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REPORTED SEXUAL BEHAVIOR AND ATTITUDES OF
APPALACHIAN STATE UNIVERSITY STUDENTS:
A COMPARISON OF
FRESHMEN GIRLS AND THEIR UPPERCLASS SISTERS

A Thesis Presented to
the Faculty of the Department of Psychology
Appalachian State University

In partial fulfillment
of the Requirements for the Degree
Master of Arts

by
Linda Janelle Kewatt
August 1974

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The present study sought to determine if a relationship existed between ASU freshmen women and their upperclass sisters in attitudes and behavior. An attitude and a behavior questionnaire were scored on a scale of 0 (conservative) to 5 (liberal) for each subject. Attitude scores were found to be generally higher than behavior scores. A relationship was found between freshmen and their upperclass sisters on attitudes but not behavior. A relationship was also found for upperclass sisters between their attitudes and behavior but was not found for freshmen women. Conclusions are: a) sibling attitudes but not behaviors are related, b) a relationship exists for upperclass sisters between attitude and behavior, and c) no relationship exists for freshmen between their attitudes and behavior.

Acknowledgement

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I would like to thank Dr. Crouch for her help, patience, and interest. Also to be thanked are Dr. Moss and Dr. Long, committee members, and Dr. Terrant and Mr. Terry Jones who helped me with statistical problems.

Without the subjects who helped in this study and the friends who helped shape the final form of the questionnaires, this study would not have been possible.

Dedication

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This is dedicated to all those who are interested in sex.

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A vast amount of literature in the past few years has dealt with sexual behavior. Kinsey (Kinsey et. al., 1953) was one of the first to do an extensive study of female sexuality in his book Sexual Behavior in the Human Female. Rather than using the general population of females as subjects, Bromley and Britten in 1938 had limited themselves to the college population. They did, however, study both sexes at the same time. Since 1953 small studies have been done using only college females and including their attitudes toward sexual behavior.

Premarital coitus has been studied along with other aspects of female sexuality. Some of these studies have questioned if the "Sexual Revolution" was real. In his book Premarital Sex in Changing Society, Bell (1966) concluded that "it appears that the greatest changes in premarital coitus for the American female occurred in the period around World War I and during the 1920's (p. 57)." Since that time he stated that the rates of premarital coitus have remained steady. Figures in premarital intercourse varied in studies from 13 to 25 percent (Bell, 1967; Ehrmann, 1959; Freedman, 1965; Kephart, 1966; Leslie, 1967; Reiss, 1966, 1967; Smigel and Seiden, 1968).

Smigel and Seiden (1968) discussed the premarital coitus percentage and the attitudes concerning the percentage. The stronger the affection in the relationship the more apt a female was to have sexual intercourse. They concluded that attitudes and behavior were liberal when love was involved.

Freedman's (1965) results are similar to those of Smigel and Seiden. Freedman did a longitudinal study beginning with a random selection of freshmen women and followed them through their senior year. Of the final 49 subjects, 11 or 22 percent had engaged in intercourse. Of the 22 percent, 16 percent had limited their intercourse to serious relationships. Four of the 11 nonvirgins had had intercourse in high school, and three of these were placed in Freedman's "Uninhibited Behavior" group. In other words, these three women did not require a serious relationship as a requisite to intercourse. Freedman's study also included the attitudes of his subjects toward sexual activity. He found that as seniors the subjects were much more liberal toward sexual behavior (both theirs and others) than they had been as freshmen. However, though the women had more liberal attitudes, their own behavior had changed little. The following are illustrative remarks that Freedman found in his study:

My ideas have changed but not my behavior.

I used to think it was horrible not to be a virgin. I'm more realistic now. But I still think it would be nice for me to be a virgin.

I'm a little more broad-minded about others, not myself. (p. 40)

Ehrmann (1959) also found that college women usually restrict their intercourse to men with whom they are emotionally involved. He stated, "Female sexual expression is primarily and profoundly related to being in love and to going steady (p.269).

Iral L. Reiss (1966) summarized the current literature at the time and concluded as did the previous investigators that emotional involvement was usually involved for women who engaged in intercourse. Some of his

conclusions were that "there is little question that a permissive premarital sexual tradition has taken root in American culture (p. 123)" and that "the movement appears to be toward a Scandinavian type of system of sex standards, with key emphasis on the association of sex and affection and the quality in the interpersonal relationship (p. 123)." Reiss also stated that "highly permissive groups . . . justified their sexual behavior by the affection present in the relationship (p. 124)." His term "highly permissive" is misleading here. Does he mean that the highly permissive have more sexual relations than the less permissive? Do the less permissive not have sexual relations at all? If the less permissive do have sexual relations, then are the highly permissive women falling in love all the time since they justify intercourse by the affection in the relationship? Reiss does not make himself clear.

Reiss also discusses sexual attitudes. He states that: "There is a widespread belief that much has changed in terms of premarital sexual behavior in the past 20 to 25 years. However, the evidence from all the available major studies is in strong agreement that although attitudes have changed considerably during this period, that many areas of sexual behavior, such as premarital coital rates, have not (p. 125)." He seems to be saying here that women are more accepting of other women's sexual behavior than they previously were even though they may not also engage in any sexual behavior, particularly coitus.

Despite what Bell concluded in 1966 that premarital coital rates for women had changed little since the 1920's, both he (in a later study) and Kaats and Davis in a separate study, concluded that there now appears to be an increase in premarital coital rates for women.

Kaats and Davis studied the sexual behavior of the University of Colorado women in 1967 and found a marked contrast to pre-1962 data. Their study reported a 41 percent rate of premarital coitus. This is a figure about twice as high as had traditionally been reported in other universities. Kaats and Davis found it significant that their data were gathered from 19- to 20-year-old sophomores rather than upperclass women. They cite three possibilities for this rate increase: a) the social forces of the past decade, including the increase of petting; b) the advent and accessibility of birth control pills; and c) a change of college students' attitudes toward a more liberal direction. On this last possibility Kaats and Davis add:

A widely accepted view is that discrepancies between attitudes and behavior are resolved by changing either the attitude or behavior. With regard to sexual attitudes and behavior, the general feeling has been that behavior has been more liberal than expressed attitudes and more people have indulged in intercourse than express attitudes approving of it. If attitudes have been becoming progressively more liberal, it appears highly likely that behavior too, may begin to change in a more liberal direction. Thus, it seems reasonable that marked attitude-behavior discrepancies would contain the potential for sudden change . . . (p. 391).

In the Kaats and Davis study is cited a study by Davis (1970) alone. He "reviewed all published and several unpublished studies of college students' behavior in which the data were collected in the 1960's(p. 391)."

From his review he points out:

In my examination of the data, I find only two substantial carefully executed studies . . . which showed a nonvirgin rate below 30 percent for college women and most of the studies yield figures in the 40 percent to 55 percent range Overall, it is clear that there are several schools with rates considerably higher than the classic 25 percent figure, and the weight of the data suggests a marked change in the number of college women who experience premarital coitus.

In the study itself by Kaats and Davis, an initial sample of women showed a premarital coital rate of 41 percent. A second study was done one quarter later which included a guard against volunteer bias. The follow up study showed a premarital coital rate of 44 percent. They concluded that the initial study was representative of the sophomore and juniors at the University of Colorado.

While Kaats and Davis replicated their study in two succeeding quarters, Bell and Chaskes (1970) in 1968 replicated a 1958 study of college coeds. They used the same questionnaire in the 1968 study as in the 1958 study and used as subjects coeds attending the same university used in 1958. As stated earlier, Bell had concluded in 1966 that no significant raise in premarital coital rates for women had occurred since the 1920's. However, results from their 1968 study led Bell to conclude "that a change has been occurring in the sexual experiences of college girls since the mid-1960's (p. 81)." Causes leading to these changes according to Bell are the rebellion among the young, including questioning the morality of adults

and their institutions, and the availability of birth control pills. In replicating the 1958 study, Bell and Chaskes matched their 1968 subjects to those used in 1958. The areas they matched were age and class standing, social class background and religious background. Bell and Chaskes broke down the premarital coital rate into three areas: a) dating, b) going steady, and c) engagement. Bell and Chaskes found that:

The number of girls having premarital coitus while in a dating relationship went from 10 percent in 1958 to 23 percent in 1968, and the coitus rates while going steady went from 15 percent in 1958 to 28 percent in 1968. While there was some increase in the rates of premarital coitus during engagement, from 31 percent in 1958 to 39 percent in 1968, the change was not as striking as for the dating and going steady stages (p. 82).

Bell and Chaskes divided their subjects by religious background into Jew, Protestant and Catholic. The number of Catholics in both studies was too small for analysis. They found that "both the Protestant and Jewish girls show[ed] a consistent increase in rates of premarital coitus . . . levels from 1958 to 1968 (p. 83)." They also found that Protestant girls had the highest premarital coital rates while the Catholic girls had the lowest rates. Bell and Chaskes found that overall, the 1968 coeds were "more apt to have had intercourse at all levels of the dating relationship (p. 83)."

Robinson, King and Balswick (1972) also did a replication study, mainly either to confirm or disagree "with the Bell and Chaskes data on the marked liberalization in the college women's sexual attitudes and

behavior during the late 1960's (p. 189)." Robinson et al. used a questionnaire as did Bell and Chaskes. Robinson's first sample was taken in 1965, the second in 1970. He did not state in his report if he had tried to match the 1965 and 1970 subjects as to background. However, Robinson et al. did state that the 1970 subjects were representative of the university in which they attended. The results of the 1970 study more than confirmed Bell and Chaskes' study. Robinson et al. had found the premarital coital rate for women in 1965 to be 28.7 percent. In 1970 the rate had risen to 37.3 percent. Though not related to the present study, it is interesting to note that while they found that the females' premarital coital rate had increased, the male rate had decreased though not significantly. Also interesting to note is that they found that for females No Petting, Light Petting and Medium Petting percentages had decreased by 7.4, 12.7, and 4.8 respectively. Heavy Petting percentages had increased, however, by 25.4 percent.

Robinson examined heavy petting, defined as manual or oral manipulation of the genitals. The 1965 to 1970 change for females was from 34.3 percent to 59.7 percent, or a change of +25.4 percent. The 1970 study separated manual from oral stimulation and found that 54 percent of the females had engaged in oral manipulation of the genitals, despite the "censure in custom, religion and law for such behavior (p. 191)." Unfortunately, this was the only study found that specifically mentioned oral-genital relations. Therefore, it is not possible to say if the percentage found at this particular university can be generalized to the coed population.

Crouch and Powell (1969) studied the sexual attitudes of Appalachian State University (ASU) coeds. In their study they found that 44 percent of the junior females and 23 percent of the freshmen females had engaged in premarital coitus. In other words, 33.5 percent of the female subjects had had premarital coital relations. The percentage supports the findings of other researchers that the premarital coital rates have increased since the mid 1960's. This study also indicated that the sexual activity of ASU females is comparable to that of females in other universities. Crouch and Powell asked their subjects how sexually experienced they wished their partners to be. Zero percent of the nonvirgins and 20 percent of the virgins, or 10 percent of the females preferred someone sexually naive. Someone with some experience was preferred by the majority of the females, 71 percent overall. Twenty percent of the nonvirgins and 18 percent of the virgins, or 19 percent overall, wanted someone who was sexually sophisticated. It appears that the females, especially the nonvirgins prefer a partner with a similar background in sexual experiences. It also appears that while men like to have virgin partners (19 percent of the nonvirgin males and 50 percent of the virgin males) the reverse is not true. An article in a recent Response magazine (1974) discussed how a sexually experienced female may handle coupling with a virgin male. According to the article, many sexually experienced women are afraid of a virgin male for two reasons: a) they do not care to have an inept lover, and b) they do not really know what to do with a male who has no sexual experience. The females are afraid they will appear too aggressive to the virgin male and

ruin the relationship. These may be the reasons sexually experienced ASU females do not care to have a naive partner but further study needs to be done to clarify this point.

Acceptability of premarital coitus in different relationships was also questioned by Crouch and Powell. The majority of nonvirgin females (64 percent) said it was acceptable for couples engaged or in love. However, virgin females (73 percent) felt intercourse should be reserved for marriage. Only 14 percent of the nonvirgin females and 6 percent of the virgin females felt intercourse was acceptable for everyone.

The latest study found dealing with sexual behavior of females appears to say that now females do not feel that intercourse should be reserved for marriage. Sexology magazine (1974) reported on the study done by The Presidential Commission on Population Growth and the American Future. In a 54-page report on the sexual behavior of teenage girls, the Commission found a premarital coital rate of up to 80.8 percent. The study gave percentages for both black and white girls, from ages 15 to 19. The premarital coital rate was higher for all ages in the black females, with the highest being 80.8 percent in the 19-year-olds. The highest premarital coital rate for the white females was also found in the 19-year-olds--40.4 percent. The average percentage rate for black females was 53.6 percent; for white females it was 23.4 percent. Overall the rate was 27.6 percent. Some of the findings related in the Sexology article are as follows:

- a) Over one-fourth of all unmarried 15- 19-year olds are having sexual intercourse regularly.
- b) Half of the 19-year-olds have had sexual relations at least once.

c) Hundreds of thousands of girls start having sexual relations at the age of 12.

d) Over one million girls under the age of 19 have had six or more sexual partners.

e) Of the eight million 15- to 19-year-old girls in the United States, more than two million have had intercourse (p. 56)

According to the Sexology article, the Commission interviewed more than 4,000 girls which "represent a scientific cross-section of the population. The national figures were computed from this sampling (p. 56) The study found that white girls started sexual relations later but that the "whites are much more active during their later teens (p. 57)." Not only did the Commission report that whites were more active in their later teen but that they also had more sexual partners than blacks. If this study is valid, it strongly disagrees with the idea that black females are more promiscuous than white females.

Concerning contraceptives, the study found that the majority of teenage girls did not care to use any method of birth control consistently. When birth control was used, the whites used withdrawal, condoms and oral methods in that order of preference. Whether lack of birth control methods was due to neglect or ignorance was not clearly understood in the study.

This study substantiates the small studies and their premarital coital rates. Though the premarital coital rate may not have changed greatly since the 1920's according to Bell (1966), they have changed, according to Bell and other researchers, since the mid-1960's.

The present study sought to determine if ASU females were comparable to the females in the reviewed literature as to behavior and attitudes. Lack of time prevented an initial and followup study of ASU females as done by Bell and Davis, and Robinson, et. al. In the study by Crouch and Powell, freshmen and junior girls were used as subjects. Some of the differences found between these two groups may have been due to differences in backgrounds of the girls (i. e., size of town lived in, income of parents, church preference, etc.). To avoid this, sisters were used in the present study, The method used for obtaining data was two questionnaires, one dealing with attitudes, the other with behavior. Three hypotheses were formed:

a) There is no significant difference between reported attitudes of freshmen women and their upperclass sisters.

b). There is no significant difference between the reported behavior of the freshmen women and their upperclass sisters.

c) There is no significant difference between the reported attitudes and behaviors of the freshmen women or of their upperclass sisters.

Method

Subjects

All subjects were students at Appalachian State University (ASU). A total number of 30 women participated; 15 were freshmen and 15 were their upperclass sisters. Sisters were used in this study as a control against background difference.

Three dormitories on the ASU campus house only freshmen girls: Doughton, White, and Hoey. Residence assistants (RA) on each hall of the three dormitories were called to find the names of freshmen girls with upperclass sisters. The list of names was arranged according to the dormitory in which the freshmen girls lived. Twelve girls resided in Doughton Dormitory, seven of whom answered the questionnaires. Five of the eight girls in White Dormitory answered the questionnaires. All three of the girls found in Hoey Dormitory answered the questionnaires. All together, 23 freshmen girls were asked to participate in the study. Of the 23, 15 girls completed the study. All of the freshmen girls were first contacted by letter or phone. The following letter contains basically what each freshmen girl was told about the study.

Dear (student's name),

I'm a graduate student in psychology and am working on my my thesis. For subjects, I need freshmen girls who have an upperclass sister attending ASU. I called your hall and the RA gave me your name. I want to ask you if you would please help me out. I need both you and your sister to answer two questionnaires for me. The questionnaires are multiple choice; one questionnaire has 25 questions, the other has 20 questions. The questionnaires are on sex and the questions are personal--but there is no way I or anyone else can identify you from the answer sheets.

Please talk with your sister about this and see if she is willing to help me, too. I need both of you.

Unfortunately, I can use only sisters and there aren't many at ASU. So far I've found only 14 and I need at least 30 pairs for my study.

I will try to contact you by phone or in person Tuesday the 26th or Wednesday the 27th. I hope you and your sister will help me out.

Sincerely,

Lindy Kewatt

Visits were made to each of the freshmen girls to see if she and her sister were agreeable to answering the questionnaires. All of the freshmen girls agreed to answer the questionnaires, however, the upperclass sisters were not so agreeable. Seven upperclass sisters refused to answer the questionnaires; the eighth sister had recently left school. Two of the upperclass sisters had "too much to do" according to their freshmen sisters. The other five upperclass sisters reportedly did not care to answer a sex questionnaire. The freshmen girls seemed disappointed that they would not be able to participate since their sisters had refused to participate. The tone of voice and facial expressions of the freshmen girls led the experimenter to believe that the girls did want to participate and were not using their sisters as scapegoats.

Questionnaires

Two questionnaires were used for the study (See Appendix A and B for the actual questionnaires). Questionnaire A (QA) dealt with the reported attitudes or beliefs that the subjects had about sexual matters. Questionnaire B (QB) dealt with the subjects reported sexual behavior.

The questionnaires used in the present study were derived from several questionnaires used by different investigators (Crouch and Powell, 1969; Gordon and Gordon, 1972; Popoff, 1969; and Tarvis, 1971).

Questionnaire A consisted of 25 questions. Questions 1-7 dealt with background information, i.e., onset of physical maturity, parents' income, religious background, number of towns lived in, present age, year in school, and population of parents' town. Questions 8-25 dealt with the attitudes that each girl had about other people's sexual behavior.

Questionnaire B dealt with the subject's own sexual behavior. Questions 8-25 on QA were matched with the questions 1-18 on QB. Questions 19 and 20 on QB were about methods used to reach orgasm and kinds of contraceptives used. These two questions were not matched with questions on QA.

The questionnaires used for reference were studied and questions applicable to the present study were chosen. These questions were arranged in a multiple choice form and a rough draft was made. The rough draft was administered to friends of the experimenter to test for clarity of the questions. Also tested was the ability of each question to offer a choice for each subject. Through the help of these friends and the thesis committee, the final questionnaires were formed.

Design

To examine the data obtained from the subjects, correlations, t-tests, and analyses of variance were computed.

Correlations were employed to determine the relationship between each of the following:

a) Scores on Questionnaire A for freshmen women and their upperclass sisters.

b) Scores on Questionnaire B for freshmen women and their upperclass sisters.

c) Scores on Questionnaire A and Questionnaire B for freshmen women.

d) Scores on Questionnaire A and Questionnaire B for upperclass women.

There were 15 pairs of subjects in correlations c and d, and 15 subjects each in correlations a and b.

The relationship of number of towns lived in and questionnaire scores was tested by t-tests. Subjects were divided into having lived in either one town all their lives or more than one town. Freshmen scores on QA were divided into two groups: Group I consisted of those freshmen who had lived in more than one town. Group II consisted of those freshmen who had lived in only one town. These group divisions were repeated for upperclass women and for Questionnaire B. There were eight subjects in each group that had lived in more than one town and seven subjects in each group that had lived in one town only.

To determine the possible influence of age of physical maturation, a 2 x 2 analysis of variance was computed for both Questionnaire A and Questionnaire B. "Early" maturers were those who began to mature before age 13. "Late" maturers were those who began to mature after age 13. Four groups were formed for each questionnaire. Group I for both QA and QB consisted of early maturing freshmen. Group II consisted of late maturing freshmen women. Groups III and IV consisted of early and late

maturing upperclass women respectively. There were eight subjects in each early maturing group, seven subjects in the late maturing upperclass groups, and six subjects in the late maturing freshmen groups.

Procedure

All work was done through the freshmen women. They were given QA first, a copy for each sister, plus two answer sheets and two envelopes in which to put the completed answer sheets. The subjects were instructed to seal the envelopes after placing their answer sheets in them. This was done to insure them of the anonymity of their answers as far as the experimenter was concerned. It was done also so the sisters themselves would not know each others' answers. There was an average time of 13 days between the time QA was answered and the time QB was answered. This span of time between answering the questionnaires was incorporated into the study to guard against the subjects possibly trying to answer QB in the same manner as QA. Directions in answering both questionnaires were the same and were as follows:

On the answer sheet you will see a place for STREET OR BOX NUMBER, and HOME TOWN. This is to help identify sisters only.

Use your parents address. For example, if your parents address is 1316 Tarleton, Burlington, you would put:

STREET OR BOX NUMBER 1316

HOME TOWN Burlington

If your parents address is Rt. 4, Box 25-A, you would put:

STREET OR BOX NUMBER 25-A

For each letter you choose, completely blot it out.

a ● c d e

If you want to change an answer, cross out the

wrong answer a ~~●~~ c ● and mark the correct answer.

If you have any further questions, please ask me.

And PLEASE answer honestly. No one will know your answers.

Analysis of Results

A conservatism scale was developed using both Questionnaire A and Questionnaire B. A scale of 0-5 was used for each choice in each question on both questionnaires. Zero represented the most conservative choice (and the "I don't know" answers on QA) while 5 represented the most liberal choice. Each subject received 2 scores, one for QA and one for QB. For further details on the ratings given to each question choice, see Appendix C. For the actual scores of each sister, see Appendix D. The scores were used to analyze the results further by means or correlations, t-tests, and analysis of variance.

Results

The standard deviation (SD) and the mean were calculated for both classes and questionnaires and are presented in Table 1. For QA the SD was 10.68 for freshmen women and 10.44 for the upperclass sisters. The means were 51.33 and 54.2 for the freshmen women and upperclass women respectively. For QB the freshmen had an SD of 14.94 while the upperclass women had an SD of 22.08 which was the largest SD. The means for both classes on QB was 38.07.

Table 1

Means and Standard Deviations for
Each Group and Each Questionnaire

	SD	X
Questionnaire A		
Freshmen women	10.68	51.33
Upperclass women	10.44	54.20
Questionnaire B		
Freshmen women	14.94	38.07
Upperclass women	22.08	38.07

Scores for the freshmen women on QA ranged from a low of 28 to a high of 69. The range for upperclass women on QA was larger, from 20 to 80. Scores on QB ranged from 12 to 61 for freshmen women and from 4 to 73 for upperclass women. (See Appendix D for further details.) Three freshmen women received a higher QB score than QA score, one received the same score on both questionnaires. Only one upperclass women received a higher QB than QA score. All other QB scores were lower than the subject's QA scores. There was a difference of up to 37 points between QA and QB scores for the freshmen and 36 points for upperclass women.

Background information was gathered on parents' income, religious background, number of towns lived in, and population of the town where the parents presently lived. Five subjects had parents with incomes between 25 and 50 thousand, seven had incomes between 15 and 25 thousand while only two had incomes between 8 and 15 thousand. Only one pair of subjects indicated that their parents' income was below 8 thousand. Baptists were the largest group (five) with Methodists following (four) where religious preference was concerned. There were three Presbyterians, two "Other" religious preferences and one Lutheran. These numbers were too small for any analysis. Very few of the subjects had moved around much. Only one freshman and two upperclass women had lived in more than five towns. Seven freshmen and six upperclass sisters had lived in fewer than five towns while seven freshmen and upperclass women had lived in the same town all their lives. The size of the towns where the parents presently lived was varied. Five subjects came from towns with populations of over 50 thousand, four from towns of populations between 40 and 50 thousand, two from towns of between 10 and 25 thousand, and one from a

town of between 5 and 10 thousand. Three subject pairs were from towns with populations below 5 thousand. Only one pair of sisters were out-of-state residents.

Eleven freshmen were aged 18 and four were 19. Five upperclass women were 19, seven were 20, one was 21 and two were 22. The classifications of the upperclass women were as follows: seven sophomores, four juniors, three seniors and one graduate student.

Questionnaire A. The majority of both the freshmen (49 percent) and their upperclass sisters (67 percent) felt intercourse was all right only if the couple were in love. Twenty-seven percent felt it was all right only if the couple were planning to be married. Three freshmen and upperclass women (20 percent) felt intercourse was all right if the couple felt close to each other or if there was no emotional involvement. Only one freshman woman and two upperclass women felt premarital intercourse was wrong for all people. Concerning friends who had premarital intercourse, 33 percent of the freshmen but only seven percent of the upperclass women knew of friends who had had intercourse in high school. The majority of freshmen, 53 percent, felt oral-genital relations should be between couples who loved each other while 64 percent of the upperclass women felt oral-genital relations were for anyone who wanted to engage in it regardless of emotional involvement. For sexual positions, 73 percent of the freshmen women and 66 percent of the upperclass women felt that varied positions were best ("three or more positions"). Two (13 percent) freshmen women and one (seven percent) upperclass woman felt the proper sexual position was only the male above. Forty percent of the freshmen women and 33 percent of the upperclass women

felt people were more likely to have sexual relations after drinking while 47 percent and 40 percent of the freshmen women and upperclass women respectively felt the desire to engage in sexual relations was greater. The results for marijuana were different. Forty percent of both groups felt that those who were high from smoking marijuana sometimes had an increase in sexual desire. Forty percent of the freshmen and 47 percent of the upperclass women did "not know about sexual desire and grass."

When having sexual relations, 66 percent of the freshmen women and 60 percent of the upperclass women felt "people are as concerned about their partner's pleasure as their own." There were limitations on the types of partners, however. Only two (13 percent) of the freshmen women felt people wanted someone who was extremely experienced and took the lead in the sexual acts. Forty-seven percent of the freshmen and 60 percent of the upperclass women felt people preferred someone who was experienced but also "willing to learn new and different ways." Forgetting about partners for the moment, 29 percent of the freshmen women felt masturbation was acceptable when done occasionally. However, 57 percent felt it was wrong at all times as opposed to seven percent of the upperclass women. They felt that masturbation was acceptable when done occasionally (33 percent), when done to the exclusion of sexual relations (27 percent), and when used in addition to sexual relations (33 percent). Beliefs about anal intercourse brought the most varied responses. Twenty-one percent of the freshmen women felt that people had had limited but positive experience, no experience but wanted it, and no experience and did not want to try it. Twenty-nine percent thought that those who had tried it did not like it. The majority of

upperclass women (46 percent) felt people had no experience and did not want to try it. Twenty-three percent felt people had had limited but positive experience. Those upperclass women who felt people had no experience but wanted to or had tried it and did not like it were 15 percent.

A reverse was found for upperclass women and freshmen women regarding the number of sexual partners. Sixty percent of the freshmen women felt one "should have only one sexual partner during life--the married partner." Only 40 percent felt a person should have as many partners as she wanted, whereas 66 percent of the upperclass women felt this way. Twenty-seven percent of the upperclass women felt the only sexual partner should be the mate. Although the women had definite ideas as to the number of sexual partners people should have, the number of partners they believed their friends to have had varied. The majority of freshmen women (60 percent) and 53 percent of the upperclass women said they did not know how many partners their friends had had. For those who did have some idea, the freshmen women thought their friends had had between three and six partners (seven percent), two partners (seven percent), one partner (13 percent), and no partners (13 percent). For upperclass women, seven percent thought their friends had had between seven and 10 partners, seven percent thought between three and six partners, and 53 percent thought their friends had had one partner. Regardless of their ideas about the number of sexual partners, both the freshmen women and upperclass women felt that contraceptives should be used when having sexual relations. Sixty-seven percent of the freshmen and 73 percent of the upperclass women felt some artificial method should always be used.

The rest of the subjects felt one should usually use some artificial means of contraception.

Of the four ways listed to achieve orgasm (vaginal and anal intercourse, mutual stimulation and oral-genital relations) 67 percent of the freshmen women and 73 percent of the upperclass women felt that any one or a combination of the methods was acceptable. Twenty-one percent of the freshmen women and 14 percent of the upperclass women felt all methods except anal intercourse were acceptable. No one felt only one method at a time should be used or that only vaginal intercourse should be used.

When looking at nude pictures, 60 percent of the freshmen women and 67 percent of the upperclass women thought that people preferred to look at pictures of the opposite sex. Thirty-three percent of the freshmen women and 27 percent of the upperclass women thought that people liked to look at both sexes. The effect of looking at nude pictures brought another reverse in freshmen women and upperclass women. While 40 percent of the freshmen women thought people were sometimes turned on and 60 percent said they were neither turned on nor off, upperclass women (60 percent) thought people were sometimes turned on and only 33 percent thought there was no effect.

Questionnaire B. Both the majority of freshmen women and upperclass women said that premarital intercourse was acceptable to them if there was some degree of emotional involvement. Eighty-six percent of the freshmen women said intercourse was all right if they at least cared for their partner. Fifty-three percent of the 86 percent, however, required at least love to be present. Only one freshmen women (seven percent)

and four (27 percent) upperclass women said they would not engage in premarital intercourse. The majority of freshmen women (53 percent) had engaged in premarital intercourse in high school while the majority of upperclass women (47 percent) were still virgins, at least technically. In other words, while seven upperclass women were virgins, only three had never engaged in oral-genital relations. Women who have engaged in sexual relations but excluding intercourse have been referred to in literature as technical virgins. Thirteen percent of the upperclass had engaged in intercourse in high school while 40 percent had done so in college. Forty percent or six of the freshmen women were virgins. While 47 percent of the freshmen women said they would engage in oral-genital relations, only 35 percent had actually engaged in them. Seventy-seven percent of the upperclass women said they would engage in oral-genital relations but only 47 percent had done so. Not counting those who were virgins (43 percent of the freshmen and 47 percent of the upperclass) the largest percentage of both groups had engaged in premarital intercourse more often than they could count (29 percent of the freshmen women and 27 percent of the upperclass women). Twenty-one percent of the freshmen women and 13 percent of the upperclass women said they had had intercourse more than 10 times but could still count the number. Percentages for the number of positions used were fairly evenly spread out with the freshmen women. Twenty percent had only used the male above position, 27 percent had used two positions, and 27 percent had used three or more positions. The majority of upperclass women (33 percent) had used two positions.

While 33 percent of the freshmen women said they were more likely to have intercourse after drinking only seven percent of the upperclass women said this. The majority of both groups (47 and 40 percent) said their desire for intercourse was greater. Only one freshmen woman said she did not drink while five upperclass women indicated that they did not drink. As in QA, the percentage results for marijuana were different from those concerning drinking. Forty percent of the freshmen women and 20 percent of the upperclass women said their sexual desire was sometimes but not always increased. Fifty-three percent of the freshmen women and 67 percent of the upperclass women said they did not smoke.

When having sexual relations, 33 percent of the freshmen women said their performance and pleasure were equally important while 47 percent said their pleasure and their partner's pleasure were equally important. Only 20 percent or three freshmen women, although there were six virgins, said they did not engage in sexual relations. For the upperclass women, 53 percent said their pleasure and their partner's pleasure were equally important while 40 percent said they did not engage in sexual relations. Concerning anal intercourse in sexual relations, only two freshmen women and two upperclass women had had actual experience with it. One freshman woman had had "limited but all right" experience while the other freshman woman and the upperclass women had had "limited and dissatisfying" experiences. Masturbation was not reported to be engaged in very much by the subjects. Only 14 percent of the freshmen women and 35 percent of the upperclass women said they masturbated.

While 71 percent of the freshmen women and 60 percent of the upperclass women said they would have only their mate as a sexual partner,

28 percent of the freshmen women and 41 percent of the upperclass women already have had two or more sexual partners. Twenty-nine percent of the freshmen and 13 percent of the upperclass women reported having had only one partner so far. As to the amount of experience a sexual partner has, 47 percent of the freshmen women wanted a man "somewhat experienced and the leader in the sexual act(s)." Thirty-three percent wanted an experienced partner who was also willing to learn from the women, and 13 percent said they only wanted their mate as a partner. Thirty-three percent of the upperclass women wanted an "experienced leader" while 27 percent wanted an "experienced learner." Those who only wanted their married mate were 27 percent. One freshman woman and two upperclass women said they preferred to have a virgin as a partner. When having sexual relations, 58 percent of the freshmen women and 50 percent of the upperclass women said they always used some form of artificial contraception. The remaining subjects usually used some artificial means. While freshmen women (33 percent) preferred all methods except anal intercourse to achieve orgasm, 43 percent of the upperclass women said they were willing to use all methods. Twenty-seven percent of the freshmen women and 29 percent of the upperclass women said they would use only one method at a time to achieve orgasm. Vaginal intercourse only was preferred by 13 percent of the freshmen women and 14 percent of the upperclass women.

While only seven percent of both groups thought the people they knew did not like to look at nude pictures, 47 percent of the freshmen and 33 percent of the upperclass women said that they did not care for nude pictures. Thirty-three percent of both groups preferred to look at male nudes while 20 percent of the freshmen and 33 percent of the upperclass

women like to look at nudes of both sexes. Only 20 percent of both groups said they were sometimes turned on while 80 percent of both groups said they were neither turned on nor off.

Actual methods used for achieving orgasm for the freshmen women were as follows: vaginal intercourse, 33 percent; mutual stimulation, 24 percent; and oral-genital, 19 percent. For the upperclass women the percentages were 28 for vaginal intercourse, 22 for mutual stimulation, and 11 for oral-genital. Forty-two percent of the freshmen and 40 percent of the upperclass women had used either the pill or condom for birth control while 26 percent of the freshmen and 15 percent of the upperclass women had used coitus interruptus. Two (10 percent) upperclass women had used the rhythm method for contraception. See Table 2 for a summary of reported sexual experiences from Questionnaire B.

Correlations were employed to determine if a relationship existed between the freshmen women and their upperclass sisters in attitudes and behaviors. In Table 3 it is noted that a correlation did exist in the reported attitudes (Questionnaire A) of freshmen women and their upperclass sisters ($p = < .05$). No significant correlation was found to exist between freshmen women and their upperclass sisters on reported behavior. Nor was there a significant correlation between the attitude and behavior scores of the freshmen women. However, a correlation was found between the attitude and behavior scores of upperclass sisters ($p = < .001$).

Using t-tests, no significant differences were found as to the number of towns lived in and the reported attitudes and behaviors of either freshmen or their upperclass sisters. (see Table 4.)

Table 2

Reported Sexual Experience on Questionnaire B

Class Rank	intercourse		oral-genital No. %	masturbation No. %	means of achieving orgasm		
	vaginal No. %	anal No. %			vaginal inter. No. %	mutual stimulation No. %	oral-genital No. %
Freshmen women	9 60	2 14	5 35	2 14	7 33	5 24	4 19
Upperclass women	8 53	2 13	7 47	5 35	5 28	4 22	2 11

Table 3
Correlations and t-tests Results between
Sister Combinations and Questionnaires

	r	t	p
Questionnaire A			
Freshmen X Upperclass	.52	2.19	.05
Questionnaire B			
Freshmen X Upperclass	.22	.78	ns
Freshmen women			
QA X QB	.24	.89	ns
Upperclass women			
QA X QB	.86	5.97	.001

Table 4
 Results of t-tests between Sisters
 Who Have Lived in One versus More than One Town
 for each Questionnaire

Questionnaire	t	p
QA		
Freshmen women	.65	ns
Upperclass women	.53	ns
QB		
Freshmen women	1.03	ns
Upperclass women	1.05	ns

A 2 x 2 analysis of variance was used to test for significance in age of physical maturation and class rank (freshmen vs. upperclass). Again, no significant differences were found. However, on Questionnaire A when combining Age of Maturation and Educational Level an F ratio of 4.152 was found to approach the .05 level of significance. An F ratio of 4.24 was actually needed to reach the .05 level. See Tables 5 and 6 for further details.

Discussion

Results from this study indicate that the subjects' behaviors and attitudes are comparable to those of subjects used in other studies.

As a whole, the subjects scored higher on Questionnaire A than on Questionnaire B. This indicates, as Freedman (1965) had found, that the subjects reported attitudes were more liberal than their reported behaviors. Freedman found that his subjects as seniors were more liberal than they had been as freshmen. The present study also indicates this, especially on several questions. On question 8 of QA (see Appendix A for further details) only 47 percent of the freshmen women felt it was all right for people in love to have premarital intercourse while 67 percent of the upperclass sisters felt this way. On question 10, 64 percent of the upperclass women felt oral-genital relations were acceptable for any two people who wanted to engage in them but only 26 percent of the freshmen women felt this way. While 57 percent of the freshmen women felt masturbation was wrong at all times, only seven percent of the upperclass sisters felt this way (question 18). A small difference was noted in question 20. "A person should have as many sexual partners as desired," was chosen by 40 percent of the freshmen women and by 66 percent of the

Table 5
Analysis of Variance
Questionnaire A by Educational Level and Age of Maturation

	SS	df	MS	F
Total	4182.1374	28	--	--
Age of Maturation (A)	433.4691	1	433.4691	3.424
Educational Level (B)	58.5237	1	58.5237	.462
A x B	525.5724	1	525.5724	4.152
Error	3164.5722	25	126.5828	--

Table 6
 Analysis of Variance
 Questionnaire B by Educational Level and Age of Maturation

	SS	df	MS	F
Total	9951.8630	28	--	--
Age of Maturation (A)	100.0005	1	100.0005	.275
Educational Level (B)	.0010	1	.0010	----
A x B	713.2260	1	713.2260	1.951
Error	9138.6355	25	365.5454	--

upperclass sisters. These noted differences may be a result of the upperclass sisters being exposed to many differing behaviors during their college careers. The freshmen women have had less time than their sisters for this exposure.

Smigel and Seiden (1968), Freedman (1965), Erhmann (1959), Reiss (1966), Bell and Chaskes (1968) and Crouch and Powell (1969) found that premarital intercourse more acceptable if there was emotional involvement for the female. In the present study, 83 percent of the freshmen and 46 percent of the upperclass sisters required love to be present. Only 13 percent of both groups said they would engage in premarital intercourse with someone to whom they felt close. Despite women's liberation, there still appears to be a large number of women who cannot or will not separate love and sex.

While Robinson, et. al., found that 54 percent of their subjects had engaged in oral stimulation, only 35 percent of the freshmen women and 47 percent of the upperclass women in the present study had done so. Robinson's study was done at the University of Georgia which is a much larger university than ASU. This difference in size may account for the smaller percentage of women experienced in oral stimulation at ASU. Also, the University of Georgia, though it is further South than ASU, may draw more Northern students than ASU. Generally, Northern students appear to have more liberal sexual attitudes and possibly more liberal sexual behavior than Southern students, resulting in a higher oral stimulation rate. The fact that the present study's sample was so small may be another reason for the difference in the percentage rates. The sister's rates may be lower than the rates of ASU coeds in general.

Although the sample in the present study was small, the premarital coital rate was found to be higher than in some of the larger studies. The freshmen women's rate of premarital coitus was 60 percent while for their upperclass sisters the rate was 53 percent. There is little difference here in the rates for freshmen women and upperclass women. However, the rates are reversed from what Crouch and Powell found for ASU coeds in 1969. Their rates were 44 percent for junior females and 23 percent for freshmen females. Where Crouch and Powell could have concluded that their junior rate may have been the result of college life, this cannot be said of the freshmen used in the present study. Eight of the nine nonvirgins had their first premarital experiences while still in high school. Only two upperclass sisters had premarital coital relations in high school. It may be that as society becomes more liberal in its sexual attitudes, the younger females are becoming more liberal in their behaviors. As stated in the Sexology article, females are beginning sexual relations earlier now than previously. If this is true it would account for the freshmen women having a higher premarital coital rate than their upperclass sisters. The high premarital coital rates are comparable to those found by Davis (1970) in his study. He stated that most studies yielded "figures in the 40 to 55 percent range." However, since the sample in the present study was small, it may not at all be representative of ASU females.

The majority of both classes in the present study preferred somewhat sexually experienced partners as opposed to extremely experienced and inexperienced partners. These are the same general results that Crouch and Powell found. It appears that while the premarital coital rates

have risen for ASU coeds (if the rates can be generalized) their preference in sexual partners has not changed. It seems that while the women may be afraid of being dominated by an extremely experienced male, neither do they want the possible ineptness of an inexperienced male. A happy medium is reached by preferring a "somewhat experienced" partner.

While the Sexology article reported that most of their teenage subjects did not use contraceptives this was not the case with ASU coeds used in the present study. The majority of both groups stated that they always used artificial contraceptives and the rest said they usually did. While eight subjects had used coitus interruptus and two had used the rhythm methods which are not very effective at least they did use some method. This difference in use may be due to the college students feeling more responsible for their actions than the teenagers. The coeds have a goal in mind, whether career and/or marriage, and a pregnancy would not be conducive to this goal.

Although there were some definite differences in the way freshmen women and their upperclass sisters answered certain questions, overall differences were only significant on the attitude questionnaire. No correlation existed between freshmen women and their upperclass sisters on QB. However, a positive correlation ($r = .52$) was found on QA. Neither was there a significant correlation in the attitudes and behaviors of freshmen women. This may be due to the freshmen women having a less liberal attitude and a more liberal behavior in some areas but not in others. While there was no significant correlation between QA and QB for freshmen, there was a significant correlation between QA and QB for upperclass sister. This correlation may be due to the upperclass women

having a more definite moral standard which they follow than do the freshmen women.

As a result of these correlations, the hypotheses were accepted or rejected as follows: a) There is no significant difference between reported attitudes of freshmen women and their upperclass sisters. This hypothesis was rejected due to a correlation at the .05 level. b) There is no significant difference between the reported behavior of the freshmen women and their upperclass sisters. This hypothesis was accepted. c) There is no significant difference between reported attitudes and behaviors of the freshmen women or their upper class sisters. This hypothesis was accepted for the freshmen women but rejected for the upperclass sisters ($p < .001$).

No significant results were found for the number of towns lived in. This seems to indicate that movement or lack of it from town to town does not effect ones attitudes or behavior.

Again no significant results were found when class rank and age of maturation were analyzed. The indications here are that an early maturing person does not have a more liberal attitude or behavior than a late maturer. Neither did the educational level of the early or late maturer have any effect on the liberality of attitudes or behavior. In fact, the analyses of variance on Questionnaire B for educational level was so small as to indicate no relationship at all. On Questionnaire A when combining educational level and age of maturation the results approached significance. There may be a minor relationship between age of maturation, educational level, and attitudes but not between age of maturation, educational level, and behavior.

Summary

The premarital coital rates found in this study for freshmen women (60 percent) and for upperclass sisters (46 percent) are higher than the rates found by the researchers cited in the review of literature (from 23 to 55 percent). These sibling rates may not generalize to the ASU coed population since the sample of subjects in the present study was so small.

By rating question choices on a scale of 0-5, scores were obtained on both QA and QB for freshmen women and their upperclass sisters. As a whole, attitude scores were higher than behavior scores for both groups. A correlation was found between freshmen women and their upperclass sisters on attitudes but not on behavior. No correlation was found for freshmen women between their attitudes and behavior but a correlation was found for upperclass sisters. The number of towns lived in made no difference in the subjects scores, nor was age of maturity and educational level found to be significant. The number of subjects in each religious group was too small to be analyzed. Those subjects living in different sized towns were too small for analyses also.

The conclusions are that while sibling attitudes are related their behaviors are not and while a high correlation exists between attitudes and behaviors for upperclass women no correlation exists for the freshmen women.

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Appendix A
Questionnaire A

	Freshmen		Upperclass	
	No.	%	No.	%
1. I began to mature physically				
a. before age 11	1	7	1	7
b. between age 11 and 13	7	50	7	47
c. between age 13 and 15	5	36	7	47
d. after age 15	1	7	0	0
✓ 2. My parents income per year is				
a. \$50,000 or above	0	0	0	0
b. between \$25 and \$50 thousand	5	33	5	33
c. between \$15 and \$25 thousand	7	47	7	47
d. between \$8 and \$15 thousand	2	13	2	13
e. below \$8	1	7	1	7
✓ 3. My religious background is				
a. Catholic	0	0	0	0
b. Baptist	5	33	5	33
c. Methodist	4	27	4	27
d. Lutheran	1	7	1	7
e. Presbyterian	3	20	3	20
f. Other	2	13	2	13
✓ 4. By the time I graduated from high school I had lived in				
a. more than 10 towns	0	0	0	0
b. from 5 to 10 towns	1	7	2	13
c. fewer than 5 towns	7	47	6	40
d. the same town all my life	7	47	7	47
✓ 5. My present age is				
a. 18	11	73		
b. 19	4	27	5	33
c. 20			7	47
d. 21			1	7
e. 22			2	13
f. other			0	0
✓ 6. My classification is				
a. freshman	15	50		
b. sophomore			7	23
c. junior			4	13
d. senior			3	10
e. other			1	3

	Freshmen		Upperclass	
	No.	%	No.	%
✓ 7. The population of the town where my parents live is approximately				
a. over 50 thousand	5		5	
b. between 40 and 50 thousand	4		4	
c. between 25 and 40 thousand	0		0	
d. between 10 and 25 thousand	2		2	
e. between 5 and 10 thousand	1		1	
f. below 5 thousand	3		3	
✓ 8. I believe premarital intercourse is				
a. all right only if two people are planning to be married	4	27	0	0
b. all right only if two people are in love	7	47	10	67
c. all right for people who feel close to each other	3	20	1	7
d. all right even if there is no emotional involvement (mainly physical desire)	0	0	2	13
e. wrong for all people	1	6	2	13
9. Most of the people I know in school				
a. had intercourse by the time they finished 8 grade	0	0	0	0
b. had intercourse during high school	5	33	1	7
c. had intercourse while a freshman or sophomore at college	3	20	4	27
d. had intercourse while a junior or senior in college	0	0	0	0
e. are still virgins	2	13	2	13
f. I am not familiar with their sex lives	5	33	8	53
✓ 10. Oral-genital sexual relations should be				
a. engaged in only between married couples	1	7	1	7
b. engaged in between engaged couples	0	0	1	7
c. between couples who love each other	8	53	3	21
d. between couples who care for each other	1	7	0	0
e. between any two people who want to engage in it	4	26	9	64
f. left out of sexual relations altogether	1	7	0	0
✓ 11. Oral-genital sexual relations				
a. are a good addition to intercourse	10	71	11	79
b. should only be engaged in when intercourse is not desirable (during menstruation)	1	7	1	7
c. should be used instead of sexual intercourse for single people	1	7	0	0
d. should not be used at any time	2	14	2	14

	Freshmen		Upperclass	
	No.	%	No.	%
12. The majority of people I know who have engaged in premarital sexual relations have done so				
a. more often than can be counted	1	7	4	27
b. more than 10 times but still countable	0	0	0	0
c. from 7 to 10 times	0	0	0	0
d. from 3 to 7 times	0	0	0	0
e. less than 3 times	3	20	2	12
f. at no time	0	0	0	0
g. I do not know how often	11	73	9	60
✓13. The [?] proper sexual position is				
a. only the male above	2	13	1	7
b. only the female above	0	0	1	7
c. limited to only 2 different positions	2	13	2	13
d. 3 or more positions	11	73	10	66
e. none unless the couple is married	0	0	1	7
✓14. When ^I people drink				
a. they are more likely than usual to have sexual relations	6	40	5	33
b. their desire to engage in sexual relations is greater than when not drinking	7	47	6	40
c. their desire to engage in sexual relations is less than when not drinking	0	0	1	7
d. they have no change in sexual desire	1	7	1	7
e. I do not know	1	7	2	13
✓15. People who ^{when I} become high from smoking marijuana (grass)				
a. are more likely than usual to have sexual relations than when not high	0	0	0	0
b. almost always desire sexual relations but do not always act on these desires	1	7	2	13
c. have no change in their sexual desires	1	7	0	0
d. have a decrease in sexual desire	1	7	0	0
e. sometimes have an increase in sexual desire but not always	6	40	6	40
f. I do not know about sexual desire and grass	6	40	7	47

		Freshmen		Upperclass	
		No.	%	No.	%
16.	When having sexual relations people are				
a.	more concerned with how they perform rather than the pleasure they receive	0	0	0	0
b.	more concerned with their own pleasure than their performance	0	0	1	7
c.	just as concerned about their performance as about their pleasure	2	13	3	20
d.	as concerned about their partner's pleasure as their own	10	66	9	60
e.	I have no idea what their concerns are	3	20	2	13
17.	The best sex partners are those who are				
a.	extremely sexually experienced and take lead in the sexual act(s)	2	13	0	0
b.	somewhat experienced and take lead in the sexual act(s)	3	20	2	13
c.	experienced but willing to learn new and different sexual ways	7	47	9	60
d.	inexperienced but willing to learn	1	7	2	13
e.	married to each other	0	0	2	13
f.	virgins	2	13	0	0
18.	I believe that masturbation				
a.	is acceptable when done occasionally and one does not also have sexual relations	4	29	5	33
b.	is all right even when done to the exclusion of sexual relations	1	7	4	27
c.	acceptable when used in addition to sexual relations	1	7	5	33
d.	is wrong at all times	8	57	1	7
19.	Concerning anal intercourse, I believe ^{? have} most people				
a.	have used it fairly often and found it satisfying	1	7	0	0
b.	have had limited but positive experience with it	3	21	3	23
c.	have had no experience but want to try it	3	21	2	15
d.	have had no experience and don't want to	3	21	6	46
e.	who have tried it don't like it	4	29	2	15

		Freshmen		Upperclass	
		No.	%	No.	%
20.	A person				
a.	should have only one sexual partner during life--the married mate (do not consider remarriage)	9	60	4	27
b.	should not have more than three premarital sexual partners during life	0	0	1	7
c.	should have as many sexual partners as desired	6	40	10	66
d.	should change sexual partners every so often	0	0	0	0
21.	When having sexual intercourse				
a.	one should always use some artificial method of contraception	10	67	11	73
b.	one should usually use some artificial method of contraception	5	33	4	27
c.	one should only use the natural contraceptive methods (rhythm method or coitus interruptus--pulling out)	0	0	0	0
d.	no method of contraception should be used since all methods are unnatural	0	0	0	0
22.	Four different ways of achieving orgasm (with a partner) are vaginal intercourse, anal intercourse, mutual stimulation and oral-genital relations. Of these methods for achieving orgasm				
a.	any method or combination is acceptable as long as both partners agree	11	79	12	86
b.	any method or combination is acceptable as long as anal intercourse is not used	3	21	2	14
c.	only one method should be used at a time	0	0	0	0
d.	only vaginal intercourse should be used at all times	0	0	0	0
23.	Most people I know of my own sex, have had intercourse with				
a.	more than 10 partners	0	0	0	0
b.	between 10 and 7 partners	0	0	1	7
c.	between 6 and 3 partners	1	7	1	7
d.	two partners	1	7	0	0
e.	one partner	2	13	5	53
f.	no one	2	13	0	0
g.	I do not know how many partners	9	60	8	53

	Freshmen		Upperclass	
	No.	%	No.	%
24. I believe that most people I know				
a. prefer to look at nude pictures of the opposite sex	9	60	10	67
b. prefer to look at nude pictures of the same sex	0	0	0	0
c. like to look at nude pictures of both sexes	5	33	4	27
d. don't like to look at nude pictures	1	7	1	7
25. When looking at pictures of nudes (opposite sex) I believe people				
a. are almost always turned on	0	0	1	7
b. are sometimes turned on	6	40	9	60
c. are neither turned on nor off	9	60	5	33
d. are turned off	0	0	0	0

Appendix B

Questionnaire B

	Freshmen		Upperclass	
	No.	%	No.	%
1. I would engage in premarital intercourse				
a. only if I were engaged to be married	3	20	2	13
b. only if I were in love with my partner	8	53	5	33
c. with any person I felt close to	2	13	2	13
d. with anyone I cared to	1	7	2	13
e. under no circumstances	1	7	4	27
2. I had my first premarital intercourse				
a. before 8th grade	0	0	0	0
b. during grades 9 through 12	8	53	2	13
c. during my first two years of college	1	7	5	33
d. during my last two years of college	0	0	1	7
e. I am a virgin	6	40	7	47
3. I engage in oral-genital sexual relations				
a. I plan to do this only with my mate	3	20	1	8
b. only with the person I am engaged to	0	0	0	0
c. only with someone I love	4	27	7	54
d. only with someone I care something about	0	0	0	0
e. with anyone I care to	0	0	2	15
f. I have never engaged in oral sex	8	53	3	23
4. I engage in oral-genital sexual relations				
a. in addition to intercourse	3	21	4	27
b. only when intercourse is not desirable	1	7	0	0
c. instead of sexual intercourse since I am single	1	7	3	20
d. at no time (at present)	9	64	8	53
5. I have engaged in premarital sexual relations				
a. more often than I can count	4	29	5	33
b. more than 10 times but I can still count the times	3	21	2	13
c. 7 to 10 times	0	0	1	7
d. 3 to 7 times	0	0	0	0
e. less than three times	1	7	0	0
f. at no time	6	43	7	47

	Freshmen		Upperclass	
	No.	%	No.	%
6. Sexual positions I have used have been				
a. only the male above	3	20	1	7
b. only the female above	0	0	0	0
c. limited to only two different positions	4	27	5	33
d. three or more different positions	4	27	2	13
e. none	4	27	7	47
7. When I have been drinking				
a. I am more likely than usual to have intercourse	5	33	1	7
b. my desire for intercourse is greater than when I've not been drinking	7	47	6	40
c. my desire for intercourse is less than when I am not drinking	1	7	1	7
d. I experience no change in my sexual desire	1	7	2	13
e. I do not drink	1	7	5	33
8. When I am high from smoking marijuana (grass)				
a. I engage in more sexual relations than when I am not high	0	0	0	0
b. I almost always desire sexual relations but do not always act on these desires	0	0	0	0
c. my sexual desire is no different when I am not high	1	7	2	13
d. my sexual desire is lessened when I am high	0	0	0	0
e. sometimes my sexual desire is increased but not always	6	40	3	20
f. I do not smoke grass	8	53	10	67
9. When I have sexual relations				
a. I am more concerned with how I perform than what pleasure I receive	0	0	0	0
b. I am more concerned with my pleasure than with my performance	0	0	0	0
c. my performance and my pleasure are equally important	5	33	1	7
d. my partner's pleasure is as important to me as my pleasure	7	47	8	53
e. I do not engage in sexual relations	3	20	6	40

		Freshmen		Upperclass	
		No.	%	No.	%
10.	I prefer my sex partner to be				
a.	very experienced sexually and the leader in the sexual act(s)	0	0	0	0
b.	somewhat experienced and the leader in the sexual act(s)	7	47	5	33
c.	experienced but willing to learn new things from me	5	33	4	27
d.	inexperienced but willing to learn	0	0	0	0
e.	my married mate	2	13	4	27
f.	a virgin	1	7	2	13
11.	I masturbate				
a.	occasionally and have no sexual relations	1	7	2	14
b.	to the exclusion of sexual intercourse	0	0	0	0
c.	in addition to intercourse	1	7	3	21
d.	at no time (at present, several months)	13	86	9	64
12.	My experience with anal intercourse has been				
a.	quite satisfying	0	0	0	0
b.	limited but all right	1	7	0	0
c.	none yet but I am open to trying it	4	27	4	27
d.	none and I don't want to try it	9	60	9	60
d.	limited and dissatisfying	1	7	2	13
13.	I would have				
a.	only my mate as a sexual partner	10	71	9	60
b.	not more than 3 premarital sexual partners	1	7	0	0
c.	as many partners as I desire	3	21	6	40
d.	a change in sexual partners every so often	0	0	0	0
14.	When having sexual relations				
a.	either my partner or I always use some artificial method of contraceptive	7	58	6	50
b.	my partner or I usually use some artificial method of contraception	5	42	6	50
c.	my partner and I only use the natural methods of contraception (coitus interruptus or rhythm)	0	0	0	0
d.	neither my partner or I use any methods of contraception as all methods are unnatural	0	0	0	0

	Freshmen		Upperclass	
	No.	%	No.	%
15. Vaginal intercourse, anal intercourse, oral-genital relations, and mutual stimulation are ways of achieving orgasm. with a partner. Of these methods				
a. I am willing to use any one or a combination to achieve orgasm	4	27	6	43
b. I would use all of them except anal intercourse to achieve orgasm	5	33	2	14
c. I would use only one method at a time to achieve orgasm	4	27	4	29
d. I would only use vaginal intercourse to achieve orgasm	2	13	2	14
16. So far I have had intercourse with				
a. more than 10 partners	0	0	0	0
b. between 10 and 7 partners	0	0	2	14
c. between 6 and 3 partners	2	14	0	0
d. two partners	2	14	4	27
e. one partner	4	29	2	13
f. no one	6	43	7	47
17. As far as looking at pictures of nudes				
a. I prefer to look at nudes of the opposite sex	5	33	5	33
b. I prefer to look at nudes of the same sex	0	0	0	0
c. I like to look at nudes of both sexes	3	20	5	33
d. I don't like to look at nude pictures	7	47	5	33
18. When looking at pictures of nudes (opposite my sex)				
a. I almost always get turned on	0	0	0	0
b. I get turned on sometimes	3	20	3	20
c. I am neither turned on nor off	12	80	12	80
d. I get turned off	0	0	0	0
19. I have had orgasm by the following methods				
a. vaginal intercourse	7	33	5	28
b. anal intercourse	0	0	0	0
c. mutual stimulation	5	24	4	22
d. oral-genital	4	19	2	11
e. I have not had an orgasm with a partner	5	24	7	39
20 I have used the following kinds of contraception				
a. condom or birth control pill	8	42	8	40
b. coitus interruptus (pulling out)	5	26	3	15
c. vaginal sprays, suppositories	0	0	0	0
d. inter-uterine device (IUD)	0	0	0	0
e. rhythm method	0	0	2	10
f. none	6	32	7	35

Appendix C

Ranking Scale for Questionnaires

Questionnaire A

	5	4	3	2	1	0
8.	d	c		b	a	e
9.	a	b	c	d	e	f
10.	e	d	c	b	a	f
11.	a		b		c	d
12.	a	b	c	d	e	f,g
13.	d	c		b	a	e
14.	a	b		c	d	e
15.	a	b	c	d	e	f
16.	d		c	a	b	e
17.	c	d	a	b	e	f
18.	c	a			b	d
19.	a	b	c	e		d
20.	d	c	b			a
21.	a	b			c	d
22.	a	b			c	d
23.	a	b	c	d	e	f,g
24.	a	c			b	d
25.	a	b	c			d

Questionnaire B

	5	4	3	2	1	0
1.	d	c		b	a	e
2.	a	b	c	d		e
3.	e	d	c	b	a	f
4.	a		b		c	d
5.	a	b	c	d	e	f
6.	d	c		b	a	e
7.	a	b		c	d	e
8.	a	b	c	e	d	f
9.	d		c	a	b	e
10.	c	d	a	b	e	f
11.	c	a			b	d
12.	d	c	b			a
13.	d	c	b			a
14.	a	b			c	d
15.	a	b			c	d
16.	a	b	c	d	e	f
17.	a	c			b	d
18.	a	b	c			d

Appendix D

Scores of Sisters on Questionnaire A and B

Questionnaire A			Questionnaire B		
	Freshmen	Upperclass women		Freshmen	Upperclass women
1.	59	63	1.	59	49
2.	48	59	2.	41	55
3.	69	59	3.	22	50
4.	56	55	4.	50	46
5.	51	60	5.	38	51
6.	42	55	6.	12	56
7.	31	50	7.	39	23
8.	52	58	8.	30	25
9.	59	60	9.	41	55
10.	57	40	10.	61	4
11.	28	20	11.	20	4
12.	56	60	12.	29	51
13.	57	55	13.	61	25
14.	52	39	14.	38	4
15.	53	80	15.	30	73