believe people err but do not "sin."
 3. Sin is behavior which goes against my own personal principles.
 4. Sin is behavior which harms others.
 5. Sin is behavior which goes against accepted social and ethical principles.
 6. Sin is failure to live up to the highest spiritual ideals I know.
 7. Sin is the individual's rejection of God's will for his life.

8. What is your view of the Bible?
 1. The Bible is a collection of myths and fantasies.
 2. The Bible is a collection of literary and historical writings.
 3. The Bible contains some of man's significant moral and ethical thinking.
 4. The Bible was written by inspired men and contains valuable spiritual teachings.
 5. The Bible is God's Word.

PART II

1. Have you ever had an experience which, at the time, you thought of as a religious experience? If so, which of the following comes closest to expressing the dominant character of your experience?
 1. I have never had what I would call a religious experience.
 2. I can't recall that I have had what I would call a religious experience.
 3. I have had moments of unusual appreciation of truth, beauty, goodness, etc.
 4. At some time I have had an awareness of the divine.
 5. I have had an experience (or experiences) when I felt a mutual encounter between myself and God.
2. There are particular moments in my life when I feel "close" to the Divine.
 1. Strongly agree.
 2. Agree.
 3. Uncertain.
 4. Disagree.
 5. Strongly disagree.
3. I know what it feels like to repent and experience forgiveness of sin.
 1. Strongly agree.
 2. Agree.
 3. Uncertain.
 4. Disagree.
 5. Strongly disagree.
4. I have experienced the joy and peace which comes from recognizing that one is a forgiven sinner.
 1. Strongly agree.
 2. Agree
 3. Uncertain.
 4. Disagree
 5. Strongly disagree.

PART III

1. How often do you attend Sabbath worship services?
 1. Every week.
 2. About twice a month.
 3. About once a month.
 4. A few times a year.
 5. Never.
2. Do you presently belong to a church?
 1. Yes
 2. No
3. Do you contribute funds to the church?
 1. Never.
 2. Sometimes.
 3. Regularly.
4. How would you describe your use of the Bible?
 1. I read the Bible regularly for devotional purposes.
 2. I read the Bible, somewhat irregularly, primarily for devotional purposes.
 3. I read the Bible occasionally for its ethical and moral teachings.
 4. I read the Bible occasionally for literary or historical purposes.
 5. I read the Bible for diverse purposes.
 6. I seldom, if ever, read the Bible.
 7. I never read the Bible.
5. In how many religious affiliated organizations, groups, or activities (such as choir, youth groups, committees, and boards, etc.) do you participate?
 0. None
 1. One
 2. Two
 3. Three
 4. Four
 5. Five or more

PART IV

1. Misrepresenting your age to be served alcoholic beverages is acceptable behavior.
 1. Strongly agree
 2. Agree
 3. Uncertain
 4. Disagree
 5. Strongly disagree
2. It would not bother my conscience to use marijuana.
 1. Strongly agree
 2. Agree
 3. Uncertain
 4. Disagree
 5. Strongly disagree
3. Premarital sexual relations between a boy and a girl who are "in love" is not immoral.
 1. Strongly agree
 2. Agree
 3. Uncertain
 4. Disagree
 5. Strongly disagree
4. Stealing hubcaps or shoplifting minor items is not immoral.
 1. Strongly agree
 2. Agree
 3. Uncertain
 4. Disagree
 5. Strongly disagree

5. Violence can be a justifiable form of civic protest.
 1. Strongly agree
 2. Agree
 3. Uncertain
 4. Disagree
 5. Strongly disagree

6. A woman should be able to obtain an abortion for any reason.
 1. Strongly agree
 2. Agree
 3. Uncertain
 4. Disagree
 5. Strongly disagree

PART V

Are the following persons mentioned in the (1) Old Testament, (2) New Testament, or not mentioned in the Bible? Check appropriate column (one column only).

	Old Testament	New Testament	Not in Bible
Aquinas	_____	_____	_____
Moses	_____	_____	_____
Joshua	_____	_____	_____
Wesley	_____	_____	_____
David	_____	_____	_____
Paul	_____	_____	_____
Isaiah	_____	_____	_____
Luther	_____	_____	_____
Timothy	_____	_____	_____
Augustine	_____	_____	_____

PART VI

1. I am for better housing for disadvantaged groups in society.
 1. Strongly agree
 2. Agree
 3. Uncertain
 4. Disagree
 5. Strongly disagree
2. I stand for the eradication of poverty among all groups of this society.
 1. Strongly agree
 2. Agree
 3. Uncertain
 4. Disagree
 5. Strongly disagree
3. I support full employment opportunities for all.
 1. Strongly agree
 2. Agree
 3. Uncertain
 4. Disagree
 5. Strongly disagree
4. I support programs which guarantee economic security for old age.
 1. Strongly agree
 2. Agree
 3. Uncertain
 4. Disagree
 5. Strongly disagree
5. I think capital punishment should be abolished.
 1. Strongly agree
 2. Agree
 3. Uncertain
 4. Disagree
 5. Strongly disagree

APPENDIX B

MODIFICATIONS OF THE BENTLER HETEROSEXUAL BEHAVIOR INVENTORY

ORIGINAL 10-POINT SCALE		SEPARATION INTO COITAL AND NON-COITAL SCALES		CONSOLIDATION OF SIMILAR ADJACENT ITEMS	
NO.	BEHAVIOR	NO.	BEHAVIOR	NO.	BEHAVIOR
1	One-Minute Continuous Lip Kissing	1	One-Minute Continuous Lip Kissing	1	One-Minute Continuous Lip Kissing
2	Manual Manipulation of Female Breasts, Under Clothes	2	Manual Manipulation of Female Breasts, Under Clothes	2	Manual Manipulation of Female Breasts, Under Clothes
3	Kissing Nipples of Female Breasts	3	Kissing Nipples of Female Breasts	3	Kissing Nipples of Female Breasts
4	Mutual Manual Manipulation of Genitals	4	Mutual Manual Manipulation of Genitals		
5	Manual Manipulation of Male Genitals, Under Clothes, By Female	5	Manual Manipulation of Male Genitals, Under Clothes, By Female	4	Manual Manipulation of Genitals
6	Sexual Intercourse, Ventral-Ventral	6	Oral Manipulation of Male Genitals, By Female		
7	Oral Manipulation of Male Genitals, By Female	7	Mutual Oral-Genital Manipulation	5	Oral Manipulation of Genitals
8	Mutual Oral-Genital Manipulation	8	Mutual Oral Manipulation of Genitals To Mutual Orgasm		
9	Sexual Intercourse, Ventral-Dorsal	1	Sexual Intercourse, Ventral-Ventral	1	Sexual Intercourse, Ventral-Ventral
10	Mutual Oral Manipulation of Genitals To Mutual Orgasm	2	Sexual Intercourse, Ventral-Dorsal	2	Sexual Intercourse, Ventral-Dorsal

APPENDIX C

THE ECKERT HETEROSEXUAL BEHAVIOR INVENTORY (EHBI)

PART I

1. Have you ever been married? (circle) YES NO
2. Please circle the number below which best describes your sexual orientation (circle one only).

1	2	3	4	5
Exclusively Heterosexual Behavior	Primarily Heterosexual Behavior	Both Heterosexual Behavior And Homosexual Behavior	Primarily Homosexual Behavior	Exclusively Homosexual Behavior

PART II

INSTRUCTIONS: On each of the following pages, a different sexual activity is described, and questions are asked regarding that activity. Please answer all questions for each behavior.

1. Activity: Male and female making continuous contact with each other's lips for one minute or longer.

a. Have you ever experienced this behavior in your lifetime? (circle correct answer) YES NO

b. If so, with how many different people have you experienced this behavior during the last two months? (circle number)

1 2 3 4 5 6 7 8 More Than 8 If more than 8, how many? ____

c. If you have experienced this behavior with one or more persons during the last two months, please indicate the number of times that you experienced it with each person during this period. Then circle the one phrase which best describes the degree of affection you felt for each person when the behavior occurred.

PERSON	NUMBER OF TIMES WITH PERSON	DEGREE OF AFFECTION				
		(For each person, circle only <u>one</u> phrase.)				
Person 1	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 2	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 3	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 4	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 5	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 6	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 7	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 8	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
All Others	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married

2. Activity: Male using his hands to make contact with female breasts (direct contact with skin)

a. Have you ever experienced this behavior in your lifetime? (circle correct answer) YES NO

b. If so, with how many different people have you experienced this behavior during the last two months? (circle number)

1 2 3 4 5 6 7 8 More Than 8 If more than 8, how many? _____

c. If you have experienced this behavior with one or more persons during the last two months, please indicate the number of times that you experienced it with each person during this period. Then circle the one phrase which best describes the degree of affection you felt for each person when the behavior occurred.

PERSON	NUMBER OF TIMES WITH PERSON	DEGREE OF AFFECTION				
		(For each person, circle only <u>one</u> phrase.)				
Person 1	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 2	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 3	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 4	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 5	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 6	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 7	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 8	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
All Others	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married

3. Activity: Male kissing nipples of female breasts (direct contact with skin)

a. Have you ever experienced this behavior in your lifetime? (circle correct answer) YES NO

b. If so, with how many different people have you experienced this behavior during the last two months? (circle number)

1 2 3 4 5 6 7 8 More Than 8 If more than 8, how many? _____

c. If you have experienced this behavior with one or more persons during the last two months, please indicate the number of times that you experienced it with each person during this period. Then circle the one phrase which best describes the degree of affection you felt for each person when the behavior occurred.

PERSON	NUMBER OF TIMES WITH PERSON	DEGREE OF AFFECTION				
		(For each person, circle only <u>one</u> phrase.)				
Person 1	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 2	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 3	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 4	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 5	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 6	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 7	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 8	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
All Others	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married

4. Activity: Male using hands to make contact with female genitals (direct contact with skin) or female using hands to make contact with male genitals (direct contact with skin) BUT NOT BOTH male and female simultaneously using hands to make contact with each other's genitals (direct contact with skin)

a. Have you ever experienced this behavior in your lifetime? (circle correct answer) YES NO

b. If so, with how many different people have you experienced this behavior during the last two months? (circle number)

1 2 3 4 5 6 7 8 More Than 8 If more than 8, how many? _____

c. If you have experienced this behavior with one or more persons during the last two months, please indicate the number of times that you experienced it with each person during this period. Then circle the one phrase which best describes the degree of affection you felt for each person when the behavior occurred.

PERSON	NUMBER OF TIMES WITH PERSON	DEGREE OF AFFECTION				
		(For each person, circle only <u>one</u> phrase.)				
Person 1	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 2	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 3	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 4	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 5	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 6	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 7	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 8	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
All Others	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married

5. Activity: Male using his mouth to make contact with female genitals (direct contact with skin) or female using her mouth to make contact with male genitals (direct contact with skin) or both male and female simultaneously using their mouths to make contact with each other's genitals

- a. Have you ever experienced this behavior in your lifetime? (circle correct answer) YES NO
- b. If so, with how many different people have you experienced this behavior during the last two months? (circle number)
 1 2 3 4 5 6 7 8 More Than 8 If more than 8, how many? ____
- c. If you have experienced this behavior with one or more persons during the last two months, please indicate the number of times that you experienced it with each person during this period. Then circle the one phrase which best describes the degree of affection you felt for each person when the behavior occurred.

PERSON	NUMBER OF TIMES WITH PERSON	DEGREE OF AFFECTION				
		(For each person, circle only <u>one</u> phrase.)				
Person 1	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 2	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 3	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 4	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 5	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 6	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 7	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 8	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
All Others	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married

6. Activity: Sexual intercourse (male penis inserted into female vagina) with male and female facing each other

a. Have you ever experienced this behavior in your lifetime? (circle correct answer) YES NO

b. If so, with how many different people have you experienced this behavior during the last two months? (circle number)

1 2 3 4 5 6 7 8 More Than 8 If more than 8, how many? _____

c. If you have experienced this behavior with one or more persons during the last two months, please indicate the number of times that you experienced it with each person during this period. Then circle the one phrase which best describes the degree of affection you felt for each person when the behavior occurred.

PERSON	NUMBER OF TIMES WITH PERSON	DEGREE OF AFFECTION				
		(For each person, circle only <u>one</u> phrase.)				
Person 1	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 2	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 3	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 4	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 5	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 6	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 7	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 8	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
All Others	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married

7. Activity: Sexual intercourse (male penis inserted into female vagina) with male facing female's back and entering her from behind

a. Have you ever experienced this behavior in your lifetime? (circle correct answer) YES NO

b. If so, with how many different people have you experienced this behavior during the last two months? (circle number)

1 2 3 4 5 6 7 8 More Than 8 If more than 8, how many? _____

c. If you have experienced this behavior with one or more persons during the last two months, please indicate the number of times that you experienced it with each person during this period. Then circle the one phrase which best describes the degree of affection you felt for each person when the behavior occurred.

PERSON	NUMBER OF TIMES WITH PERSON	DEGREE OF AFFECTION				
		(For each person, circle only <u>one</u> phrase.)				
Person 1	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 2	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 3	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 4	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 5	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 6	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 7	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
Person 8	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married
All Others	_____	no particular affection	moderate affection	strong affection	in love	engaged to be married

FEEDBACK QUESTIONS

1. To what extent do you feel that the questions asked here give us what you consider a good picture of what you think are the important features of your sexuality? (circle best number)

1

2

3

4

5

Not At All

A Good

Picture

A

Moderately

Good Picture

A

Very Good

Picture

Please explain your response:

2. To what extent do you feel that the past two months are representative of your typical sexual behavior? (circle best number)

1	2	3	4	5
Not At All		Somewhat		Very Much
Like		Like		Like
Me		Me		Me

Please explain your response:

APPENDIX D

RESEARCH CONSENT AGREEMENT

I understand that Paul Eckert is conducting this scientific study, under the supervision of Dr. Elaine Donelson, Professor of Psychology.

I understand that this study involves the investigation of religious beliefs and sexual behavior and that my participation will involve answering detailed questions in the attached questionnaire concerning my own religious beliefs and sexual behavior. My participation will require one hour or less of my time. I understand that Dr. Donelson will be available to counsel me if I become upset as a result of completing the questionnaire.

I understand that I am free to discontinue my participation in the study at any time without penalty.

I understand that the results of the study will be treated in strict confidence and that I will remain anonymous. Within these restrictions, results of the study will be made available to me at my request.

I understand that my participation in the study does not guarantee any beneficial results to me.

I understand that, at my request, I can receive additional explanation of the study after my participation is completed.

In light of the above information, and because my participation in this study only involves return of a questionnaire, I AGREE THAT RETURN OF THIS QUESTIONNAIRE CONSTITUTES MY INFORMED CONSENT TO PARTICIPATE. I AGREE TO DETACH AND KEEP THIS PAGE AS A RECORD OF MY CONSENT.

*****SUBJECT: DETACH AND KEEP THIS PAGE!*****

LIST OF REFERENCES

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