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Evaluation of Values Clarification as a Teaching Method for a College Level Human Sexuality Course

presented by

Nancy Brunton Smith

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MASTER OF ARTH

Department of Family and Child Brolody

1982

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ABSTRACT

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than they were at the start, (By, were no more willing to discuss sexuality with Nancy Brunton Smithgle.) Discussion

This study was conducted with a sample of forty-eight drawn from a population of ninety-one students from a human sexuality class on the Michigan State University campus during Spring term 1981-82.

The basic objective of the study was to evaluate a program for human sexuality education that utilized values clarification techniques. Gender, students' role in the class, their willingness and ease of discussing sexuality were also examined. A secondary objective was the development of a questionnaire to measure values and the values clarification process. Though further work is still needed, supportive measures indicated that the questionnaire adequately measured these two dimensions.

The research indicated that students were able to significantly clarify their values and that students gained significantly in their knowledge of sexuality from the beginning to the end of the course. Surprisingly, a moderate inverse relationship was found to exist between students' clarification of their values and their gain in sexual knowledge. Students role in the class or their gender did not appear to have any
effect on how well they were able to clarify and understand
their values.

The study indicated that while students were more at ease when discussing sexuality at the conclusion of the course than they were at the start, they were no more willing to discuss sexuality with a broad range of people. Discussion group facilitators were more willing to discuss sexuality both at the beginning and the end of the course than were non-facilitators.

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CHAPTER I

STATEMENT OF THE PROBLEM

1. To evaluate the . The Need as of delitering a balmas

During the past several decades in which sex education has begun to come into its own, there has been great concern from educators, parents, and students for something other than mere sex education. Each group seems to have been saying that they would like to see some kind of values taught in addition to the disclosure of information regarding sexuality.

Articles and books have been written on the connection between sex education and the teaching of values. There is, however, a significant deficiency in the literature. Most of the literature has been theoretical and lacks substantiation through empirical research methods. The literature which does note empirical research deals mainly with attitudes about sexuality and not with the effectiveness of utilizing a values clarification process.

A search was conducted to find an instrument for measuring values and individuals' clarification of their values as they relate to sexuality. No instrument was located which adequately measured these two dimensions in regard to sexuality. Most questionnaires which were found measured a

respondent's sexual attitudes and not values. In light of this, an instrument was developed to measure values and clarification of the respondent's values for sexuality.

Objectives

This study had six objectives. They were:

- 1. To evaluate the effectiveness of utilizing a values
 clarification process for a college level sex edu-
- To develop an instrument for measuring values and students' clarification of values for sexuality.
- 3. To determine if there were any differences in clarification of values between males and females when exposed to the same educational materials.
- 4. To determine if the students' role in the class,
 whether or not they were a group facilitator, affected
 the amount of clarification of values which the student experienced.
- To evaluate whether or not the class facilitated the students' ease and willingness to discuss sexuality.
- 6. To examine whether students gained knowledge of sexuality from the class as well as a greater under-

The general Review of the Literature

ship between sex education and the values of students. This concern has prompted a great amount of writing on the subject.

Areas covered in the literature have been sex education, asponvalues, values clarification, gender, and the values of the instructor.

One of the first methods of teaching sex education was that of a scientific-biological approach which came about after World War I. The objectives of this method were to dispel "ignorance, correct misconceptions, and to focus on the biological facts of life" (Hoyman, 1970, p. 340). This method often dealt with animal reproduction and did not go into the facts about human reproduction.

While the field of sex education in general has expanded beyond the post World War I concept, there are those individuals who even today advocate such limited programs.

Hennessy (1980) cited a recent incident in which a biology teacher indicated that he was doing his part in sex education by teaching the biological reproduction cycle and workings of the frog. Such approaches to sex education are seen by most professionals as inadequate in that they do not meet the needs of the student and often leave individuals confused and uncertain about sexuality (Arcus, 1980; Brick, 1981; Calderone, 1974; Englund, 1980; Gordon, 1981; Hacker, 1981; Hennessy, 1980: Hoyman, 1970: Needle, 1977; Schinke, 1981; and Wilkins, 1979).

The general concensus among professionals in the field is that sex education is important for the dispensing of knowledge regarding sexuality. Studies indicate that the more knowledgeable young people are regarding sexuality, the

more likely they are to handle their own sexuality in a responsible manner (Gordon, 1981). The learning of biological and physiological information about sexuality is seen as fundamental and a building block upon which to build comprehensive sex education programs (Hacker, 1981). This fundamental objective of sex education, however, should be only one goal of several.

be more than just imparting the facts of biological reproduction to the students (Brick, 1981; Englund, 1980; Hacker, 1981; Hoyman, 1970; Schinke, 1981). "Sex education should involve young people in developing an awareness of what it means to be a sexual being" (Wilkins, 1979, p. 223). Hoyman (1970) and Brick (1981) felt that for optimal use, sex education must deal with the social, psychological, and value dimensions of human sexuality so that the student receives and develops a clear understanding about his/her own sexuality.

The inclusion of values into any comprehensive sex education program is believed to be necessary by professionals in the field (Arcus, 1980; Calderone, 1974; Gordon, 1981; Hennessy, 1980; Needle, 1977; Reagan, 1980; and Wilkins, 1979). Englund (1980) points out that there is a real need for instructors of sex education programs to guide students toward recognition of underlying moral principles which are present in their actions and the actions of others.

While the majority of authors agree that values need

to be considered in regard to sex education, Arcus (1980) raised some questions as to how and who should deal with this issue and in particular whether or not the educational system should be involved in this process. She points out the difference between teaching values and dealing with values. Dealing with values in her perception and as stated by the 1968 National Commission on Family Life Education, is for educators to, "be able to help youth and adults clarify their own concepts and expand their thinking beyond their own value structures" (p. 164). If educators are to include values in sex education programs, then according to Arcus, it must be by dealing with values and not teaching them.

Instructional courses on sexuality and values must be realistic and relevant to today's youth and should provide opportunities for the students to study and discuss feelings about sexuality (Needle, 1977). By raising and examining the controversial issues with which individuals must deal in today's society, educators provide the opportunity for students to clarify what they value and believe of their own sexuality (Hacker, 1981). Such views represent the beliefs of many professionals and indicate a need for the inclusion of values in any sex education program (Arcus, 1980; Brick, 1981; Calderone, 1974; Englund, 1980; Gordon, 1981; Hennessy, 1980; Hoyman, 1970; Schinke, 1981; and Wilkins, 1979).

There is general agreement among sex educators that values cannot be taught by dictating values to the student, nor should students be given the idea that hedonism is the

part in sexuality. "Many educators want to strike a balance between these two extremes in order to preserve fairness and objectivity without sacrificing personal conviction and integrity," (Englund, 1980, p. 7). From these convictions have come several educational methods for dealing with this situation. Values clarification is one of those methods.

Arcus (1980) defines values clarification as calling for students to strive toward clarifying their own values using the processes of choosing, prizing, and acting. In so doing, students are better able to examine what they believe and why. On the basis of this knowledge, they may decide to stand by their values more firmly, or they may find a need for modification of existing values. Whichever the case, the student has gained a new understanding about him/herself and can act accordingly. As a teaching method, Hacker (1981, p. 209) emphasized that values clarification is, "the exposing of values, not the imposing of them."

Raths, Harmin, and Simon (1978) indicated that by helping individuals to clarify their own values, one may see less confusion, apathy, or inconsistency in those individuals. "If we succeed in clarifying them (values), the theory (values clarification theory) asserts that results will show up as changes in behavior," (p. 4). One clarifies what one's own values are by examining the process through which one's values were developed. This valuing procedure is based on three processes: The first is that of making a choice as to what

one will value. This choosing must be done by the individual freely, from several alternatives, and after consideration has been given to the consequences. The second process is prizing one's choice. One must be happy with one's choice; happy enough to be able to affirm that choice to others. The final process is acting on one's choice. Individuals are now at the point where they can do something with their choice and in some way incorporate it into some pattern of their life. A person's values often do not remain the same through life, but mature as the individual matures. Throughout life, this proceedure continues and values are reassessed which may or may not result in changes of values.

which have been examined in relationship to the values clarification process. Reagan (1980) investigated the values of the instructor and the possible effect which they might have on the students' values. She concluded that the instructor's values and the imparting of information on sexuality did not appear to influence the values of the students in terms of changing them. Reagan also concluded, "...that the benefits of sex education, at least at the college level, far outweigh the perceived risks," (1980, p. 7).

Another factor which has been examined is that of gender differences in attitudes regarding sexuality. Dearth and Cassell (1976) compared gender differences of university students after a semester course in human sexuality and found that for the most part, males and females were more

alike than different in regard to attitudes about sexuality.
Whether or not this held true when looking at their values
rather then attitudes was not explored. he research

In light of the review of literature, this study evaluated the effectiveness of utilizing a values clarification process for a college level human sexuality course; developed an instrument for measuring values and clarification of values as they relate to sexuality: examined differences in clarification of values between males and females when they were exposed to the same educational material; and evaluated whether students gained knowledge of sexuality from the course. Based on the goals and structure of the course, two other objectives were explored: to determine if a students' role in the class affected the amount of clarification of values which students experienced and to evaluate whether or not the class facilitated the students' ease and willingness to discuss sexuality. The Reagan study (1980) indicated that the values of the instructor were not an influential factor, but it was seen as beneficial to control this element in the present study.

The research was conducted in one undergraduate, upper division human sexuality class at Michigan State University. Because of the limited sample, this study may only be generalized to other human sexuality classes in the College of Human Ecology at the Michigan State University and not to other universities' sex education classes.

Research Hypotheses the

The following hypotheses have been derived from the

- H₀₁For students who receive sex education taught from a values clarification basis, there will be no significant change in students' understanding of their values regarding sexuality.
- H₁₁Students who receive sex education taught
 form a values clarification basis will have a sexual
 a significantly greater understanding of
 totheir own values for sexuality by the end
 of the course.

The literature reviewed suggests that when students learn through a values clarification process their learning is enhanced and they then understand their position on the issues (Wilkins, 1979). Arcus (1980) and Hoyman (1970) concur that enabling students to carefully examine the options is of great importance.

H₀₂There will be no significant change between the values of male and female students when exposed to sex education as taught from a values clarification basis.

Dearth and Cassell (1976) studied the difference in attitudes between males and females and found there to be little difference. It is expected that the same thing will hold true for values, especially when both males and females participate in the same sex education class taught from a values clarification perspective.

- H₀₃There will be no relationship between the students' role in the class and the understanding of their own values.
- H₁₃The relationship between being a group facilitator and students' understanding of their own values will be greater than the relationship between not being a facilitator and students' understanding of their own values.

The human sexuality course studied utilized group facilitators. Because the facilitators received more exposure to the instructors and to the techniques of values clarification, it was hypothesized that these will have a positive effect on the students clarification of their values.

- H₀₄There will be no relationship between students' understanding of their own values and their willingness to discuss their sexual feelings and behavior.
- H₁₄There will be a positive relationship between willingness by students to discuss their sexual feelings and behavior and students' understanding of their own values.

One of the objectives of the course was to help students become more willing to discuss sexual issues which concern them. It was hypothesized that the more one understands one's own values the less threatening communicating those values becomes.

H₀₅There will be no significant change in students' ease of talking about sexual beliefs, values and behavior from the beginning to the end of the course.

H₁₅Students will report significantly greater ease of talking about sexual beliefs, values and behavior from the beginning to the end of the course.

Another objective of the course was to increase a student's level of comfort in discussing sexual issues. Because the students received practice in discussing sexual issues throughout the term, it was hypothesized that the level of comfort would increase for students.

- H₀₆There will be no significant difference in students' knowledge of sexuality from the beginning to the end of the course.
 - H₁₆Students will increase significantly their knowledge of sexuality from the beginning to the course.

The professionals in the field believe that the imparting of knowledge regarding sexuality is fundamental to human sexuality programs. Such knowledge is essential and cannot be overlooked (Hacker, 1981).

understand Conceptual and Operational Definitions

This study used several concepts which need to be defined and clarified. These concepts are: sex education, values clarification and values.

Sex education is the communication of information from one person to another on the subject of human sexuality.

This communication of sexual information took place through classroom lectures, audio-visual aids, and assigned readings which were to be done by the student before class time. Topics under consideration were: biological aspects of sexuality, birth process, psychosexual development, sexual response, sex roles, teenage sexuality, sex education in the home, pornography, contraception, values, sexually transmitted

diseases, sexual expression, atypical sexual behavior, abortion, homosexuality, handicapper sexuality, rape, marital rape, incest, sexuality in the middle and later years, cohabitation, love and intimacy, and communication.

Sex education was measured through the use of two tests:
the Sex Knowledge section of the Sex Knowledge and Attitude
Test developed in 1972 by Dr. Harold I. Lief and Dr. David M.
Reed (Appendix A), and the Sex Knowledge Inventory-Form Y
developed by Thomas McHugh and Gelolo McHugh in 1977 (Appendix
A). The course's final exam was also used as a post measure
of sex education. When operationally referring to sex education, the term sex knowledge has been used throughout this
work.

values clarification is the process of clarifying and understanding one's values and the development of those values (Arcus, 1980). This process involves the elements of choosing, prizing and acting which are integral in the development of values and facilitate the student's arrival at a clear picture of his/her own values (Raths, Harmin, and Simon, 1978).

Techniques were utilized in teaching the human sexuality course under study which were constructed to enable students to clarify their values. Each activity that the members of the class received was based on the values clarification process and incorporated the elements of choosing, prizing and acting.

Were Students' clarification of their values was measured by

the Value Diffscore which represented the total amount of change in values exhibited on the Sexual Values section of the instrument (Appendix A) from pre to post test for each student. Students' issue reaction papers (Appendix B) and their self-reports of clarification on the Who I Am Sexually II assignment (Appendix B) were both used as supportive measures of students' clarification of values.

Values were conceptualized in an abstract and universal way. They are ideals that govern an individual's behavior and are the result of the valuing process of choosing, prizing and acting (Raths, Harmin, and Simon, 1978) Raths, Harmin, and Simon point out that values are different from attitudes and beliefs. Attitudes, beliefs and purposes approach values but do not meet all the criteria involved in the valuing process. For example, an attitude may be freely chosen and prized, but it may not influence the individual's actions. Often values develop out of these expressions, but until they meet all the criteria in the valuing process, they should be viewed as a different concept than values.

Each student's values were considered to be an individual and unique matter with no right or wrong values.

Students were asked to discuss their values in papers and in small discussion groups for the various topics dealt with in the course. This enabled students to explore their own values and to identify what values they held that were related to sexuality. Students' values as they relate to sexuality, were measured by the Sexual Values section of the instrument (Appendix A).

facilitators were included as part of the sample. The other thirty-two members of the sample were chosen from the distussion groups randomly without replacement (two per group)

by throwing a dice to obtain two different purbers between

one and fivemethodology and design of the study

Chapter two deals with the research design and methodology of the study. The methods and rationale behind the methods used in this study, the basic design of the study, the sample, the sampling process, the instrumentation, the data collection techniques, and scoring of the instrument are presented in this chapter for the reader's information.

Population

Limitations of expense and time influenced the researcher to choose a population of one class of human sexuality taught at Michigan State University. The population consisted of ninty-one students from the Thursday evening class of Human Sexuality in the Family taught during Spring Term 1981-82. The class met in the evening for approximately two and one half hours each week.

Since the class had more fe Sample

Subjects were selected from the population to form a sample size of forty-eight. Because the role of facilitator was viewed by the researcher as enhancing a student's values clarification process and in order to have a sufficient number of facilitators to analyze this variable, all the

facilitators were included as part of the sample. The other thirty-two members of the sample were chosen from the discussion groups randomly without replacement (two per group) by throwing a dice to obtain two different numbers between one and five.

Sampling Process

On the first day of class, students were asked to fill out an information sheet (Appendix C) which gave the instructors information pertinent to the class and this study. On the basis of this information, the students were divided into sixteen discussion groups, each containing five or six students. Members for the discussion groups were selected by the instructors on the basis of gender, major in school, age. conservative/liberal views, dominant/submissive personalities, and committed/non-committed to a relationship indexes in order to achieve a mixture of people in each discussion group. This information was supplied on the information sheet and was seen as helping to provide an atmosphere for stimulating discussion. The only variable which was not equally distributed in each group was the number of males and females. Since the class had more females than males, any discussion group which included males, contained at least two. This was done so that the men in the class would feel comfortable and not overwhelmed by the women in the discussion group. Care was taken to avoid placing two persons who knew each other in the same group as this could affect their willingness to discuss the topics openly.

Once the groups had been stratified, the researcher selected two members from each group, other than the group facilitator, for the sample. This selection process was done randomly without replacement by throwing a dice.

In each group, number six was denoted as the facilitator, thus utilizing numbers one through five for selecting the remainder of the sample. The first two different numbers rolled on the dice between one and five determined which two group members became a part of the study. Thus, three students were selected from each discussion group. This process was followed for each of the sixteen groups. These students were studied in depth with regard to all three measures of the study: the instrument (Appendix A), the weekly issue reaction papers (Appendix B), and Who I Am Sexually II papers (Appendix B).

It should be noted that there were four students who were originally selected as part of the sample, but each had to be replaced by another student from the discussion group of which the student being replaced was a member. Two students did not take the pretest, one student dropped the class, and one student decided not to participate in the discussion group experience. The replacement process was also done by throwing a dice to randomly select a student from those remaining in the group who were not already a part of the sample.

All acusum & Research Design

This study was designed to explore and evaluate the effectiveness of utilizing a values clarification process for a college level human sexuality course: to develop an instrument for measuring values and students' clarification of their values for sexuality: to examine differences in clarification of values between males and females when exposed to the same education materials; to determine if a students' role in the class, whether or not they were a group facilitator, affected the amount of values clarification which the students experienced; to determine whether or not the class facilitated the students' ease and willingness to discuss sexuality; and to evaluate whether students gained knowledge of sexuality from the class. With these objectives in mind and because no empirical research has been done to evaluate the utilization of the values clarification process in a human sexuality course, a pilot design was selected in which there was only one group but a pretest and posttest were administered.

The study was cross-sectional in nature in that a section of each student's life was being measured for the effect of a particular teaching method. Each student was asked to complete the pretest and the posttest, thus enabling a measurement at a certain point in time. The results are generalizable to students who enroll in a human sexuality course taught in the College of Human Ecology taught on the Michigan State University campus.

All students in the class were exposed to the same lecture materials, audio-visuals, guest speakers, and instructors. The exercises, film discussion sheets, situation sheets, role play situations etc. were constructed to facilitate the students' exploration of their values. The guidelines for writing the weekly issue reaction papers (Appendix B) and the Who I Am Sexually II papers (Appendix B) were stated in a similar manner to help the students examine the choosing, prizing and acting processes which they utilized in reaching their own values. Each student received a printed copy of these guidelines.

involved in the class as a Teaching Assistant. In this position the researcher was present for all class sessions, met with the facilitators, contributed to the course through organization, evaluation, and occasional instruction.

The small discussion groups were used throughout the course. Needle (1977) advocated opportunities for students to study and discuss their feelings about sexuality and believes such opportunities can be helpful for students. Hacker (1981, p. 209) concurs on this point and also states that students must be allowed to discuss their differences, and "be heard and respected for them and learn how to deal with them on a peer level." Small discussion groups appear to be ideal for achieving such purposes.

Raths, Harmin, and Simon (1978) indicated that the use of small groups for discussions and exercises facilitates

thoughtful comments. Morrison and Price (1974, p. 10) point to the "continual self-examination which occurs in the process of group interaction." Stratification of groups to strive for a good mixture of people was cited by Raths, Harmin and Simon (1978) as one method of forming small groups. For the purposes of this study and achievement of the course goals, stratification of the groups was seen as beneficial.

Each discussion group contained a facilitator. The facilitators were students enrolled in the class for credit. They were expected to meet all class requirements as were the other students. Individuals were chosen to be facilitators by first expressing an interest in the role and then examination of their schedules. The facilitators met with the instructors each week prior to class for one hour. This time was spent in discussion of the planned class activities. dealing with the dynamics of small group processes in order to help them form a cohesive discussion group, conversing about the process of values clarification to facilitate their ability to help the members of their group to consider how their values developed, and discussion and evaluation of the previous week's activities. Because the facilitators received added exposure to values clarification techniques and to the instructors, they were evaluated as a separate group as well as part of the total sample.

cess, sex education in the free

nudity, sexual communiInstrumentation , rape, birth control,

The instrument used (Appendix A) consisted of four major parts: the Sexual Values test, the Sex Knowledge section of the Sex Knowledge and Attitude Test (SKAT), the Sex Knowledge Inventory-Form Y, and Demographic Information. The instrument has separate pretest and posttest forms which differ only on the Sexual Values portion of the instrument. Both the pre and post test forms have been included in Appendix A.

Sexual Values. Values were measured by the Sexual Values section of the instrument which was developed for this thesis (Appendix A). This portion of the instrument was pretested at the end of Winter Term, 1982 in a Michigan State University human sexuality class. The pre and post tests contained two questions on each topic and underlying value as they relate to sexuality, for internal validity. One question on each topic was worded identically for both tests. For internal validity, the second question for each topic and underlying value had the same meaning, but was worded slightly differently from pre to post test. This was done to avoid carryover between the tests which might affect the results.

The Sexual Values portion of the instrument was constructed based on fifteen topics related to sexuality that were dealt with in the human sexuality course. Those topics were: masturbation, pornography, homosexuality, birth process, sex education in the home, intercourse with love, sexuality in the later years, incest, privacy and sexuality,

nudity, sexual communication, abortion, rape, birth control, and venereal disease. This test also included two questions on the willingness and ease with which the respondents were able to discuss sexuality and the posttest contained a question dealing with the overall rating of the course.

The questions on this portion of the instrument were designed to measure an underlying value for each topic area. The underlying values believed by the researcher to be measured were: pleasure for oneself is alright (items 3,18/3.18)1. right to choose to what one is exposed (items 4,19/4,19), right to choose one's own lifestyle (items 5,20/5,20), partnership of father and mother (items 6.21/6.21), parents responsibility for their child's sexual development (items 7. 22/7.22) sex with love (items 8.23/8.23), right of an individual (child) not to be harassed (items 10,25/10,26), sex is private (items 28/28), sex is natural (items 13.15.30/13. 15,30), communication between partners is desireable (items 14 29/14 29) self-determination (items 1.9.11.16.24.26/1.9. 12,16,24,27), and responsible sexual behavior (items 2,12,17, 27/2,11,17,25). It should be noted that while there are fifteen topics there are only twelve underlying values being measured. The reason for this is that questions on the topics of abortion, sexuality in the later years, and rape were all thought to measure the underlying value of self-determination

¹Throughout the remainder of the test and in the tables, a format of (x,x/x,x) will be used to indicate the item numbers on the pre/post tests respectively.

(items 1,16,9,24,11,26/1,16,9,24,12,27). The questions on birth control and venereal disease were thought to measure the underlying value of responsible sexual behavior (items 2,17,12,27/2,17,11,25).

The Sexual Values section used a five point Likert Scale from "strongly agree" to "strongly disagree." The intent was not to see if a student moved from "strongly agree" to "strongly disagree" or vice versa on any of the questions.

Such movement could have been seen as a change of values, and the intent of the course and study was not to change students' values. Instead, smaller movements or shifts in values were expected, such as from "uncertain" to "agree" or "disagree."

These smaller movements of one or two points were seen as indicating an increased clarification and understanding of values on a particular topic. Larger shifts also indicated a clarification of values, but it was thought that they were not as likely to occur. Because a Likert Scale was used, data was collected at the ordinal level.

In addition to the Sexual Values section of the instrument, two subjective measures were taken to measure the students' values and clarification of their values during the course. Students were required to write a weekly issue reaction paper (Appendix B) which helped the students clarify their values on those issues. Each student was also required to write a two page "Who I Am Sexually II" paper (Appendix B). This paper was to deal with the four issues which the students felt they had come to clarify and understand most

for themselves. This assignment was written in the eighth week of the term and was assumed to be the students' self report of clarification and understanding of values. Both assignments were examined by the researcher for evidences of the choosing, prizing and acting process of reaching one's values. The guidelines for both assignments (Appendix B) helped the researcher to discern the students' utilization of the values clarification process.

A values clarification score was determined for each respondent on the Sexual Values section of the instrument.

This score was a calculation of the difference between the pre and post test responses, thus illustrating the total amount of shift which occurred in sexual values from the outset to the finish of the course for each student. This shift was seen as representative of the amount of clarification of values which the student experienced.

Sex Knowledge. The Sex Knowledge and Attitude Test (SKAT) was developed by Dr. Harold I. Lief and Dr. David M. Reed (1972), both of the University of Pennsylvania. The knowledge portion of the SKAT consists of seventy-one true-false questions on a variety of topics regarding sexuality which allowed for collection of interval level data. The authors of the test reported the sex knowledge portion of this test to be a valid test on the basis of face and content validity of the questions. They also reported the reliability measure of the test to be .87 (Lief and Reed, 1972). Future references to this portion of the instrument will be made by

use of the term, "general sex knowledge" section of the instrument. The Attitudes section of this standardized test was not utilized, ghout the course.

The Sex Knowledge Inventory-Form Y was developed by Thomas McHugh and Gelolo McHugh (1977) as a standardized test for measuring the extent of an individual's knowledge of the human reproductive systems and also allowed for collection of data at the interval level. This test was divided into three parts. The first dealt with the different parts of both the male and female anatomies and will be referred to as the "body parts" portion of the instrument. The second part was a list of questions dealing with the functions of various sexual parts of male and female bodies and will be referred to as the "physiology" section of the instrument. The term, "broad sex knowledge" will be used to refer to the third section of the Sex Knowledge Inventory-Form Y. This part consisted of four lists of multiple choice questions on a variety of sexual topics. There was no reliability or validity information available for this test.

Demographic Information. Three factors which were pertinent to this study were gender, a student's role in the class and the instructor's values. Sex was specified by each student on the instrument under demographic information. A student's role in the class referred to whether or not a student was a group facilitator. Although it is recognized that values are communicated in non-verbal as well as verbal ways, the instructors' values were controlled

as much as possible by the instructors refraining from mentioning their own values and by maintaining the same instructors throughout the course.

Final Exam. Although not a part of the test instrument, the final exam developed for the course was used as another measure of knowledge gained from the course. A correlation was run between the final exam and the total sex knowledge score to determine the reliability of the final exam as a measure of sexual knowledge gained. Because there was a moderate positive correlation between the two scores, the final exam was also used as a measure of knowledge gained.

Scoring of the Instrument

Sexual Values. The Sexual Values section of the instrument was a Likert Scale scored from one to five, with five being the greatest amount of the value measured and one being the least; three was uncertain. For example: question two on both the pre and post tests dealt with the topic of birth control and measured the underlying value of responsible sexual behavior. The question was as follows:

Birth control may be considered as ranging from abstinance to chemical and mechanical methods.

Assuming procreation is not the goal, the consistent use of birth control methods by a couple desiring intercourse is a necessary action.

If students responded with "strongly agree" they received a five because the response represented the greatest amount of the underlying value of responsible sexual behavior. If they responded with "strongly disagree" which represented the least amount of the underlying value of responsible sexual

behavior, they received a one. Each question was scored in a similar manner for both the pre and post tests.

Sex Knowledge. The general sex knowledge portion of the instrument was scored by taking the number wrong and subtracting that from the total score possible, seventy-one, to arrive at the student's score. The body parts portion was scored in the same manner with a total possible of twenty. A similar method was used on the physiology section of the There were six questions which required more than one answer (questions 5, 7, 15, 16, 22, 27; see Appendix A, p. 114). For computer analysis each answer was treated as though it came from separate questions. Thus, the total score on this section was thirty-seven. All four parts of the broad sex knowledge section were combined to make a total score of forty from which the number of incorrect responses were subtracted in order to arrive at a score for this sec-The total sex knowledge score was gained by adding the scores of all four sections together. This computation of the total sex knowledge score was done by the computer in order to minimize possible errors in scoring.

Data Collection

During the first class session, the students were asked to fill out the instrument and return it to the researcher.

Once this was done, there was no further testing during the course. On the last day of the class before the final examination date, each student was asked to fill out the instrument

again and return it to the researcher. Each time, students were assured that the results of this testing would not affect their course grade.

One of the class requirements was that the students make a copy of their issue reaction papers which the instructor keeps for a term. All reaction papers (Appendix B) were read at the end of the term and assigned a score by the researcher for the purposes of this study. Possible scores ranged from zero to five points based on specific criteria that were intended to facilitate the examination of the values clarification process (Appendix B). This scale was collapsed to a system better suited to statistical analysis of any increase or decrease in ability to clarify values. Collapsing of the criteria allowed for measurement of the major increases or decreases in the scores. The criteria for a three or a four and a one or a two were relatively close. Because of this, students could have moved back and forth frequently without gaining clarification of their values, particularly at the beginning of the course when they were trying to grasp the criteria. In the new scale a five became a three, a three or four became a two, a one or two became a one, and a zero remained the same.

The Who I Am Sexually II papers (Appendix B) were also read by the researcher. For this assignment students were asked to list and discuss four topics examined over the term in which they thought they had gained the most understanding of the topic and their underlying values. Each of these four

topics was recorded by the researcher in the order in which they were cited. These areas of most gained understanding were assumed to be the students' self reports of clarification and understanding of values.

To avoid influencing the responses of the students they were not told until the end of the course that research was being conducted to examine the relationship of the values clarification process and education for human sexuality.

After students had taken the posttest they were told that research data had been collected on randomly chosen members of the class. At this time students were given the option of participating or not in the research without affecting their grade. No students who were a part of the sample requested not to be included. To further protect the anonymity of the members of the sample and to assure that the students' grades were not affected by their inclusion or exclusion in the study, the identity of students in the sample were known only to the researcher and not to the major professor who assigned grades for the course.

For the purposes of this research, a .05 level of significance was accepted for statistical significance before the analysis of the data took place. Significance levels of .01 and .001 have also been noted where they apply. Acceptance or rejection of hypotheses was based on the .05 level of significance.

CHAPTER III

RESULTS OF THE DATA ANALYSIS

Description of the Sample

The sample for this study was composed of forty-eight students of which 81 percent were female and which was representative of the composition of the class. Sixty-nine percent of the sample were in their senior year in college, 10 percent were graduate students and the remaining students were juniors with one sophomore. All of the males in the sample were seniors while 62 percent of females were seniors, 13 percent were graduate students, and the remaining 25 percent were juniors and sophomores. Because the majority of students were upper-class-persons and graduate students, their ages tended to correspond: 79 percent of the students were twenty to twenty-two years of age. The remaining 21 percent ranged in age from twenty-three to forty-one. Age percentages were similar for both males and females.

The group of facilitators was composed of sixteen students, 81 percent of whom were female which is representative of the total sample and the class. Facilitators ranged in age from twenty to forty-one with 94 percent between the ages of twenty and twenty-two. Ninty-four percent of the facilitators were juniors or seniors, the remaining individual was a graduate student.

When asked to describe their own beliefs and values, 88 percent listed them as being not at all or somewhat conservative, i.e. in favor of traditional standards. Seventy-five percent of the students described their beliefs and values as being influenced in some way by religion. Males and females did not exhibit any major differences on either of these questions, nor did facilitators or non-facilitators.

In response to whether or not students felt that their beliefs and values were in conflict with their parents' beliefs and values, 69 percent replied that "somewhat" of a conflict did exist. A larger proportion of females (74 percent) indicated that their values and beliefs were in conflict with their parents than did males (44 percent). Facilitators also reported somewhat more conflict in beliefs and values between themselves and their parents with 94 percent of facilitators reporting somewhat or definite conflict while non-facilitators reported 78 percent for the same levels of conflict.

Analysis of Value Items and Overall Clarification of Values

Students' responses to the individual value items and the clarification of their values were analyzed and are reported in this section. The individual value items were examined through the use of the Wilcoxon matched-pairs signed-ranks test to determine if there was a significant increase in students' clarification of their values. The value items that showed a significant increase were then cross-tabulated

with the students' self-reported areas of most gained understanding and clarification in order to examine these two
factors together. The values clarification process was
further analyzed through the calculation of a total values
clarification score, the Value Diffscore. The Value Diffscore
was then correlated with the issue reaction paper measures
to discern the relationship between the objective and subjective measures.

The Wilcoxon Test. The Wilcoxon matched-pairs signed-ranks test was used to analyze the values portion of the instrument. The Wilcoxon is a statistical test for ordinal level data which determines the significance of the difference between two related samples according to the trait being measured. This test is appropriate for samples where respondents act as their own controls in pre-and-post designs (Champion, 1970). The Wilcoxon was used because the data was collected on a five point scale which is traditionally considered to be ordinal level data. Also the study utilized a pre-and-post test situation in which the students acted as their own controls, thus making the Wilcoxon an appropriate statistacal test. The .05 level of significance was used to determine whether or not a significant increase in clarification of values had occurred.

Values Diffscore. In order to complete the analysis of the data dealing with students' clarification of their own values, it was viewed as important to derive a total score for change in the Sexual Values section of the instrument.

This total score was obtained by taking the absolute value of the difference between the scores for each item on the pretest measure and the posttest measure of this section of the instrument. As with the Wilcoxon, the questions which were worded identically on both the pre and post tests were placed with each other and the items which were similarly worded on the two tests were examined together (hereafter referred to as paired questions). For the Value Diffscore, the two questions on both tests dealing with willingness to discuss sexuality and ease of discussing sexuality were not included. This was due to the researcher's belief that they do not measure values, but attitudes and behavior. Also, the Value Diffscore was correlated with each of the two discussability questions to see if there was any significant relationship between them. Once the absolute value of the difference between the pretest and posttest questions was obtained for each of the thirty pairs of questions, they were all added together to procure a total score.

The absolute value of the difference between the pretest and posttest was used so that all change would be recorded in the total score. If for instance, a student had marked "uncertain", a three, on the pretest for questions one and two, and then on the posttest marked "strongly agree", a five, for question two and "strongly disagree", a one, for question one; then the shift on both questions would cancel each other out when added together if the absolute value of the difference was not considered. By considering the

absolute value of the difference for both questions, the total score then reflects the amount of change for each regardless of the direction of the change. While most changes which students made did show a positive change, there were some who moved in the opposite direction. This was seen as important information which should not be lost, because it does indicate a clarification of values on the part of the student.

Hypothesis One

- H₀₁For students who receive sex education taught from a values clarification basis, there will be no significant change in students' understanding of their values regarding sexuality.
- H₁₁Students who receive sex education taught from a values clarification basis will have a significantly greater understanding of their own values for sexuality by the end of the course.

Results of the Wilcoxon Test

The Sexual Values section of the instrument contained thirty-two questions on both the pre and post tests.

Seventeen of these were identically worded on each test. The other fourteen were similarly worded questions but related on subject matter and the underlying value (see Table 1).

To utilize the Wilcoxon test, the difference in scores on the seventeen identically worded questions were examined pre to post with each other and the fourteen similarly worded questions were analyzed together. Thus creating a total of thirty-two pairs of questions pre to post test. All of those thirty-two pairs showed an increase in the underlying value,

however, only a little over half were significant at the .05 level (see Table 1). Eleven (71 percent) of the seventeen identically worded pairs exhibited a significant increase from the beginning to the end of the course.

It should be noted that of the thirty-two pairs of questions, only thirty were value items. The other two pairs were the discussability questions: willingness to discuss sexuality and ease of discussion. Both questions were identically worded on the two tests. With the deletion of these two pairs, the number of significant value items was sixteen, still 53 percent of all the items (see Table 1).

The implementation of the Wilcoxon test takes into account scores which show no change from pre to post test. Such scores are termed ties and are dropped from the analysis. Another type of tie may occur in which the difference between pre and post scores on an item for two or more respondents is the same size. In such cases the same rank is assigned to the scores and is determined by taking the average of the ranks that would have been assigned had the scores differed (Siegel, 1956). For example, if three pairs resulted in scores of -1, -1, and +1; each pair would be given the rank of: $\frac{1+2+3}{3} = 2$.

There were quite a few ties which resulted in the data when it was analyzed through use of the Wilcoxon test. These ties were due to the small scale, one to five, on which each question was measured. The number of ties ranged from eleven per item to thirty-seven per item with the greatest amount of

Table 1

Change in Individual Value Items by the Wilcoxon Test Pre to Post (n=48)

Subject Area	Items (Pre/Post)	Least Rank Mean	Z Score
Significant Items			
Birth Control ° Homosexuality l° Birth l° Sex with Love ° Incest Rape ° Venereal Disease ° Nudity ° Birth Control Masturbation ° Pornography ° Sex with Love Sexuality Later Yrs° Rape l Privacy ° Venereal Disease	(26/27) (28/28)	7.00 9.00 12.06 10.57 4.50 7.50 11.75 12.33 12.67 13.69 10.50 11.00 6.50 12.72 11.17 13.50	-1.894** -1.734* -1.776* -2.938*** -2.706*** -3.767*** -2.271** -2.171** -2.437** -1.721* -2.368** -2.271** -1.932** -2.919***
Non-Significant Items	(27/11)	13.30	-2.313
Abortion ° Masturbation Pornography Sex Ed in the Home ° Sexuality Later Yrs° Sex is Natural Sexual Communication Abortion Homosexuality Birth Sex Ed in the Home Incest ° Sexual Communication Sex is Natural	(1/ 1) (3/18) (4/19) (7/ 7) (9/24) (13/13) (14/29) (16/16) (20/ 5) (21/ 6) (22/22) (25/10)	16.79 11.72 12.85 7.00 12.33 11.83 9.56 16.94 12.20 6.50 9.50 7.50 5.50 9.50	255 -1.071121220390122 -1.064958552847 -1.023942978019

^{*} Identically worded question on both pre and post tests.

 $^{^{1}}$ n=47, three students choose not to answer the question on one of the tests.

^{***} $p \le .001$

^{**} p ≤ .01

^{*} p ≤ .05

ties occuring in the mid-twenties for the questions. Upon examination of the cross-tabulations for each of the pretest questions with the posttest questions, the majority of movement between tests did appear to occur on the questions which showed a significant increase. There were, however, a few items on which there appeared to be quite a bit of movement but the Wilcoxon did not show them to be significant. This may be due to the number of ties which occurred in the data.

Cross-Tabulation of Significant Value Items with Self-Reported Areas of Clarification

The Who I Am Sexually II paper which students were asked to write during the eighth week of the term was used as a supportive measure to the Sexual Values portion of the instrument. Students were asked to elaborate on four subject areas of their choice from a list of topics covered during the class on which they considered themselves to have gained the most understanding and clarification of why they believed as they did. This measure was thus considered a self-report by the students regarding their own level of values clarification.

The five most frequently mentioned subjects were:
homosexuality, birth control, rape, handicapper sexuality,
and birth process. Each of these subject areas also exhibited a significant increase from pre to post test when analyzed with the Wilcoxon test. The one exception was handicapper sexuality which was not a topic examined on the
instrument.

The areas which were mentioned by the students were examined in connection with the items displaying a statistically significant increase from pre to post test through the use of the Wilcoxon test. Table 2 shows a cross-tabulation for the total sample of these two areas according to subject. The results of this cross-tabulation indicated that the self reports by the students and the Wilcoxon statistical test were guite similar.

For the purposes of this cross-tabulation, the item

"sex with love" was considered similar to the reported area

"love and intimacy." Also the item, "nudity" was considered

similar to the reported area of "sex education" due to the

content of the question. There were no subject areas which

corresponded with the items of masturbation and privacy for

sex which the students could choose, so they have been

placed at the bottom of the table.

Value Diffscore and Correlation with Reaction Paper Measures

The Value Diffscore was examined as a total measure for clarification of values which students experienced during the course. If individuals had moved one point on each question then they would have received a Value Diffscore of thirty. To expect that most individuals would move one point per question seemed unrealistic, and indeed the scores showed that for most students, this did not occur. The total sample ranged in Value Diffscores from seven to thirty-seven with modes of 14 and 20, a median of 18 and mean of 19 (see Table 3).

Table 2

ems Which Displayed a Statistically Significant Change in Wilcoxon Pre to Post Test By Student Reported Areas of Most Gained Understanding (n=48) Items Which Displayed a

			Who	I Am Sexually	H	Areas		
Signigicant Items in Wilcoxon	lst Freg.	Area Percent	2nd Freq.	Area Percent	3rd Freg.	Area Percent	4th Freg.	Area Percent
Homosexuality	12	25.0	5	10.4	7	14.6	4	8.3
Birth Control	2	10.4	Ŋ	10.4	4	8.3	m	6.3
Birth Process	ĸ	10.4	е	6.3	4	8.3	ĸ	6.3
Venereal Disease	2	4.2	ĸ	6.3	4	8.3	4	8.3
Rape	4	8.3	10	20.8	٦	2.1	2	4.2
Incest	m	6.3	8	4.2	ч	2.1	2	4.2
Pornography	7	2.1	Н	2.1	4	8.3	ß	10.4
Sexuality Late Yrs	rs 1	2.1	0	0.0	J	2.1	٦	2.1
Nudity	0	0.0	7	4.2	4	8.3	4	8.3
Sex with Love	г	2.1	0	0.0	-т	2.1	0	0.0
Ease of Discussion	on 1	2.1	0	0.0	7	4.2	0	0.0
Masturbation		not on list						
Privacy		not on list						

Table 3
Frequency Distribution of the Value Diffscore (n=45)

Diffscor	e F	requency	Percentage
7		2	4.2
11		1	2.1
12		1	2.1
13		1	2.1
14		5	10.4
15		4	8.3
16		4	8.3
17		4	8.3
18		2	4.2
19		2	4.2
20		5	10.4
21		3	6.3
22		2	4.2
24		1	2.1
25		1	2.1
26		1	2.1
28		1	2.1
29		1	2.1
32		1	2.1
35		2	4.2
37		1	2.1
To	otal	45 ¹	100.0

There were three students who chose not to respond to one question each on either the pre or post test. For this reason, no diffscore could be calculated for those students.

There has been a fair amount of controversy over the past decade in regard to treating ordinal level data as interval data. Much of current thinking leans toward treating ordinal data as if it were interval because it allows the researcher to employ more powerful and sophisticated statistical techniques (Asher, 1976). Interval statistics are usually better developed and more clearly interpretable (Labovitz, 1970). Labovitz (1970) believes that his arguments for using interval statistics on ordinal data are general enough to apply to any ordinal scale. He stated that any error which may occur in this process is offset by the more powerful and sensitive statistics which can be used. Originally, Lavovitz (1971) used an ordinal scale with only four categories and his results showed that the correlations were quite high in magnitude. Asher (1976, p. 66) pointed out that the "greater the number of categories in the ordinal variable, the less critical is the interval requirement." Labovitz (1971) agreed with this statement, and still believes that the advantages of using interval statistics on ordinal data far outweigh the possible risks of violating assumptions.

In light of the arguments presented by Labovitz, Asher and others, the researcher chose to treat some of the ordinal data in this study as interval level. The Pearson Product Moment Correlation was used to detect the relationship between the Value Diffscore and (1) the students' increase in clarifying of values on their reaction papers and (2) the score averages of the reaction papers.

The correlation between students' reaction paper averages and the Value Diffscore exhibited a very low negative relationship that was not significant (r=-.09, p>.05, n-45). This relationship suggested that as a supportive measure of students' clarification of values the reaction paper average was a poor indicator of this process as it occurred over time. Forty-five scores were available for this correlation due to no responses by three students on one question each in the Sexual Values section of the instrument.

The relationship between the Value Diffscore and the reaction paper increase was a very low positive correlation that was not significant (r=.05, p > .05, n=45). Again, this correlation suggested that the reaction papers were a poor supportive measure of the values clarification process for the sample.

In conslusion, the H₀₁ null hypothesis was rejected and the H₁₁ hypothesis accepted on the basis of the Wilcoxon matched-pairs signed-ranks test performed on the individual value items, which yielded statistically significant increases for over half of the items, sixteen out of thirty. The majority of significant movement on the value items occurred on items which were identically worded from pre to post test, thus indicating more strongly a clarification by the students of their own values. Examination of the Value Diffscore also indicated that students did clarify their values. The Value Diffscore gave evidence of the total amount of clarification which occurred during the course, and supports the results of the Wilcoxon.

Hypothesis Two

H₀₂There will be no significant change between the values of male and female students when exposed to sex education as taught from a values clarification basis.

Results of the Wilcoxon Test

The Wilcoxon matched-pairs signed-ranks test was run for the sub-groups of males vs females to see if there were any noticeable differences in clarification of values between There were some areas in which males and females the groups. reported significant change in regard to clarification of values (see Tables 4 and 5). Males appeared to have clarified their values on fewer items (four out of thirty) than did females (thirteen out of thirty). All of the areas but one that showed a significant increase for males were also areas on which females showed a significant increase. are, however, three and a half times more items clarified for females than for males. This difference may be due to the small number of males in the sample or it may be that at the beginning of the course males were able to state what they valued more clearly than females, or that females were able to clarify more of their values over the term. The researcher, however, tends to believe that this difference is due more to the small number of males who were included in the study. The small number of males in the sample limits the amount of variation likely to be present in their responses. was less likelihood of someone on the extremes being a part of the sample. Also the small sub-group size meant that

larger amounts of change were needed to cause a significant difference from pre to post test.

Table 4

Value Items that Showed a Statistically Significant Change Pre to Post Test for Males (n=9)

Subject Area	No. of Pairs	Least Rank Mean	Z Score
Sex with Love °	9	2.00	-2.028**
Venereal Disease °	9	2.50	-1.677*
Sexuality Later Years	s ° 9	0.00	-1.826**
Rape	9	0.00	-1.826**

^{*} Identically worded question on both pre and post tests.

^{**} p 4 .01

^{*} p ≤ .05

Subject Area	No. of Pairs	Least Rank Mean	Z Score
Homosexuality °	38	7.50	-1.680*
Birth Process °	39	11.50	-1.867**
Sex with Love °	39	8.67	-2.207**
Incest	39	3.50	-2.251**
Rape °	39	7.50	-3.376***
Venereal Disease °	39	9.50	-1.655*
Nudity °	39	11.00	-2.103**
Birth Control	39	10.06	-2.206**
Masturbation °	39	13.20	-3.251***
Pornography °	39	8.70	-1.829**
Sex with Love	39	8.00	-2.068**
Rape	38	10.37	-1.755**
Venereal Disease	39	11.50	-3.148***

Identically worded question on both pre and post test.

Cross-Tabulation of Significant Value Items with Self-Reported Areas of Clarification

The Who I Am Sexually II paper was examined to see if the subject areas on which students reported greater

^{***} p < .001

^{**} p ≤ .01

^{*} p 4 .05

understanding and clarification were the same areas that exhibited a significant increase as indicated by the Wilcoxon test. Males reported greater understanding and clarification most frequently on the following four subject areas: birth control, homosexuality, birth process, and handicapper sexuality. None of these four subject areas exhibited a significant increase from the beginning to the end of the course (see Table 6). The small size of this sub-group could have influenced the results. The clarification which occurred for males on these subject areas may not have been large enough to compensate for the size of the sub-group to produce a significant difference.

The six most frequently reported subject areas for females were: homosexuality, rape, handicapper sexuality, birth control, birth process and venereal disease. Each of these subject areas, except handicapper sexuality which was not a topic included on the Sexual Values section of the instrument, was found to exhibit a significant increase from pre to post test by the Wilcoxon (see Table 7). For females, the areas of self-reported clarification and greater understanding were supportive of the results of the Wilcoxon test for the individual value items.

Value Diffscore and Correlation with Reaction Paper Measures

Students' total clarification of values was measured by the Value Diffscore which was a calculation of the absolute value of the difference between the value pairs from pre to

Table 6

Items Which Displayed a Statistically Significant Change Pre
 to Post in Wilcoxon Test By Student Reported Areas of
 Most Gained Understanding for Males (n=9)

			Who	Who I Am Sexually II Areas	11y II A	reas		
Significant Items in Wilcoxon	lst Freg.	lst Area q. Percent	2nd Freq.	2nd Area q. Percent	3rd Freq.	3rd Area q. Percent	4th Freq.	4th Area q. Percent
Venereal Disease	0	0.0	0	0.0	0	0.0	٦	11.1
Rape	0	0.0	7	22.2	0	0.0	0	0.0
Sex with Love	0	0.0	0	0.0	г	11.1	0	0.0
Sexuality in Later Years	1	11.1	0	0.0	0	0.0	0	0.0

Table 7

Items Which Displayed a Statistically Significant Change Pre
 to Post in Wilcoxon Test By Student Reported Areas of
 Most Gained Understanding for Females (n=39)

			Who I	I Am Sexually II Areas	lly II A	reas		
Significant Items in Wilcoxon	lst Ar Freq. Pe	Area Percent	2nd Freg.	Area Percent	3rd Freg.	Area Percent	4th Freq.	Area Percent
Homosexuality	11	28.2	4	10.3	9	15.4	4	10.3
Birth Control	2	12.8	т	7.7	m	7.7	7	5.1
Birth Process	4	10.3	m	7.7	2	5.1	м	7.7
Venereal Disease	7	5.1	m	7.7	4	10.3	м	7.7
Rape	4	10.3	ω	20.5	П	2.6	7	5.1
Incest	3	7.7	7	5.1	ч	2.6	7	5.1
Nudity	0	0.0	7	5.1	4	10.3	4	10.3
Sex with Love	г	2.6	0	0.0	0	0.0	0	0.0
Ease of Discussion	n 1	2.6	0	0.0	2	5.1	0	0.0
Masturbation	-	not on list						

Table 8

Frequency Distribution of the Value Diffscore for Males (n=8) and Females (n=37)

	Ma	les	Fem	ales
Diffscore	Freq.	Percent	Freq.	Percent
7	1	11.1	1	2.6
11	0	0.0	1	2.6
12	1	11.1	0	0.0
13	0	0.0	1	2.6
14	0	0.0	5	12.8
15	1	11.1	3	7.7
16	1	11.1	3	7.7
17	1	11.1	3	7.7
18	0	0.0	2	5.1
19	0	0.0	2	5.1
20	2	22.2	3	7.7
21	1	11.1	2	5.1
22	0	0.0	2	5.1
24	0	0.0	1	2.6
25	0	0.0	1	2.6
26	0	0.0	1	2.6
28	0	0.0	1	2.6
29	0	0.0	1	2.6
32	0	0.0	1	2.6
35	0	0.0	2	5.1
37	0	0.0	1	2.6
Total	81	100.0	371	100.0

Three students did not respond to one question each on the Sexual Values portion of the instrument. Thus no diffscore could be calculated for those students.

post. Value Diffscores for males ranged from seven to twenty-two with a mode of 20, a median of 16 and a mean of 16 (see Table 8). Scores for females ranged from seven to thirty-seven with a mode of 14, a median of 18, and a mean of 20 (see Table 8).

Table 9 shows a comparison of the means and standard deviations for the total sample and the two sub-groups of males and females on the Value Diffscore. The standard deviation for males was smaller than for the total sample or for females. These figures indicate that the sub-group of males was more homogeneous than the sample or the group of females. Thus, the males in this study were more alike in regard to clarification of values than females or the entire sample which was 81 percent female.

Table 9

Means and Standard Deviations on the Value Diffscore for the Total Sample, Males and Females

	Sample	Males	Females
Mean	19.20	16.00	19.89
SD	6.76	4.72	5.54
N	45	8	37

The Value Diffscore was correlated with the two reaction paper measures: the students' increase on their reaction papers and the score averages of the reaction papers. The correlation between students' reaction paper average and the

Value Diffscore was significant only for males, and indicated a very strong positive realtionship (see Table 10). Thus as average scores for males increased, so did clarification of values. For males the average reaction paper score appeared to be a good indicator of the values clarification process.

The relationship between the Value Diffscore and the reaction paper increase for males was a moderate negative correlation that was not significant (see Table 10). While the correlation was not significant, it is interesting to note that it was negative and indicated that as clarification of values increased the evidence of increase on the reaction papers decreased.

The correlation for females between the Value Diffscore and the reaction paper average is a low negative relationship that was not significant (see Table 10). A low positive correlation that also was not significant existed between the Value Diffscore and the reaction paper average (see Table 10). While neither relationship was significant, it should be noted that the correlations were in the opposite direction of those for males, but in the same direction as the correlations for the total sample. This seemed to indicate that the increase in reaction papers was a slightly more supportive measure of clarification of values for females than males.

The data showed that while females exhibited a statistically significant increase on more value items (thirteen) than did males (four), this was not seen as evidence that females were able to clarify their values any better than

males. The small n of the males in the sample may have been responsible for this difference. When the Value Diffscore was correlated with the reaction paper average for both males and females, the results indicated a significant, strong positive relationship $(r=.74, p \le .01, n=8)$ between the two variables for males and a low negative relationship $(r=-.25, p \le .05, n=37)$ for females which was not significant. These correlations appear to indicate that as males were able to clarify their values the average scores on their reaction papers also increased. In light of these results, the H_{02} null hypothesis is accepted.

Table 10

Pearson Correlation Between Value Diffscore and Reaction Paper Measures for Males and Females

	Valu	e Diffscore
	Males n=8	Females n=37
Reaction Paper Increase	34	.18
Reaction Paper Average	.74**	25

^{**} p ≤ .01

Hypothesis Three

- H₀₃There will be no relationship between the stustudents' role in the class and the understanding of their own values.
- H₁₃The relationship between being a group facilitator and students' understanding of their own values will be greater than the relationship between not being a facilitator and students' understanding of their own values.

Results of the Wilcoxon Test

The Wilcoxon test was run on the sub-groups of facilitators vs non-facilitators to see if there were any noticeable differences in the clarification of values between the groups.

The groups of facilitators and non-facilitators showed very little variation between them regarding areas clarified. The number of items for each group was quite similar, ten for facilitators and nine for non-facilitators (see Tables 11 and 12). Also the subject areas for the two groups were quite similar. The only difference being that facilitators exhibited a significant increase on the first set of questions dealing with masturbation which was not so for non-facilitators. This was not seen by the researcher as a major difference between the two groups since both groups did show a significant increase on the second set of questions dealing with masturbation.

Generally, a value item was not significant for a subgroup if it was not also significant for the total sample. However, for both facilitators and non-facilitators the

Table 11

Value Items that Showed a Statistically Significant Change Pre to Post Test for Facilitators (n=16)

Subject Area	No. of Pairs	Least Rank Mean	Z Score
		nean	
Abortion °	16	4.50	-1.734*
Masturbation	16	0.00	-2.366**
Incest	16	0.00	-2.366**
Rape °	16	3.00	-2.100**
Birth Control	16	4.00	-1.988**
Masturbation °	16	0.00	-2.666***
Sex with Love	16	4.00	-1.867**
Sexuality in			
Later Years °	16	0.00	-1.826**
Rape	16	3.00	-1.859**
Venereal Disease	16	5.00	-2.293**

^{*} Identically worded question on both pre and post tests.

^{***} p ≤ .001

^{**} p ≤ .01

^{*} p ≤ .05

Subject Area	No. of Pairs	Least Rank Mean	Z Score
Abortion °	32	10.08	-1.661*
Homosexuality °	32	5.00	-1.704*
Sex with Love °	32	7.13	-2.676***
Rape °	32	5.00	-3.148***
Venereal Disease °	32	7.25	-1.761*
Masturbation °	32	9.17	-2.265**
Rape	31	9.07	-1.807*
Venereal Disease	32	9.00	-1.917**
Sex is Private °	31	4.50	-2.000**

^{*} Identically worded question on both pre and post tests.

question on abortion which was identically worded on both tests (items 1/1) showed a significant increase in clarification of values by students for each group, but not for the total sample. Upon examination of the cross-tabulations for each group, the direction of the movement was indicated. Facilitators appeared to move toward valuing more control by women over their own bodies and non-facilitators seemed to have moved in both directions with a bit more movement toward control. The

^{***} p < .001

^{**} p ≤ .01

^{*} p **\$** .05

group of facilitators also exhibited a significant increase on the first set of questions on masturbation (items 3/18) which was not evident among the whole sample. Again, the cross-tabulations were used to indicate the direction of the change on these questions. Facilitators appeared to value and accept pleasure for oneself more by the end of the course than they did at the beginning. Other than these two items, there are no differences between the sub-groups and the whole sample on significant increases in the values clarification process.

Cross-Tabulation of Significant Value Items with Self-Reported Areas of Clarification

The subject areas of most gained understanding reported by students on the Who I Am Sexually II paper were examined to note similarities and differences between the reported areas and the value items that exhibited a significant increase from pre to post test. The four most frequently reported subject areas for facilitators were: homosexuality, handicapper sexuality, rape and venereal disease. Rape and venereal disease were the only two of these four areas that exhibited a significant increase in the clarification of facilitators' values (see Table 13). Handicapper sexuality was not on the Sexual Values portion of the instrument, and the area of homosexuality was not significant for this sub-group. The self-reported areas of clarification appear to have been adequate support for the results of the Wilcoxon test.

Table 13

Items Which Displayed a Statistically Significant Change Pre
 to Post in Wilcoxon Test By Student Reported Areas of
 Most Gained Understanding for Facilitators (n=16)

			Who I		Am Sexually II Areas	reas		
Significant Items in Wilcoxon	lst Freg.	lst Area q. Percent	2nd Freq.	Area Percent	3rd Freq.	Area Percent	4th Freg.	4th Area q. Percent
Birth Control	ı	6.3	ю	18.8	П	6.3	0	0.0
Venereal Disease	П	6.3	J	6.3	٦	6.3	m	18.8
Rape	0	0.0	2	31.3	П	6.3	0	0.0
Incest	7	12.5	0	0.0	0	0.0	П	6.3
Sexuality in Later Years	Н	6.3	0	0.0	1	6.3	ı	6.3
Sex with Love	0	0.0	0	0.0	П	6.3	0	0.0
Ease of Discussion	1	6.3	0	0.0	0	0.0	0	0.0
Abortion	0	0.0	0	0.0	0	0.0	0	0.0
Masturbation	H	not on list						

The five more frequently reported subject areas of gained understanding for non-facilitators were: homosexuality, birth control, rape, handicapper sexuality, and birth process. Of these five items only homosexuality and rape were areas on which non-facilitators exhibited a significant increase in clarification of values (see Table 14). It appears that the self-reported areas of clarification were adequate support for the findings of the Wilcoxon test.

<u>Value Diffscore and Correlation</u> with Reaction Paper Measures

The Value Diffscore indicated the amount of total clarification of values by the students during the course. The scores for facilitators ranged from seven to twenty-nine with modes of 15, 16, 17, and 20, a median of 17 and a mean of 18 (see Table 15). Non-facilitators' scores ranged from seven to thirty-seven with a mode of 14, a median of 20, and a mean of 20 (see Table 15).

A comparison of the means and standard deviations for the total sample and the two sub-groups of facilitators and non-facilitators is displayed in Table 16. The standard deviation for facilitators (5.54) was smaller than that of non-facilitators (7.27). These figures indicated that the group of facilitators was more homogeneous than the non-facilitators; there seemed to be more diversity among the sub-group of non-facilitators.

Table 14

Items Which Displayed a Statistically Significant Change Pre to Post in Wilcoxon Test By Student Reported Areas of Most Gained Understanding for Non-Facilitators (n=32)

			Who I	I Am Sexually II	lly II Ar	Areas		
Significant Items in Wilcoxon Fr	lst Freq.	lst Area q. Percent	2nd Freq.	Area Percent	3rd Freg.	Area Percent	4th Freg.	4th Area q. Percent
Homosexuality	7	21.9	5	15.6	5	15.6	2	6.3
Venereal Disease	7	3.1	7	6.3	m	9.4	٦	3.1
Rape	4	12.5	2	15.6	0	0.0	7	6.3
Sex with Love	7	3.1	0	0.0	0	0.0	0	0.0
Ease of Discussion	0	0.0	0	0.0	7	6.3	0	0.0
Abortion	ч	3.1	0	0.0	ч	3.1	٦	3.1
Masturbation		not on list						
Privacy		not on list						

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	Facil	itators	Non-Fac	ilitators
Diffscore	Freq.	Percent	Freq.	Percent
7	1	6.3	1	3.1
11	0	0.0	1	3.1
12	1	6.3	0	3.1
13	0	0.0	1	3.1
14	1	6.3	4	12.5
15	2	12.5	2	6.3
16	2	12.5	2	6.3
17	2	12.5	2	6.3
18	1	6.3	1	3.1
19	0	0.0	2	6.3
20	2	12.5	3	9.4
21	0	0.0	3	9.4
22	0	0.0	2	6.3
24	1	6.3	0	0.0
25	0	0.0	1	3.1
26	1	6.3	0	0.0
28	0	0.0	1	3.1
29	1	6.3	0	0.0
32	0	0.0	1	3.1
35	0	0.0	2	6.3
37	0	0.0	1	3.1
Total	151	100.0	30 ¹	100.0

Three students did not respond to one question each on the sexual values portion of the instrument. Thus no diffscore could be calculated for those students.

Table 16

Means and Standard Deviations on the Value Diffscore for the Sample, Facilitators and Non-Facilitators

	Sample	Facilitators	Non-Facilitators
Mean	19.20	17.73	19.93
SD	6.76	5.54	7.27
N^{1}	45	15	30

Three students did not respond to one question each on the Sexual Values portion of the instrument. Thus no diffscore could be calculated for those students.

The Value Diffscore was correlated with the two reaction paper measures to examine the existing relationship. The correlations between the Value Diffscore and the reaction paper increase for facilitators was a very low positive relationship that was not significant (see Table 17). The correlation between these two variables for non-facilitators was also not significant, but it was a very low negative relationship (see Table 17). The relationships for both sub-groups between the Value Diffscore and the reaction paper averages were very low negative correlations which were not significant (see Table 17). It appears that the reaction paper was not an adequate supportive measure of the values clarification process for facilitators or non-facilitators.

Table 17

Pearson Correlation Between Value Diffscore and Reaction Paper Measures for Facilitators and Non-Facilitators

	Value	Value Diffscore				
	Facilitators n=15	Non-Facilitators n=30				
Reaction Paper Increase	.17	07				
Reaction Paper Average	12	02				

p > .05

A Pearson Correlation test was used to determine the relationship between students' role in the class and clarification of their values. To find the relationship between these two variables, students' role in the class had to be made into a dummy variable. Because role in class was a dichotomous variable it could not be correlated with the Value Diffscore, therefore it was necessary to dummy this variable so the computer would treat role in class as a continuous variable and make a correlation possible. The result of this correlation was a very low, negative relationship that was not significant (r=-.16, p > .05, n=45). This correlation indicated that there was no significant relationship between students' role in the class and the amount of clarification of values which they experienced.

On the basis of the data analyzed, the ${\rm H}_{03}$ null hypothesis is accepted and the ${\rm H}_{13}$ hypothesis is rejected. Both

facilitators and non-facilitators exhibited statistically significant increases on approximately the same number of items, eleven and ten respectively. When a Pearson correlation test was run on the dummy variable for role in class and the Value Diffscore, the relationship was not significant and was a very low negative relationship (r=-.16, p > .05, n=45). No major differences were indicated between the two groups on either of the subjective measures of the values clarification process.

Factor Analysis

A factor analysis was performed on the values section of the instrument. Factor analysis is a design by which the regularity and order in the data can be ascertained (Rummel, 1967). It is one method of discovering the minimum number of hypothetical factors underlying the data that can account for the observed covariation, and as a means of investigating the data for possible reduction (Kim and Mueller, 1978). The factor analysis was run in this study to ascertain whether the thirty-two value items would factor into the twelve values and one issue of discussability that were believed to underlie the Sexual Values section of the instrument.

When the factor analysis was allowed to run freely using oblique rotation, it produced twelve factors on the pretest and twelve on the posttest (see Table 18 and Table 19 respectively). The analysis did provide evidence of patterns in each test, however, most of these patterns did not hold constant from pre to post test. It is interesting to

Table 18

Pretest Oblique Factor Analysis, Pattern Matrix After Rotation

Ite:		cea	1	2	3	4	5	6	7	8	9	10	11	12
1	Abortion*												.58	
16	Abortion												.95	
2	Birth Contro	ol °					.35							
17	Birth Contro						.64							
3	Masturbation	ו		.41			.41							
18	Masturbation	٠.					.55							
4	Pornography										.32			
19	Pornography	•									.91			
5	Homosexuali	ty•	.84											
20	Homosexuali	ty	.78											
6	Birth Proces	ss*												. 3
21	Birth Proces	ss				50								
7	Sex Education in the Home				.45		42							
22	Sex Education in the Home													.5
8	Sex with Lov	/e °								.88				
23	Sex with Lov	⁄e								.74				
9	Sexuality in Later Years			.57										
24	Sexuality in Later Years			.66										
10	Incest			.69										
25	Incest •			.63										
11	Rape*										-	57		
26	Rape											.56		
12	Venereal Disease•		.39											
27	Venereal Disease								.56					
13	Dark Rm for	Sex	:											. 7
28	Privacy for	Sex	:		.69									
14	Sexual Communicat:	ion							.61					
29	Sexual Communicat:	ion•	•						.57					
15	Nudity*					70		97	7					
30	Nudity					70								
31	Willingness Discuss Se												.39	
32	Ease of Discussabil	lity	,•		.32									

[•] Identically worded question on both pre and post tests.

Table 19
Posttest Oblique Factor Analysis, Pattern Matrix After Rotation

Ite:		Area	1	2	3	4	5 5	Factor	rs 7	8	9	10	11	12
1	Abortion*										.69			
16	Abortion			.56										
2	Birth Conti	rol•			.83									
17	Birth Cont				. 72									
3	Masturbatio	on•	.92											
18	Masturbatio	on	.92											
4	Pornography	y •												 75
19	Pornography	y					46							
5	Homosexuai.	lty•							70					
20	Homosexual:	ity							79					
6	Birth Proce	ess						.68						
21	Birth Proce	ess•						.49	.31					
7	Sex Educat: in the Hor		.45	.38										
22	Sex Educat: in the Hor			.66										
8	Sex with Lo	ove*									68			
23	Sex with Lo	ove					,80							
9	Sexuality : Later Year							38						44
24	Sexuality : Later Year							64						
10	Incest •			.57										
26	Incest					74								
11	Venereal Disease													56
25	Venereal Disease*			.66										
12	Rape •									.69				
27	Rape								45		38			
13	Romantical: Lit Rm for		•		.38						-	.35		
28	Privacy for	Sex°										.78		
14	Sexual Communicati	on• -	.34						40					
29	Sexual Communicati	on							55					
15	Nudity*												.69	
30	Nudity					42							.38	
31	Willingness Discuss Se						.74							
32	Ease of Discussab	ility	•								_	.68		
33	Rating of t	the				77								

Identically worded question on both pre and post tests.

note that some of the questions that were identically worded on both tests did not load onto a factor with the same size of factor loading on the pre and post test analysis. In each case, the pretest question loaded only moderately onto one or several factors, but loaded more strongly onto one factor in the posttest. This occurred for the subject areas of birth control (items 2/2), venereal disease (items 12/25), willingness to discuss sexuality (items 31/31), and ease of discussing sexuality (items 32/32), see Tables 18 and 19. Other identically worded items loaded strongly onto one factor for the pretest, but in the posttest became dispersed and loaded moderately onto one or more factors. This happened for the areas of sexuality in the later years (items 24/9) and sexual communication (items 29/14), see Tables 18 and 19. cases appear to indicate that the class has had some intervening effect on the students that has altered the manner in which an item loads onto a factor.

Nine of the seventeen items factored together on both the pre and post tests. Those items were: homosexuality (items 5,20/5,20), sexuality in the later years (items 9,24/9,24), sexual communication (items 14,29/14,29), birth control (items 2,17/2,17), masturbation (items 3,18/3,18), masturbation and sex education (items 3,18,7/3,18,7), privacy for sex and ease of discussing sexuality (items 28,32/28,32), and nudity (items 15/15), see Table 20. Each of these factors was examined to determine the underlying value concept of the questions loading at a minimum of .35. The

Table 20

A Comparison of the Items with Significant Factor Loadings for the Pre and Post Test

Pretest Items	Posttest Items
Sexual Openness (homosexuality)	Sexual Openness (homosexuality)
Homosexual couples should be permitted to dance with each other at public dances as are heterosexual couples.	Homosexual couples should be permitted to dance with each other at public dances as are hetrosexual couples. Item 20 Factor 779
Homosexuality is not acceptable as a variation in sex outlet for adults. Item 20 Factor 1 .78	Homosexual behavior is acceptable between consenting adults. Item 5 Factor 770
Self Determination (sexuality later syears)	Self Determination (sexuality later years)
The current trend to acknowledge the sexual rights of older persons in nursing homes should not be encouraged because such expression is offensive to other residents and staff members. Item 24 Factor 2 .66	The current trend to acknowledge the sexual rights of older persons in nursing homes should not be encouraged because such expression is offensive to other residents and staff members. Item 9 Factor 638
Making fun of sexual behavior between elderly persons is offensive to me. Item 9 Factor 2 .57	Jokes about the absurdity of sexual expression of older adults is acceptable to me. Item 24 Factor 664
Sexual Communication (communication)	Sexual Communication (communication)
Good sexual relationships are built and maintained through a lot of verbal and non-verbal communication between partners about their sexual expression. Item 29 Factor 7 .57	Good sexual relationships are built and maintained through a lot of verbal and non-verbal communication between partners about their sexual expression. Item 14 Factor 740
I would enjoy discussing my sexual needs with my partner. Item 14 Factor 7 .61	I would feel uncomfortable talking with my partner about our individual sexual needs. Item 29 Factor 755

Table 20 Continued

Posttest Items	Responsible Sex (birth control) Birth control may be considered as ranging from abstinance to chemical and mechanical methods. Assuming procreation is not the goal, the consistent use of birth control methods by a couple during intercourse is a necessary action. Item 2 Factor 3 .84 Birth control ranges from abstinance to chemical and barrier methods. Individuals who do not want children should use birth control when engaging in sexual intercourse. Item 17 Factor 3 .72	Individual Responsibility for Sexual Behavior (masturbation) Masturbation for individuals is an acceptable expression of sexuality. Item 3 Factor 1 .92 Masturbation for a married person is acceptable. Item 18 Factor 1 .92
Pretest Items	Birth control may be considered as ranging from abstinance to chemical and mechanical methods. Assuming procreation is not the goal, the consistent use of birth control methods by a couple during intercourse is a necessary action. Item 2 Factor 5 .35 Birth control ranges from abstinance to modern chemical and barrier methods. If one does not want to become pregnant, sexual intercourse for pleasure without the use of an effective birth control method is an irresponsible act.	al Responsibility for r (masturbation) bation for individuals able expression of sex 18 Factor 5 leasure through the us is a selfish act.

Table 20 Continued

Pretest Items	Posttest Items
ate Sexual Behavior rbation and sex educatons for masturbation a Individual Responsibil Behavior.	ate Sexual Behavior rbation and sex educat ons for masturbation a Individual Responsibil Behavior.
Item 18 Factor 5 .74 Item 3 Factor 5 .88 Discussion of sexual matters should be kept to a minimum in the home so the child will not develop undue curiosity about sex. Item 7 Factor 542	Item 3 Factor 1 .92 Item 18 Factor 1 .92 Discussion of sexual matters should be kept to a minimum in the home so the child will not develop undue curiosity about sex. Item 7 Factor 1 .45
Comfort with Sexuality (privacy and ease of discussability)	Comfort with Sexuality (privacy and ease of discussability)
For me, privacy with no danger of inter- ruption is necessary for satisfying sexual interaction. Item 28 Factor 3 .69	For me, privacy with no danger of inter- ruption is necessary for satisfying sexual interaction. Item 28 Factor 10 .78
Discussing my behavior, attitudes and beliefs on sexuality: A. is a somewhat gratifying experience in which I feel little uncomfortableness	Discussing my behavior, attitudes and beliefs on sexuality: A. is a somewhat gratifying experience
witch treet very hard to a neutral exp	+
D. is a very rewarding experience that is easy for me E. makes me feel somewhat uncomfortable Item 32 Factor 3 .32	D. is a very rewarding experience that is easy for me E. makes me feel somewhat uncomfortable Item 32 Factor 1068

Table 20 Continued

Pretest Items	Posttest Items
Sexuality is Natural (nudity)	Sexuality is Natural (nudity)
Nudity in families helps children learn to accept the naturalness of the human	Nudity in families helps children learn to accept the naturalness of the human
Item 15 Factor 697	Item 15 Factor 11 .69

underlying value constructs for these factors were labeled as: sexual openness (homosexuality), self determination (sexuality in the later years), sexual communication (communication about sex), responsible sex (birth control), individual responsibility for sexual behavior (masturbation), appropriate sexual behavior (masturbation and sex education), comfort with sexuality (privacy for sex and ease of discussing sexuality), and sexuality is natural (nudity), see Table 20. Once these factored values were derived, the factors rather than the individual items were assessed for significant change from pre to post testing by means of the Wilcoxon matched-pairs signed-ranks test. This analysis will be covered in depth in the next section.

The factor analysis was run with oblique rotation to determine if there were any relationships between the factors. When the analysis was run freely, there were no strong relationships between the factors. The strongest correlation between factors was a -.27 between factors one and eight on the pretest (see Table 21) and a -.24 between factors two and twelve on the posttest (see Table 22). Because of the lack of relationship between factors it was concluded that the items were measuring different constructs and thus the analysis was not forced to a fewer number of factors.

In summary, the questions on the same subjects which were intended to measure the same underlying value did tend to factor together within each testing. While these questions did not always factor with the same factor loadings

Table 21

Pretest Factor Analysis Correlation Matrix

						Factors						
Factors	1	2	3	4	5	9	7	8	6	10	11	12
ч	1.00											
2	.03	1.00										
е	.03	.02	1.00									
4	90	.04	05	1.00								
2	60.	60.	.05	07	1.00							
9	02	03	22	.03	.04	1.00						
7	.14	.01	.07	.04	.03	10	1.00					
∞	27	.02	04	01	.03	01	03	1.00				
6	08	.04	08	.08	.03	00.	.04	.01	1.00			
10	12	03	00.	05	02	08	.03	.02	00.	1.00		
11	.23	.01	.07	.08	90.	.04	00.	15	01	10	1.00	
12	04	.13	.18	03	03	07	.04	60.	90	12	02	1.00

Table 22

1.00 -.13 1.00 10 .12 -.11 -.03 1.00 90. .10 σ Posttest Factor Analysis Correlation Matrix -.05 -.08 -.04 -.01 ω 1.00 -.02 -.03 .14 00. .09 7 Factors 1.00 • 08 .07 -.12 -.10 -.02 -.11 9 1.00 .01 • 00 .04 -.04 .04 -.02 S 1.00 -.04 .04 -.07 .04 -.05 .10 .04 4 1.00 .02 -.07 .03 90. 90. 00. .04 -.21 .01 $\boldsymbol{\omega}$ 1.00 • 00 -.09 00. -.03 90. -.04 -.17 .04 -.24 2 1.00 .09 .10 00. .05 90.--.20 .03 .03 -.10 .03 Factors 10 12 S ω σ 2

from pre to post test, they did show some evidence of measuring the same phenomena. This appeared to indicate that the experience of the course had an intervening effect on the students' responses to the Sexual Values section of the instrument. If an item loaded more strongly onto a factor for the posttest than for the pretest, this appeared to be further evidence that students were able to clarify their values during the course.

Value Factors

As stated, the items which factored together on both pre and post tests were combined to make eight different value factors. These value factors were then analyzed by use of the Wilcoxon matched-pairs signed-ranks test to see if a significant change occurred from pre to post test. Of those eight value factors, only four were significant at the .05 level (see Table 23). For those value factors which were not significant it should be noted that these factors usually involved paired items which did not show significant change when analyzed individually by the Wilcoxon test. The one exception to this was the comfort with sexuality factor in which both pairs of questions involved showed a significant increase when examined individually. It is unclear why this occurred.

Value Factors	No. of Pairs	Least Rank Mean	Z Score
Sexual Openness	471	13.33	-0.668
Self Determination	48	14.79	-1.382
Sexual Communication	48	12.00	-1.277
Responsible Sex	48	14.29	-3.067***
Indiv. Responsible Sexuality	48	12.79	-3.106***
Appropriate Sexual Behavior	48	15.85	-2.597**
Comfort with Sexuality	471	13.91	-1.395
Sexuality if Natural	48	12.33	-2.171**

Two students did not respond to one question each on the Sexual Values section of the instrument.

$$p \le .001$$

The value factors were also analysed by use of the Wilcoxon for each sub-group of the sample. It was found that for males there was a significant increase only for Responsible Sex (see Table 24). Females exhibited a significant increase from pre to post test on all of the items which showed a significant increase for the whole sample (see Table 25). It is possible that the small n for the group of males in the study has had an effect on the number of items which showed a significant increase from the beginning to the end

of the course. This difference also occurred for the analysis of the individual items.

Table 24

Change in Value Factors from Pre to Post Test for Males (n=9)

Value Factors	No. of Pairs	Least Rank Mean	Z Score
Sexual Openness	9	2.25	-0.183
Self Determination	9	3.00	-0.314
Sexual Communication	9	2.50	-0.913
Responsible Sex	9	0.00	-1.826*
Indiv. Responsible Sexuality	9	1.00	-0.477
Appropriate Sexual Behavior	9	0.00	-1.000
Comfort with Sexuality	8	1.50	0.000
Sexuality is Natural	9	2.00	-0.535

^{*} p ≤ .05

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Value Factors	No. of Pairs	Least Rank Mean	Z Score
Sexual Openness	38	11.85	-0.546
Self Determination	39	12.50	-1.345
Sexual Communication	39	9.79	-1.066
Responsible Sex	39	12.14	-2.687***
Indiv. Responsible Sexuality	39	12.75	-3.049***
Appropriate Sexual Behavior	39	15.33	-2.468**
Comfort with Sexuality	39	13.47	-1.359
Sexuality is Natural	39	11.00	-2.103**

^{***} $p \le .001$

The sub-group of facilitators increased significantly on three of the four value factors that showed a significant increase for the sample. There was no significant increase on Sexuality is Natural for this sub-group (see Table 26).

Non-facilitators increased significantly only on Responsible Sex and Individual Responsibility for Sexual Behavior (see Table 27).

^{**} p ≤ .01

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Value Factors	No. of Pairs	Least Rank Mean	Z Score
Sexual Openness	15	4.00	-0.280
Self Determination	16	7.50	-1.412
Sexual Communication	16	3.00	-0.314
Responsible Sex	16	4.00	-2.578**
Indiv. Responsible Sexuality	16	0.00	-2.803***
Appropriate Sexual Behavior	16	0.00	-2.803***
Comfort with Sexuality	15	6.00	-0.706
Sexuality is Natural	16	3.500	-1.540

^{***} p ≤ .001

^{**} p ≤ .01

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Value Factors	No. of Pairs	Least Rank Mean	Z Score
Sexual Openness	32	10.00	-0.860
Self Determination	32	7.88	-0.639
Sexual Communication	32	8.17	-1.302
Responsible Sex	32	9.17	-2.103**
Indiv. Responsible Sexuality	32	9.50	-1.703*
Appropriate Sexual Behavior	32	10.61	-1.147
Comfort with Sexuality	32	8.75	-1.136
Sexuality is Natural	32	8.25	-1.603

^{**} p \leq .01

It should be noted that the value factors which exhibited a significant increase for any of the sub-groups also showed a significant increase for the whole sample. There were no value factors that were significant for one of the sub-groups but were not significant for the entire sample.

^{*} p ≤ .05

Analysis of Students' Willingness to Discuss Sexuality

Hypothesis Four

- H₀₄There will be no relationship between students' understanding of their own values and their willingness to discuss their sexual feelings and behavior.
- H₁₄There will be a positive relationship between willingness by students to discuss their sexual feelings and behavior and students' understanding of their own values.

The Pearson Product Moment Correlation was used to determine the relationship between students' willingness to discuss sexuality and their clarification of values. In addition to the correlations, the Wilcoxon matched-pairs signed-ranks test was used to determine if there was a significant increase in students' willingness to discuss sexuality from the course's start to its conclusion. The .05 level of significant was pre selected to determine statistical significance.

The Value Diffscore was correlated with the students' willingness to discuss sexuality both before and after the course. The only correlations that were significant were those for the group of facilitators. For this sub-group, the Pearson correlation indicated a moderate positive relationship between willingness to discuss sexuality and clarification of values. The facilitators were more willing to discuss issues in sexuality both at the beginning of the course and at the end (see Tables 28 and 29).

Table 28

Pearson Correlation Between Value Diffscore and Pretest,
Posttest Willingness to Discuss Sexuality for Total
Sample, Males and Females

	Value Diffscore				
	Sample n=45	Males n=8	Females n=37		
Pretest	03	28	.04		
Posttest	.13 ²	03	.143		

Three students did not respond to one question each on the Sexual Values section of the instrument.

p > .05

Table 29

Pearson Correlation Between Value Diffscore and Pretest,
Posttest Willingness to Discuss Sexuality for Total
Sample, Facilitators and Non-Facilitators

	Value Diffscore					
	Sample n=45	Facilitators n=15	Non-Facilitator n=30			
Pretest	03	.58**	16			
Posttest	.132	.59**	.052			

Three students did not respond to one question each on the Sexual Values section of the instrument.

 $^{^{2}}$ n=44

 $^{^{3}}$ n=36

 $^{^{2}}$ n=44

 $^{^{3}}$ n=29

^{**} p < .01

The Wilcoxon test was used to determine if there was a statistically significant increase in students' willingness to discuss sexuality from pre to post test. The results of this test indicated that the increase in willingness to discuss sexuality from the beginning to the end of the course was not significant for the total sample nor any of the subgroups; males vs females or facilitators vs non-facilitators (see Table 30).

Table 30

Change in Willingness to Discuss Sexuality from Pre to Post Test

	No. of Pairs	Least Rank Mean	Z Score
Total Sample	471	8.50	440
Gender			
Males	9	2.88	-1.079
Females	38 ¹	5.00	-1.600
Role in Class			
Facilitators	16	3.00	405
Non-Facilitators	311	5.64	578

One student gave more than one response on the posttest. p > .05

In conclusion, the results of the Pearson Product Moment Correlations run between the Value Diffscore and students' pretest and posttest willingness to discuss sexuality indicated that there was no statistically significant relationship between either the pre or post measure of willingness to

discuss sexuality and the Value Diffscore (pretest: r=-.03, p > .05, n=45; posttest: r=.13, p > .05, n=44). There was, however, a statistically significant relationship between the Value Diffscore and willingness to discuss sexuality for the sub-group of facilitators (pretest: r=.58, $p \le .01$, n=15; posttest: r=.59, $p \le .01$, n=15). The Wilcoxon test was performed on this item to see if there was a significant increase from pre to post test. There was no statistically significant increase in willingness to discuss sexuality for the entire sample (z=-.440, p > .05, n=47) nor for the group of facilitators (z=-.405, p > .05, n=16). On the basis of these results, the H_{04} null hypothesis is accepted and the H_{14} hypothesis is rejected.

Analysis of Students' Ease in Discussing Sexuality

Hypothesis Five

- H₀₅There will be no significant change in students' ease of talking about sexual beliefs, values and behavior from the beginning to the end of the course.
- H₁₅Students will report significantly greater ease of talking about sexual beliefs, values and behavior from the beginning to the end of the course.

Students' ease of discussing sexuality was examined by the variables of gender and role in class as well as for the total sample. The Wilcoxon matched-pairs signed-ranks test was used to determine if students increased significantly in their ease of discussing sexuality. A significant increase from pre to post was exhibited by the total sample and females, but not for males in their ease of discussing sexuality (see Table 31). This difference may have been due to the males being more comfortable talking about sexuality at the beginning of the course than females were. Or it may have been due to the small number of males in the sample. Thus, the increase for males was not as great and not significant.

Table 31

Change in Ease of Discussing Sexuality from Pre to Post Test for Total Sample, Males and Females

	No. of Pairs	Least Rank Mean	Z Score
Total Sample	471	6.50	-3.563***
Males	81	0.00	-1.342
Females	39	6.00	-3.340***

¹One student gave more than one respnose on the posttest. *** p \leq .001

Both the sub-groups of facilitators and non-facilitators as well as the total sample, exhibited a significant increase in ease of discussing sexuality from the beginning to the end of the course (see Table 32). Thus, a student's role in the class seemed to have no effect on his/her ease of discussing sexuality.

Table 32

Change in Ease of Discussing Sexuality from Pre to Post
Test for Total Sample, Facilitators and Non-Facilitators

	No. of Pairs	Least Rank Mean	Z Score
		mean	2 Score
Total Sample	47 ¹	6.50	-3.563***
Facilitators	15 ¹	3.00	-2.100**
Non-Facilitators	32	4.00	-2.900***

 $^{^{}m l}$ One student gave more than one response on the posttest.

In conclusion, the $\rm H_{05}$ null hypothesis was rejected and the $\rm H_{15}$ hypothesis was accepted on the basis of the Wilcoxon test done on the ease of discussing sexuality item which was measured on the pretest and posttest. The Wilcoxon showed there to be a statistically significant increase in ease of discussing sexuality (z=-3.563, p \leq .001, n=47) for the total sample. Ease of discussing sexuality also showed a significant increase for three of the four sub-groups: females (z=-3.340, p \leq .001, n=39); facilitators (z=-2.100, p \leq .01, n=15); and non-facilitators (z=-2.900, p \leq .001, n=32).

^{***} p < .001

^{**} $p \leq .01$

Sex Knowledge

Hypothesis Six

- H₀₆There will be no significant difference in students' knowledge of sexuality from the beginning to the end of the course.
- H₁₆Students will increase significantly in their knowledge of sexuality from the beginning to the end of the course.

A t-test for matched pairs was used to determine if the sex knowledge portion of the instrument showed a statistically significant increase from pretest to posttest. The total sex knowledge scores for the pretest and posttest were examined as well as each component of the sex knowledge section of the instrument. In addition to the t-test, the Pearson Product Moment Correlation was used to determine the relationship between sex knowledge and students' clarification of their values. The correlations were run between the sex knowledge measures: (1) pretest total sex knowledge, (2) posttest total sex knowledge, (3) the final exam developed for the course, and the Value Diffscore. A probability level of .05 was pre selected to determine significance for both sets of statistical tests.

The total score and three of the four parts exhibited a statistically significant increase between pre and post tests (see Table 33). The one part of the sex knowledge measure which did not show a significant increase was the broad knowledge section of the test on page nine of the instrument. Some of the students commented informally on

this section of the instrument and indicated that it was not an adequate measure of sexuality. Due to these comments, the researcher was not surprised by the results of the t-test.

Table 33

T-Test of Pre and Post Sex Knowledge Measures for the Total Sample

	Ν ^l	Mean Pre	SD	Mean Post	SD	t
Total Sex Knowledge	43	124.40	15.92	130.09	16.60	-4.40***
General Sex Knowledge	48	50.73	5.70	54.27	5.91	-4.31***
Body Parts	47	12.30	4.81	13.83	4.30	-3.44***
Physiology	44	23.82	6.19	24.91	7.34	-1.90*
Broad Sex Knowledge	46	36.67	3.00	36.96	2.78	-0.87

Five students did not complete one or more parts of the sex knowledge section of the instrument.

Each of the sub-groups of the sample were also examined to see if there was a statistically significant increase between the pretest and posttest scores. All of the groups showed a significant increase from pre to post test for the total sex knowledge scores, the general sex knowledge and the body parts portions of the instrument. The group of males was the only sub-group that exhibited a significant increase on the broad sex knowledge portion of the instrument.

^{***} p < .001

^{*} p ≤ .05

The sub-group of males also displayed a mean on the pretest total sex knowledge score that was lower than the means for females or for the entire sample. The mean on the posttest total sex knowledge score for males was higher than the means for females or the sample (see Tables 34 and 35). This indicated that males exhibited the greatest amount of increase in sex knowledge during the course when compared with the sample or the sub-group of females.

Table 34

T-Test of Pre and Post Sex Knowledge Measures for Males

	N	Mean Pre	SD	Mean Post	SD	t
Total Sex Knowledge	9	119.33	15.78	130.56	15.89	-3.73***
General Sex Knowledge	9	50.33	5.15	55.56	4.07	-3.13**
Body Parts	9	10.78	5.22	13.89	4.89	-3.33**
Physiology	9	23.33	5.59	24.00	8.54	-1.06
Broad Sex Knowledge	9	35.89	3.89	37.11	2.42	-1.85*

^{***} p ≤ .001

^{**} $p \leq .01$

^{*} p ≤ .05

Table 35

T-Test of Pre and Post Sex Knowledge Measures for Females

	N ¹	Mean Pre	SD	Mean Post	SD	t
Total Sex Knowledge	34	125.74	15.92	129.97	17.01	-3.15***
General Sex Knowledge	39	50.82	5.88	53.97	6.26	-3.38***
Body Parts	38	12.66	4.70	13.82	4.22	-2.36**
Physiology	35	24.20	6.35	25.14	7.11	-1.54
Broad Sex Knowledge	37	36.86	2.77	36.92	2.89	-0.15

¹ Five students did not complete one or more parts of the sex knowledge section of the instrument.

The pretest total sex knowledge score mean was higher for facilitators than the pretest means for non-facilitators or the total sample. The sub-group of facilitators also exhibited a higher posttest total sex knowledge score mean than did non-facilitators or the sample (see Tables 36 and 37). This indicated that as a group, facilitators knew more about sexuality at the beginning of the course than did non-facilitators or the sample, and that by the conclusion of the course they still knew more about sexuality.

^{***} p ≤ .001

^{**} $p \leq .01$

Table 36

T-Test of Pre and Post Sex Knowledge Measures for Facilitators

	N ¹	Mean Pre	SD	Mean Post	SD	t
Total Sex Knowledge	14	125.29	14.40	132.79	14.55	-4.69***
General Sex Knowledge	16	51.13	5.57	55.31	4.36	-3.24***
Body Parts	16	12.69	3.70	14.75	3.36	-3.21***
Physiology	15	24.07	5.38	25.80	7.96	-1.57
Broad Sex Knowledge	15	36.47	3.02	37.20	2.15	-1.24

¹Two students did not complete one or more parts of the
 sex knowledge section of the instrument.

^{***} p ≤ .001

for Non-Facilitators

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	N ¹	Mean Pre	SD	Mean Post	SD	t
Total Sex Knowledge	29	123.97	16.83	128.79	17.60	-2.75**
General Sex Knowledge	32	50.53	5.84	53.75	6.55	-3.04***
Body Parts	31	12.10	5.33	13.35	4.69	-2.14**
Physiology	29	23.69	6.66	24.45	7.09	-1.14
Broad Sex Knowledge	31	26.77	3.03	36.84	3.07	-0.17

Three students did not complete one or more parts of the sex knowledge section of the instrument.

The final exam which students took at the end of the course was correlated with the posttest total sex knowledge score using the Pearson Product Moment Correlation. This was done to observe how the final exam compared with a standardized sex knowledge measure. The Pearson Product Moment Correlation did indicate that there was a moderate positive relationship $(r=.42, p \le .001)$ between the two scores. For each of the sub-groups studied there was some evidence of a positive relationship, however, only two of the groups showed a significant relationship at the .05 level (see Table 38).

^{***} p < .001

^{**} p ≤ .01

Table 38

Pearson Correlation Between Posttest Total Sex Knowledge and Final Exam for Total Sample and Sub-Groups

		Posttest	Total Sex	Knowledge	
	Sample	Males	Females	Facili- tators	Non-Facili- tators
Final Exam	.42***	.53	.42**	.22	.57***
N	431	9	341	141	291

Five students did not complete one or more parts of the sex knowledge section of the instrument.

- *** p ≤ .001
- ** p < .01

Thus, it appears that the constructed final exam was a moderately valid measure of students' knowledge in sexuality. It is likely that the correlation between the two measures was moderate because of the emphasis on physical aspects of sexuality in the standardized test as compared with the developed final exam.

As a consequence of the results from the above correlation, the final exam was also used as a measure of total sex knowledge for the class. The Value Diffscore was then correlated with the measures of sex knowledge: the final exam, the pretest total sex knowledge score and the posttest total sex knowledge score. These correlations were performed using the Pearson Product Moment Correlation. The correlation between the Value Diffscore and the sex knowledge

measures exhibited an inverse low to moderate relationship for all groups except males, meaning that as students' clarification of their values increased, their sex knowledge decreased. While these correlations were significant for the total sample, females and non-facilitators, they are only moderate in magnitude. The size of the sub-group of males and facilitators may have had an effect on these findings (see Tables 39 and 40).

Table 39

Pearson Correlation Between Value Diffscore and Measures of Sex Knowledge for Total Sample, Males and Females

	Value Diffscore			
	Sample	Males	Females	
Pretest Sex				
Knowledge	30**	 05	36**	
$(n)^{1}$	(44)	(8)	(36)	
Posttest Sex				
Knowledge	37***	.02	44**	
$(n)^{1}$	(41)	(8)	(33)	
Final				
Exam	35***	.38	37**	
(n) ¹	(45)	(8)	(37)	

The difference in the number of respondents is due to five students who did not complete one or more sections of the sex knowledge portion of the instrument and three students who did not respond to one question each on the Sexual Values section of the instrument.

^{***} p 4 .001

^{**} p ≤ .01

While the correlation is not large or significant, it is interesting to note that for males the relationships between the Value Diffscore the posttest sex knowledge score and the final exam are positive rather than negative.

Table 40

Pearson Correlation Between Value Diffscore and Measures of Sex Knowledge for Total Sample, Facilitators and Non-Facilitators

	Value Diffscore				
	Sample	Facilitators	Non-Facilitators		
Pretest Sex					
Knowledge	30**	16	34*		
$(n)^{1}$	(44)	(15)	(29)		
Posttest Sex					
Knowledge	37***	20	41**		
(n) ¹	(41)	(13)	(28)		
Final					
Exam	35*	33	40**		
(n) ¹	(45)	(15)	(30)		

The difference in the number of respondents is due to five students who did not complete one or more sections of the sex knowledge portion of the instrument and three students who did not respond to one question each on the Sexual Values portion of the instrument.

^{***} p ≤ .001

^{**} p ≤ .01

^{*} p ≤ .05

In conclusion, the analysis of the data showed that there was a statistically significant increase from pre to post test in respect to sex knowledge (t=-4.40, p \leq .001, n=45) for the entire sample. A t-test for matched pairs was used to test for significant increases between pre and post test on the total sex knowledge score as well as the four sections measuring sex knowledge. Three of the four sections showed a significant increase from the beginning to the end of the course. On the basis of these results, the H₀₆ null hypothesis was rejected and the H₁₆ hypothesis was accepted.

CHAPTER IV

SUMMARY, CONCLUSIONS AND IMPLICATIONS OF THE RESEARCH

Summary

This research was conducted with a sample drawn from a population of ninety-one students from a human sexuality class on the Michigan State University campus. The class met once a week for two and one half hours during Spring Term 1981-82. The sample consisted of forty-eight students, sixteen of whom were chosen because of their role in the class, discussion group facilitator; the other thirty-two were chosen randomly without replacement by throwing a dice from the class' sixteen discussion:groups.

The data was collected through the administration of a pretest form of the instrument (Appendix A) on the first day of class. The posttest form of the instrument (Appendix A) was administered on the last day of class before the final examination date. The instrument was designed to measure values as they relate to sexuality and knowledge of sexuality. The final exam which was developed for the course was also used as a measure for knowledge of sexuality.

Supportive measures of students' clarification of their values were used. These measures were two course assignments,

(1) weekly issue reaction papers (Appendix B) and (2) Who I

Am Sexually II papers (Appendix B). Both measures were constructed to facilitate the students' clarification and understanding of their own values and valuing process of choosing, prizing and acting. These supportive measures were then examined in connection with the Sexual Values section of the instrument.

The objectives of this study were:

- To evaluate the effectiveness of utilizing a values clarification process for a college level sex education course.
- To develop an instrument for measuring values and students' clarification of values for sexuality.
- 3. To determine if there were any differences in clarification of values between males and females when exposed to the same educational materials.
- 4. To determine if students' role in the class, whether or not they were a group facilitator, affected the amount of clarification of values which the student experienced.
- 5. To evaluate whether or not the class facilitated the students' ease and willingness to discuss sexuality.
- 6. To examine whether students gained knowledge of sexuality from the class as well as a greater understanding of their values.

The objectives were analyzed statistically through the use of the Wilcoxon matched-pairs signed-ranks test, the Pearson Product Moment Correlation, cross-tabulations of the

data, a factor analysis, and the t-test for matched pairs.

A probability level of .05 was pre selected to determine statistical significance.

Conclusions

The results of this study indicated that when college students participated in a human sexuality class taught from a values clarification perspective they were able to clarify their values regarding sexuality. The theory and the literature state that sex education should be taught from a values clarification basis so that the students will gain more from the class than just added knowledge. Dealing with the social, psychological, and value dimensions of sexuality was advocated by Hoyman (1970) so that students may develop a clear understanding of their own sexuality. The present study supports what the theory has proposed.

Raths, Harmin, and Simon (1978) took the theory one step further. They indicated that if an individual was allowed to freely choose and prize his/her values, the results should be evident in his/her behavior. While this study does not test the theory that far, it was certainly hoped that whatever clarification and understanding the students experienced, they would carry that over into their actions regarding sexuality.

An instrument was developed for this study to measure individuals' values and clarification of those values as they relate to sexuality. The students' self-reported areas of

most gained understanding in the Who I Am Sexually II papers seemed to be supportive evidence that the Sexual Values section of the instrument was measuring students' values and their clarification of those values. With some added work, the Sexual Values section of the instrument does show promise of becoming a valid and reliable test.

As was expected, the study found no major differences between the abilities of males and females to clarify their values. Success in this process of understanding appears to be much more of an individual thing rather than something which is related to gender. On this point the research concurs with the study done by Dearth and Cassell (1976) in which they found little differentiation between males and females regarding sexual attitudes from the beginning to the end of a human sexuality course.

It was thought that facilitators would exhibit a greater understanding of their own values regarding sexuality than would those who were not facilitators because of the facilitators' added exposure to the values clarification process and to the instructors. The results of the research do not bear out this assumption. There appears to be little difference between facilitators and non-facilitators in regard to clarification of values. For the instructors, this indicated that the greater understanding and awareness which they have seen occurring in the facilitators had also been occurring in the rest of the students. If facilitators gained something from the class that other students did not,

perhaps it was something more related to the role of facilitator, such as: leadership skills, ability to listen, ability to facilitate discussion, or confidence in themselves. At this point, however, it appears that students gained from the course regardless of their role in the class.

The question testing willingness to discuss sexuality was worded such that it tested with whom students were willing to discuss sexuality. The research indicated that this does not change significantly from the beginning to the end of the course. The study, however, did not ask with how many people students were willing to discuss sexuality from the start of the course to its conclusion. Comments that the instructors have received indicate that this may be an area of willingness to discuss sexuality in which students do change during the course.

Even though students were not any more willing to talk about sexuality with a broader range of persons, students were, however, more at ease when discussing sexuality at the conclusion of the course than they were at the start. The discussion groups used in the class appear to have helped students become more comfortable discussing sexuality even though they may not be anymore willing to talk about sex with a broad range of persons.

It is hoped that the greater ease in discussing sexuality which the students experienced will carry over into the personal relationships of the students. Thus enabling them to talk about the sexual relationship which exists

between the student and his/her partner. One of the goals of the course was to increase the students' comfort and ease in discussing various aspects of sexuality, and it appears to have been met.

One interesting aspect of the results was that the correlation for facilitators between the Value Diffscore and willingness to discuss sexuality was a substantial positive correlation that was statistically significant. This held true for both the pre and post test measures, which may indicate that as a group, facilitators are more willing to discuss sexuality with a broader group of persons, particularly as it relates to one's values. This finding may be helpful in choosing facilitators for similar human sexuality programs. One may want to look for those students who appear more willing to discuss values and sexuality.

The research indicated that students also gained in general knowledge about sexuality. Such knowledge is certainly a primary goal of any sex education program and cannot be overlooked. The students in this study were able to gain in general knowledge of sexuality as well as that which deals with specific parts of the anatomy and the physiology of sexuality.

The data also showed that as a group, males increased the most in their level of knowledge of sexuality. The research indicated that at the beginning of the course males in this study knew less about sexuality than females, but by the course's conclusion males knew more than females. While

this data cannot be generalized to all males, it may be an indicator that the American stereotype of males knowing all there is to know about sexuality is incorrect.

When students' clarification of their values and their gained sex knowledge were correlated, a moderate inverse relationship resulted. This may indicate that too much concentration on one leads to a decrease in the other. may be a note of caution for those involved in teaching sex education. The present sample is not generalizable to all human sexuality courses, however, this finding may be something to watch for in other programs that seek to impart clarification of values as well as information about sexuality. When considering these results, it is also important to keep in mind the goals of any sex education program. the program is directed toward those who will one day be teaching factual information about sexuality, then an instructor may want to concentrate more on the information aspect of sexuality. If, however, the goals of the program are to facilitate students in clarifying their own values so that they can incorporate their learning into their lives, then the instructor may want to place more emphasis on the values clarification process. This point should be examined in regard to future human sexuality classes on the Michigan State University campus.

One point to note about the relationship between the values clarification process and knowledge of sexuality is that in this study both variables did exhibit a statistically

significant increase from the outset of the course to its conclusion. While there may be an inverse relationship between the two, it should be remembered that the relationship is moderate and that in this study human sexuality taught from a values clarification basis did appear to facilitate the students' gain of knowledge and understanding of their values and beliefs.

As a whole, the research tended to concur with the literature reviewed. For the sample in question, a values clarification approach to sex education did allow the students to gain more from the course than just added knowledge. The students did, however, gain knowledge of sexuality from the course as well. It appears as though the course could be interpreted as a positive learning experience for the students.

Limitations of the Present Study

The entire sample was limited in itself. Only one class served as the population, thus limiting the scope of the research. Had the sample been larger, including other classes and possibly universities, additional information may have been gained and generalizability increased. While other researchers and program instructors may gain ideas and insights from this study, the results can be generalized only to the course, Human Sexuality in the Family at Michigan State University.

One major limitation which has been mentioned throughout

the work is the very limited number of males in the study. The low number of males in the sample may have affected some of the research results. For instance, the Wilcoxon did not produce as many statistically significant items for males as it did for females. One possible explanation is that with the small number of males there was less likelihood that the sample contained males on the extremes: conservative or liberal. With such a sample there was less probability of variation or movement from pre to post test. The small number may just not have been large enough to have detected any major patterns in the data which would have affected the analysis. Another possible explanation is that the socialization of males in American society leads men to believe that there are specific ways sexuality should be treated, and that as men they know everything about sexuality and how to treat it. With this kind of pressure from society and peers it may be very difficult for men to re-examine their values regarding sexuality and show significant changes in a period of ten weeks.

The Sexual Values portion of the instrument was not a standardized test of values relating to sexuality. The questionnaire was in the beginning stages of development and such information should be considered along with the results. Developing a questionnaire which measures values and not attitudes is very demanding and must be given careful thought, consideration and time. While much thought and work has gone into the questionnaire to this point, still more is needed.

Suggestions for Future Research

A study with a larger total sample which would increase the generalizability would be beneficial to replicate the present study. Also a study similar to this research with more males should be done. The findings between males and females are tenuous and further study needs to be done with samples in which there are an equal number of males and females, if possible. Such studies would either substantiate or revise the findings of the present study.

Studies of the values clarification approach need to be enlarged to cover programs other than only those as the college level. Many public school districts are facing the question of how to teach sex education. Research studies which can show the results of what students gain from a values clarification approach to human sexuality may be of great benefit to school boards and parents. Research studies that could show hard data related to public schools may help to relieve some of the worries parents have about the linking of sex education and the values clarification process.

Facilitators reported informally that they felt they had gained more from the class by being a facilitator than if they had not been in that role. This study indicated that for facilitators the extra element which they sensed they took from the class was not added clarification of values. Other than self reports, there was no evidence of the something which facilitators gained from the class that other students did not gain. Research on the role of facilitator,

and the benefits which students receive from the role, would be helpful to determine what it is that is gained and if it is a real or perceived gain.

The Sexual Values section of the instrument is still being developed. Much work can be done to advance this pro-After carefully examining the factor analysis, some of the questions should be revised to measure more accurately the underlying value. The questions on both the pretest and posttest need to be tested to discover if they are measuring the same underlying value on both tests. Particular attention should be paid to the similarly worded questions to assure measurement of the same underlying value. This could probably best be done by placing all the questions on one The test should then be administered to a selected sample. With this accomplished, a factor analysis should be run to determine if the groups of questions are measuring the same single underlying value. If so, then the questions can again be divided into pretest and posttest forms with one identically worded and one similarly worded question per subject area for each test. At that point the evaluation process could be started again to assure the researcher that a valid and reliable instrument was being developed.

Human sexuality programs need to be evaluated. Instructors should not assume that because a course runs smoothly or it has worked for the past ten years that it is a worthwhile program that meets the needs of the students. If sex education with a values clarification approach is to be used

productively, existing programs must be continually evaluated and revised. And evaluation should be as in depth as possible, yielding statistical data that can be analyzed, substantiated, and able to be replicated by other researchers in other settings.

APPENDIX A

PRETEST

Sexual Values

Your own personal values and feelings are wanted here. Carefully avoid any inclination to respond to this survey in ways you believe someone else wants you to feel. This is not a test; there are no right or wrong answers.

Read each item and decide whether your own beliefs and values incline you to agree or disagree with what it says to you. Place your answers on this test.

- If you STRONGLY AGREE with what is said, circle the capitalized SA at the right of the item.
- If you are simply in AGREEMENT, circle the capital A.
- If you STRONGLY DISAGREE with the item, circle the capitalized SD.
- If you are simply in DISAGREEMENT, circle the capital D.
- If you are UNCERTAIN how you feel about the item, circle the capital U.

Work as rapidly as you can. First impressions are best. Remember, you are being asked to record your feelings toward the meaning of each item as you understand it.

1.	Abortion should be permitted whenever the female involved thinks it is the best decision.	SA	A	U -	D	SD
2.	Birth control may be considered as ranging from abstinance to chemical and mechanical methods. Assuming procreation is not the goal, the consistent use of birth control methods by a couple during intercourse is a necessary action.	SA	A	U	D	SD
3.	Self pleasure through the use of masturbation is a selfish act.	SA	A	U	D	SD ·
4.	Pornography or sexually explicit material should be available to any adult who wants to see it.	SA	A	U	D	SD
5.	Homosexual couples should be permitted to dance with each other at public dances as are heterosexual couples.	SA	A	U	D	SD
6.	The birth of a child is not complete unless both mother and father are active participants.	SA	A	U	D	SD
7.	Discussion of sexual matters should be kept to a minimum in the home so the child will not develop undue curiosity about sex.	SA	A	U	D	SD
8.	Sexual intercourse is acceptable only if the couple has a committed, loving, and stable relationship.	SA	A	U	D	SD ·
9.	Making fun of sexual behavior between elderly	SA	A	U	D	SD

persons is offensive to me.

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10.	Incest is wrong only because there are laws against it.	SA	A	U	D	SD
11.	The main issue in rape which is offensive to me is that a woman does not have the ultimate control over her own body.	SA	A	U	D	SD
12.	If I was married with a family and discovered I had contracted VD from a one night stand, I would seek medical attention for myself but say nothing to my spouse for fear of a divorce.	SA	A	U	D	SD
13.	A darkened room creates the best setting for satisfying sexual intercourse for me because I and my partner cannot see what is happening.	SA	A	U	D	SD
14.	I would enjoy discussion my sexual needs with my partner.	SA	A	U	D	SD
15.	Nudity in families helps children learn to accept the naturalness of the human body.	SA	A	U	D	SD
16.	Abortion does not consider the rights of the unborn child and therefore should not be permitted.	SA	A	U	D	SD
17.	Birth control ranges from abstinance to modern chemical and barrier methods. If one does not want to become pregnant, sexual intercourse for pleasure without the use of an effective birth control method is an irresponsible act.	SA	A	υ	D	SD
18.	Masturbation for individuals is an acceptable expression of sexuality.	SA	A	U	D	SD
19.	Printed material or pictures that might be labeled pronographic or sexually explicit should be <u>required</u> as one form of sexual instruction for <u>all</u> people.	SA	A	U	D	SD
20.	Homosexuality is not acceptable as a variation in sex outlet for adults.	SA	A	U	D	SD
21.	Birth is an event which the mother should experience on her own.	SA	A	U	D	SD
22.	Children should receive their primary sex education from their parents.	SA	A	U	D	SD
23.	Sexual intercourse is acceptable if the individuals are just casual friends or if it is their first date.	SA	A	U	D	SD
24.	The current trend to acknowledge the sexual rights of older persons in nursing homes should not be encouraged because such expression is offensive to other residents and staff members.	SA	A	Ü	D	SD
	2					

25.	A parent has the right to involve his/her child in any type of behavior including sexual caressing.	SA	A	U	D	SD
26.	Rape cannot occur in marriage because it is the duty of each person to satisfy their partner's sexual needs.	SA	A	U	D	SD
27.	If I discovered I had a venereal disease, I would tell my sexual partner(s) about the possibility of their having VD as well, even though it may mean the end of the relationship.	SA	A	U	D	SD
28.	For me, privacy with no danger of interruption is necessary for satisfying sexual interaction.	SA	A	U	D	SD
29.	Good sexual relationships are built and maintained through a lot of verbal and non-verbal communication between partners about their sexual expression.	SA	A	U	D	SD
30.	Nudity in a family is only acceptable when	SA	A	U	D	SD

For the following two questions, please choose the one response which best describes how you feel about the statement.

- 31. I am willing to discuss my personal feelings and behavior in regard to sexuality if there is a valid reason --
 - A. only with my sexual partner
 - B. with no one

sex is all about.

C. with intimate friends of the same sex

the children are young and do not know what

- D. in a classroom setting
- E. with intimate friends of either sex
- 32. Discussing my behavior, attitudes and beliefs on sexuality
 - A. is a somewhat gratifying experience in which I feel little uncomfortableness.
 - B. is very hard to do
 - C. is a neutral experience which poses little threat to me
 - D. is a very rewarding experience that is easy for me
 - E. makes me feel somewhat uncomfortable

General Sex Knowledge *

Each of the following statements can be answered either true or false. Please indicate your position on each statement using the following alternatives:

T. True F. False

Be sure to answer every question.

- 1. Pregnancy can occur during natural menopause (gradual cessation of menstruation).
- 2. Most religious and moral systems throughout the world condemn premarital intercourse.
- 3. Anxiety differentially affects the timing of orgasm in men and women.
- 4. A woman does not have the physiological capacity to have as intense an orgasm as a man.
- 5. There is no difference between men and women with regard to the age of maximal sex drive.
- 6. Social class is directly correlated with the frequency of incest.
- 7. The use of the conduct is the most reliable of the various contraceptive methods.
- 8. The incidence of extramatical intercourse is constant for males between the ages of 21 and 60.
- 9. Nearly half of all unwed girls in America have sexual intercourse by age 19.
- 10. There are two kinds of physiological orgastic responses in women, one clitoral and the other vaginal.
- 11. Impotence is almost always a psychogenic disorder.
- 12. Tranvestitism (a form of cross-dressing) is usually linked to homosexual behavior.
- 13. There was as much premarital coitus a generation ago as there is now.
- 14. Sexual attitudes of children are molded by erotic literature.
- 15. In some successful marriages sex adjustment can be very poor.
- 16. Homosexuals are more likely to be exceptionally creative than heterosexuals.
- A women who has had a hysterectomy (removal of the uterus) can experience orgasm during sexual intercourse.
- 18. Homosexuality or mes from learning and conditioning experiences.
- 19. In responsive women, non-coital stimulation tends to produce a more intensive physiological orgastic response than does coitus.
- 20. Those convicted of serious sex crimes ordinarily are those who began with minor sex offenses.

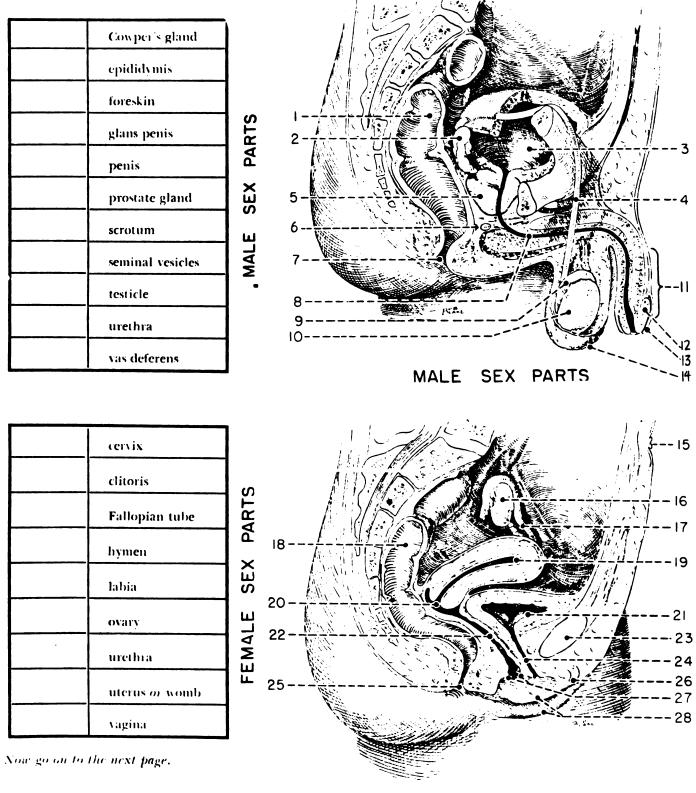
*Sex Knowledge and Attitude Test, Harold I. Lief and David M. Reed, University of Pennsylvania, 1972.

- 21. One of the immediate results of castration in the adult male is impotence.
- 22. The body build of most homosexuals lacks any distinguishing features.
- 23. Masturbation by a married person is a sign of poor marital sex adjustment.
- 24. Exhibitionists are latent homosexuals.
- 25. A woman's chances of conceiving are greatly enhanced if she has an orgasm.
- 26. Only a small minority of all married couples ever experience mouth-genital sex play.
- 27. Impotence is the most frequent cause of sterility.
- 28. Certain foods render the individual much more susceptible to sexual stimulation.
- 29. A high percentage of those who commit sexual offenses against children is made up of the children's friends and relatives.
- 30. A higher percentage of unmarried white teenage girls than unmarried black teenage girls in the United States have had intercourse with four or more partners.
- 31. The attitude of the average American male towards premarital intercourse is shaped more by his religious devoutness than by his social class.
- 32. In teaching their daughters female sex roles, middle-class mothers are more affected by cultural stereotypes than mothers in other social classes.
- 33. In most instances, the biological sex will override the sex assigned by the child's parents.
- 34. The onset of secondary impotence (impotence preceded by a period of potency) is often associated with the influence of alcohol.
- 35. Nursing a baby usually protects the mother from becoming pregnant.
- 36. In our culture some homosexual behavior is a normal part of growing up.
- 37. Direct contact between penis and clitoris is needed to produce female orgasm during intercourse.
- 38. For a period of time following orgasm, women are not able to respond to further sexual stimulation
- 39. In some legal jurisdictions artificial insemination by a donor may make a woman liable to suit for adultery.
- 40. Habitual sexual promiscuity is the consequence of an above-average sex drive.
- 41. Approximately one out of three adolescent boys has a homosexual experience leading to orgasm.
- 42. Impotence in men over 70 is nearly universal.
- 43. Certain conditions of mental and emotional instability are demonstrably caused by masturbation.
- 44. Women who have had several sex partners before marriage are more likely than others to be unfaithful after marriage.
- 45. The emotionally damaging consequences of a sexual offense against a child are more often attributable to the attitudes of the adults who deal with the child than to the experience itself.

- 46. Sexual maladjustment is the major cause of divorce.
- 47. Direct stimulation of the clitoris is essential to achieving orgasm in the woman.
- 48. Age affects the sexual behavior of men more than it does women.
- 49. The circumcized male has more trouble with ejaculatory control than the uncircumcized male.
- 50. More than a few people who are middle-aged or older practice masturbation.
- 51. Varied coital techniques are used most often by people in lower socioeconomic classes.
- 52. Individuals who commit rape have an unusually strong sex drive.
- 53. The rhythm method, (refraining from intercourse during the six to eight days midway between menstrual periods), when used properly is just as effective as the pill in preventing conception.
- 54. Exhibitionists are no more likely than others to commit sexual assaults.
- 55. The ability to conceive may be significantly delayed after the menarche (onset of menstruation).
- 56. Many women erroneously consider themselves to be frigid.
- 57. Menopause in a women is accompanied by a sharp and lasting reduction in sexual drive and interest.
- 58. The two most widely used forms of contraception around the world are the condom and withdrawal by the male (coitus interruptus).
- 59. People in lower socioeconomic classes have sexual intercourse more frequently than those of higher classes.
- 60. Pornographic materials are responsible for much of today's aberrant sexual behavior.
- 61. For some women, the arrival of menopause signals the beginning of a more active and satisfying sex life.
- 62. The sex drive of the male adolescent in our culture is stronger than that of female adolescent.
- 63. Lower-class couples are generally not interested in limiting the number of children they have.
- 64. Excessive sex play in childhood and adolescence interferes with later marital adjustment.
- 65. There is a trend toward more aggressive behavior by women throughout the world in courtship, sexual relations, and coitus itself.
- 66. Sometimes a child may have cooperated in or even provoked sexual molestation by an adult.
- 67. LSD usually stimulates the sex drive.
- 68. Seven out of ten parents desire formal sex education in the schools.
- 69. For every female that masturbates four males do.
- 70. Douching is an effective form of contraception.
- 71. Freshmen medical students know more about sex than other college graduates.

Body Parts **

DIRECTIONS: How well do you know the proper names for male and female sex parts? Given the proper name, you are to identify each part by its number. In the blank space by each name write its number from the drawing. Be sure to fill all spaces. If you do not know, guess. If you are guessing, place an X by your answer. If you want to know more, draw a circle around your answer. The term sex part is used here to mean either sex organ or sex structure. Each drawing shows one half of a human body which has been divided through the center from front to back. Place your answers directly on the booklet



Physiology **

DIRECTIONS: You may understand much about male and female sexual relations without knowing the scientific names for sex parts. Answer the questions below with numbers and/or names. You can select the numbers from the drawings. Use both numbers and names when you know both. If you do not know either, quess the number. If you are guessing, place an X by your answer. If you want to know more about a question, draw a circle around your answer. The term Sex Part is used here to mean either sex organ or sex structure. Each drawing on the opposit page shows one half of a human body which as been divided through the center from front to back.

	MALE SEX PARTS		Name	No.
1.	What covers and protects the male organs that produce male reproductive cells?	1.		
	Where are the male reproductive cells formed?	2.		
	Where do the newly formed reproductive cells first accumulate?	3.		
	Which male sex part penetrates the female during sex relations?	4.		
	During sexual arrousal:	5.		
Э.		а		
	a. What male sex part becomes larger, longer, and quite firm?	ь		
_	b. Which male sex part is most sensitive to touch? What sex part passes the male reproductive cells out of the body, but has no such			
O.		6.		
7	function in the female. At the height of male sexual excitement fluids are added to the male reproductive			
7.	cells by three sex parts. These three parts are:	••		
	cens by three sex parts. These three parts are.			
Ω	Which male part, when closed by disease, accident, or surgery, prevents the male			
Ο.	from causing a female to become pregnant.	8.		
۵	Which male sex part supplies the male bloodstream with products important to	0.		
3.	physical growth and health?	9.		
10	What male sex part is removed in castration?	10.		*
	Which is the male sex part that is partially removed in circumcision?	11.		
• • •	Time is the male sex part that is partially removed in circumstance.	• • •		
	FEMALE SEX PARTS.			
12.	Where are the female reproductive cells formed?	12.		
13.	Which female sex part first receives the mature female reproductive cell?	13.		
14.	What sex parts covers and protects the sex organs and structures of the female?	14.		
15.	During sexual excitement the two female sex parts that usually become moist are:	15.		
16.	During sexual arrousal:			
	a. What female sex part usually becomes larger and firmer?	6. a		
	b. Which female sex part is most sensitive to touch?	b		
17.	In sexual intercourse, which female sex part completely encloses the male sex			
	organ?	17.		
18.	Where does the male sex organ enter the female?	18.		
19	At what place inside the female does the male sex organ usually discharge male			
	reproductive cells?	19.		
20.	Where does a male reproductive cell meet with, and unite with the female repro-			
	ductive cell?	20.		
21.	Where do the united male and female reproductive cells go to continue growth			
	before the baby is born?	21.		
22.	The first two female sex parts that a baby passes through in being born are:	22.		
23 .	Where does a baby come out of its mother's body?	23.		
24.	Which female sex part, when closed by disease, accident, or surgery, prevents the			
	female from becoming pregnant?	24.		
25 .	What female sex part supplies the female bloodstream with products important to			
	physical growth and health?	25.		
	The menstrual flow comes from what female sex part?	26.		
27 .	The first two female sex parts that the menstrual flow passes through on its way	27.		
00	out of the body are?			
28.	Where does the menstrual flow leave the female's body?	28.		
	In douching, where is the nozzel of the syringe placed?	29.		
JU.	What sex part withdraws into the female body at the height of sexual excitement?	30		

Broad Sex Knowledge **

DIRECTIONS: In the blank space beside each definition below, write the number of the word that *best fits* the definition. Be sure to fill all spaces in both columns. If you do not know, guess. If you are guessing, place an X by your answer. If you want to know more about the meaning of a word, draw a cicle around your answer.

			H			
 caesarean banian conception douche 	5. labor6. menstruation7. menopause8. pregnancy	9. puberty 10. senility 11. semen 12. sterilization		25. adultery 26. fornication 27. frigidity 28. genitals	29. gonads 30. hirsute 31. impotence 32. masturbation	33. mistress 34. rape 35. travesty 36. vulva
become able to have Flushing the vagma The birth of a baby operation. Fluid containing mathematical The shedding of a last A surgical operation coming a parent. That time when a way haldren. The joining of a mathematical The physical effor	e children. I with a liquid. I through the abdo- ale sex cells. Immg of blood cells I which prevents a Soman is fosing her hale and a female co- ts of giving birth to woman from the t	s by the womb, person from be- ability to have		Low degree of sex Male and female se Sex relations of an female. Sex relations force Sex relations of an than husband or within husband or within husband or within husband of the stimulation of Lack of ability to especially in men. The reproductives A woman who usu to whom she is no	ex parts. I unmarried male was dupon another, married person write. I parts of the femiliary one's sex organs, perform normal second glands of male fally limits her sex	th someone other ale sex organs.
13, climax 14, coccyx 15, copulation 16, collus	17, ejaculation 18, erection 19, tervent 20, intercourse	21. orgasm 22. ovulation 23. ovum 24. sperm		37. abortion 38. gonorrhea 39. homosexual 40. incest	41. infamy 42. miscarriage 43. prophylactic 44. promiscuity	
Write two number The reproductive comments of the second control o	of sexual excitements) ells of the male. ers) by the male at the	nt in male or female		A disease of the bl through the sex or The birth of a bab. A disease of the in A blood test for a Natural or intenti- it can live. Sex relations with A woman who off A person who has same sex. A device or chemic venereal desase thr	gans. y before it can live side lining of male venereal diesase, onally caused birth a close relative, ers to have sex rel- sex relations with	or female sex organs, tof a baby before attons for pay, a member of the ne from catching a

**Sex Knowledge Inventory-Form Y, Gelolo McHugh, Saluda, NC: Family Life Publications, Inc., 1977.

Demographic Information

1.	Your Age
2.	Sex
3.	Year level in school
4.	Check one of the items below which best describes your level of commitment to a relationship at this time:
	MarriedCommittedNot committed at present
	EngagedDivorced/SeparatedNever been committed
5.	If you are married, how long have you been married?
6.	Check one of the items below which best describes your religious training:
	Catholic Protestant Jewish
	None Other
7.	Are you a parent? Yes No
8.	Are your beliefs conservative (in favor of traditional standards)? Circle one response.
	A. Not at All B. Somewhat C. Definitely D. Very Definitely
9.	Are your beliefs influenced by religion?
	A. Not at All B. Somewhat C. Definitely D. Very Definitely
10.	Are your beliefs in conflict with your parents' beliefs?
	A. Not at All B. Somewhat C. Definitely D. Very Definitely E. In conflict with one but not the other
11.	Answer only if you chose response E for number 10. Are your beliefs in conflict with:
	A. Your mother, but not your father B. Your father, but not your mother

POSTTEST

Sexual Values

Your own personal values and feelings are wanted here. Carefully avoid any inclination to respond to this survey in ways you believe someone else wants you to feel. This is not a test; there are no right or wrong answers.

Read each item and decide whether your own beliefs and values incline you to agree or disagree with what it says to you. Place your answers on this test.

- If you STRONGLY AGREE with what is said, circle the capitalized SA at the right of the item.
- If you are simply in AGREEMENT, circle the capital A.
- If you STRONGLY DISAGREE with the item, circle the capitalized SD.
- If you are simply in DISAGREEMENT, circle the capital D.
- If you are UNCERTAIN how you feel about the item, circle the capital U.

Work as rapidly as you can. First impressions are best. Remember, you are being asked to record <u>your</u> feelings toward the meaning of each item as <u>you</u> understand it.

1.	Abortion should be permitted whenever the female involved thinks it is the best decision.	SA	A	U	D	SD
2.	Birth control may be considered as ranging from abstinance to chemical and mechanical methods. Assuming procreation is not the goal, the consistent use of birth control methods by a couple during intercourse is a necessary action.	SA	A	U	D	SD
3.	Masturbation for individuals is an acceptable expression of sexuality.	SA	A	U	D	SD
4.	Printed material or pictures that might be labeled pornographic or sexually explicit should be required as one form of sexual instruction for all people.	SA	A	U	D	SD
5.	Homosexual behavior is acceptable between consenting adults.	SA	A	U	D	SD
6.	Fathers should actively participate in the birth of their children whenever possible.	SA	A	U	D	SD
7.	Discussion of sexual matters should be kept to a minimum in the home so the child will not develop undue curiosity about sex.	SA	A	U	D	SD
8.	Sexual intercourse is acceptable only if the couple has a committed, loving, and stable	SA	A	U	D	SD

relationship.

9.	The current trend to acknowledge the sexual	SA	A	U	D	CD
·	rights of older persons in nursing homes should not be encouraged because such expression is offensive to other residents and staff members.			Č	D	SD
10.	A parent has the right to involve his/her child in any type of behavior including sexual caressing.	SA	A	U	D	SD
11.	If I discovered I had VD I would seek medical attention for myself and not tell my partner for fear of losing the relationship.	SA	A	U	D	SD
12.	The main issue in rape which is offensive to me is that a woman does not have the ultimate control over her own body.	SA	A	U	D	SD
13.	I would like to experience sexual intercourse in a romantically lit room so that my partner and I could see our interaction.	SA	A	U	D	SD
14.	Good sexual relationships are built and maintained through a lot of verbal and non-verbal communication between partners about their sexual expression.	SA	A	U	D	SD
15.	Nudity in families helps children learn to accept the naturalness of the human body.	SA	A	U	D	SD
16.	Abortion should be permitted whenever the responsible male involved thinks it is the best decision.	SA	A	U	D	SD
17.	Birth control ranges from abstinance to chemical and barrier methods. Individuals who do not want children should use birth control when engaging in sexual intercourse.	SA	Α	U	D	SD
18.	Masturbation for a married person is acceptable.	SA	A	Ü	D	SD
19.	Pornography or sexually explicit material has no worth whatsoever and should not be available to the public.	SA	A	U	D	SD
20.	Homosexual couples should be permitted to dance with each other at public dances as are heterosexual couples.	SA	A	U	D	SD
21.	The birth of a child is not complete unless both mother and father are active participants.	SA	A	U	D	SD
22.	The home is the best place for a child to recieve their sex education.	SA	A	U	D	SD
23.	Sexual intercourse is best when enjoyed for its own sake rather than for the purpose of expressing love.	SA	A	U	D	SD

24.	Jokes about the absurdity of sexual expression of older adults are acceptable to me.	SA	A	Ū	D	SD
25.	If I was married with a family and discovered I had contracted VD from a one night stand, I would seek medical attention for myself but say nothing to my spouse for fear of a divorce.	SA	A	ŭ	D	SD
26.	Parent-child incest is a violation of a child's rights and privacy.	SA	A	U	D	SD
27.	When I refer to someone as "my woman" ("my man") that means that I have the right to sexual interaction with them.	SA	A	U	D	SD
28.	For me, privacy with no danger of interruption is necessary for satisfying sexual interaction.	SA	A	U	D	SD
29.	I would feel uncomfortable talking with my partner about our individual sexual needs.	SA	A	U	D	SD
30.	It is better if family members do not expose	SA	A	U	D	SD

For the following three questions, please choose the one response which best describes how you feel about the statement.

- 31. I am willing to discuss my personal feelings and behavior in regard to sexuality if there is a valid reason --
 - A. only with my sexual partner

their boides to one another.

- B. with no one
- C. with intimate friends of the same sex
- D. in a classroom setting
- E. with intimate friends of either sex
- 32. Discussing my behavior, attitudes and beliefs on sexuality
 - A. is a somewhat gratifying experience in which I feel little uncomfortableness
 - B. is very hard to do
 - C. is a neutral experience which poses little threat to me
 - D. is a very rewarding experience that is easy for me
 - E. makes me feel somewhat uncomfortable
- 33. Overall for me, this class has been
 - A. a class in which I gained an understanding of my attitudes and values about sexuality
 - B. a fun experience but I didn't get much out of it
 - C. a class in which I learned a fair amount of factual material about human sexuality
 - D. a class in which I gained an understanding of my attitudes and values about sexuality as well as learning factual material on human sexuality.
 - E. a waste of time

General Sex Knowledge *

Each of the following statements can be answered either true or false. Please indicate your position on each statement using the following alternatives:

T. True F. False

Be sure to answer every question.

- 1. Pregnancy can occur during natural menopause (gradual cessation of menstruation).
- 2. Most religious and moral systems throughout the world condemn premarital intercourse.
- 3. Anxiety differentially affects the timing of orgasm in men and women.
- 4. A woman does not have the physiological capacity to have as intense an orgasm as a man.
- 5. There is no difference between men and women with regard to the age of maximal sex drive.
- 6. Social class is directly correlated with the frequency of incest.
- 7. The use of the condom is the most reliable of the various contraceptive methods.
- 8. The incidence of extramarital intercourse is constant for males between the ages of 21 and 60.
- 9. Nearly half of all unwed girls in America have sexual intercourse by age 19.
- 10. There are two kinds of physiological orgastic responses in women, one clitoral and the other vaginal.
- 11. Impotence is almost always a psychogenic disorder.
- 12. Tranvestitism (a form of cross-dressing) is usually linked to homosexual behavior.
- 13. There was as much premarital coitus a generation ago as there is now.
- 14. Sexual attitudes of children are molded by erotic literature.
- 15. In some successful marriages sex adjustment can be very poor.
- 16. Homosexuals are more likely to be exceptionally creative than heterosexuals.
- 17. A women who has had a hysterectomy (removal of the uterus) can experience orgasm during sexual intercourse.
- 18. Homosexuality comes from learning and conditioning experiences.
- 19. In responsive women, non-coital stimulation tends to produce a more intensive physiological orgastic response than does coitus.
- 20. Those convicted of serious sex crimes ordinarily are those who began with minor sex offenses.

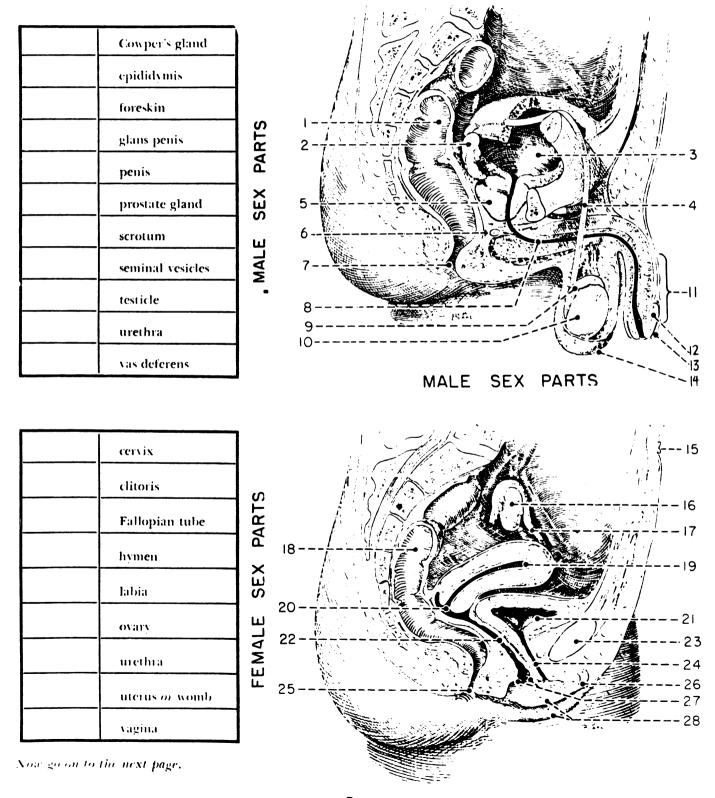
*Sex Knowledge and Attitude Test, Harold I. Lief and David M. Reed, University of Pennsylvania, 1972.

- 21. One of the immediate results of castration in the adult male is impotence.
- 22. The body build of most homosexuals lacks any distinguishing features.
- 23. Masturbation by a married person is a sign of poor marital sex adjustment.
- 24. Exhibitionists are latent homosexuals.
- 25. A woman's chances of conceiving are greatly enhanced if she has an orgasm.
- 26. Only a small minority of all married couples ever experience mouth-genital sex play.
- 27. Impotence is the most frequent cause of sterility.
- 28. Certain foods render the individual much more susceptible to sexual stimulation.
- 29. A high percentage of those who commit sexual offenses against children is made up of the children's friends and relatives.
- 30. A higher percentage of unmarried white teenage girls than unmarried black teenage girls in the United States have had intercourse with four or more partners.
- 31. The attitude of the average American male towards premarital intercourse is shaped more by his religious devoutness than by his social class.
- 32. In teaching their daughters female sex roles, middle-class mothers are more affected by cultural stereotypes than mothers in other social classes.
- 33. In most instances, the biological sex will override the sex assigned by the child's parents.
- 34. The onset of secondary impotence (impotence preceded by a period of potency) is often associated with the influence of alcohol.
- 35. Nursing a baby usually protects the mother from becoming pregnant.
- 36. In our culture some homosexual behavior is a normal part of growing up.
- 37. Direct contact between penis and clitoris is needed to produce female orgasm during intercourse.
- 38. For a period of time following orgasm, women are not able to respond to further sexual stimulation
- 39. In some legal jurisdictions artificial insemination by a donor may make a woman liable to suit for adultery.
- 40. Habitual sexual promiscuity is the consequence of an above average sex drive.
- 41. Approximately one out of three adolescent boys has a homosexual experience leading to orgasm.
- 42. Impotence in men over 70 is nearly universal.
- 43. Certain conditions of mental and emotional instability are demonstrably caused by masturbation.
- 44. Women who have had several sex partners before marriage are more likely than others to be unfaithful after marriage.
- 45. The emotionally damaging consequences of a sexual offense against a child are more often attributable to the attributes of the adults who deal with the child than to the experience itself.

- 46. Sexual maladjustment is the major cause of divorce.
- 47. Direct stimulation of the clitoris is essential to achieving orgasm in the woman.
- 48. Age affects the sexual behavior of men more than it does women.
- 49. The circumcized male has more trouble with ejaculatory control than the uncircumcized male.
- 50. More than a few people who are middle-aged or older practice masturbation.
- 51. Varied coital techniques are used most often by people in lower socioeconomic classes.
- 52. Individuals who commit rape have an unusually strong sex drive.
- 53. The rhythm method, (refraining from intercourse during the six to eight days midway between menstrual periods), when used properly is just as effective as the pill in preventing conception.
- 54. Exhibitionists are no more likely than others to commit sexual assaults.
- 55. The ability to conceive may be significantly delayed after the menarche (onset of menstruation).
- 56. Many women erroneously consider themselves to be frigid.
- 57. Menopause in a women is accompanied by a sharp and lasting reduction in sexual drive and interest.
- 58. The two most widely used forms of contraception around the world are the condom and withdrawal by the male (coitus interruptus).
- 59. People in lower socioeconomic classes have sexual intercourse more frequently than those of higher classes.
- 60. Pornographic materials are responsible for much of today's aberrant sexual behavior.
- 61. For some women, the arrival of menopause signals the beginning of a more active and satisfying sex life.
- 62. The sex drive of the male adolescent in our culture is stronger than that of female adolescent.
- 63. Lower-class couples are generally not interested in limiting the number of children they have.
- 64. Excessive sex play in childhood and adolescence interferes with later marital adjustment.
- 65. There is a trend toward more aggressive behavior by women throughout the world in courtship, sexual relations, and coitus itself.
- 66. Sometimes a child may have cooperated in or even provoked sexual molestation by an adult.
- 67. LSD usually stimulates the sex drive.
- 68. Seven out of ten parents desire formal sex education in the schools.
- 69. For every female that masturbates four males do.
- 70. Douching is an effective form of contraception.
- 71. Freshmen medical students know more about sex than other college graduates.

Body Parts **

DIRECTIONS: How well do you know the proper names for male and female sex parts? Given the proper name, you are to identify each part by its number. In the blank space by each name write its number from the drawing. Be sure to fill all spaces. If you do not know, guess. If you are guessing, place an X by your answer. If you want to know more, draw a circle around your answer. The term sex part is used here to mean either sex organ or sex structure. Each drawing shows one half of a human body which has been divided through the center from front to back. Place your answers directly on the booklet



Physiology **

DIRECTIONS: You may understand much about male and female sexual relations without knowing the scientific names for sex parts. Answer the questions below with numbers and/or names. You can select the numbers from the drawings. Use both numbers and names when you know both. If you do not know either, quess the number. If you are guessing, place an X by your answer. If you want to know more about a question, draw a circle around your answer. The term Sex Part is used here to mean either sex organ or sex structure. Each drawing on the opposit page shows one half of a human body which as been divided through the center from front to back.

	MALE SEX PARTS		Name	No.
1	What covers and protects the male organs that produce male reproductive cells?	1.		
	Where are the male reproductive cells formed?	2.		
	Where do the newly formed reproductive cells first accumulate?	3.		
	Which male sex part penetrates the female during sex relations?	4.		
	During sexual arrousal:	5.		
J .	a. What male sex part becomes larger, longer, and quite firm?	a		
	b. Which male sex part is most sensitive to touch?	b		
6	What sex part passes the male reproductive cells out of the body, but has no such			
Ο.	function in the female.	6.		
7	At the height of male sexual excitement fluids are added to the male reproductive			
•	cells by three sex parts. These three parts are:	•		
	cens by times sex partar times times parts are.			
Я	Which male part, when closed by disease, accident, or surgery, prevents the male			
0.	from causing a female to become pregnant.	8.		
9	Which male sex part supplies the male bloodstream with products important to	0.		
٥.	physical growth and health?	9.		
10.	What male sex part is removed in castration?	10.		
	Which is the male sex part that is partially removed in circumcision?	11.		
	· · · · · · · · · · · · · · · · · · ·	• • •		
	FEMALE SEX PARTS			
12.	Where are the female reproductive cells formed?	12.		
	Which female sex part first receives the mature female reproductive cell?	13.		
	What sex parts covers and protects the sex organs and structures of the female?	14.		
	During sexual excitement the two female sex parts that usually become moist are:	15.		
16.	During sexual arrousal:			
	a. What female sex part usually becomes larger and firmer?	6. a		
	b. Which female sex part is most sensitive to touch?	b		
17.	In sexual intercourse, which female sex part completely encloses the male sex			
	organ?	17.		
18.	Where does the male sex organ enter the female?	18.		
19	At what place inside the female does the male sex organ usually discharge male			
	reproductive cells?	19.		
20.	Where does a male reproductive cell meet with, and unite with the female repro-			
	ductive cell?	20.		
21.	Where do the united male and female reproductive cells go to continue growth			
	before the baby is born?	21.		
22.	The first two female sex parts that a baby passes through in being born are:	22.		
23 .	Where does a baby come out of its mother's body?	23 .		
24.	Which female sex part, when closed by disease, accident, or surgery, prevents the			
	female from becoming pregnant?	24.	•	
25 .	What female sex part supplies the female bloodstream with products important to			
	physical growth and health?	25.		
	The menstrual flow comes from what female sex part?	26.		
27.	The first two female sex parts that the menstrual flow passes through on its way	27.		
^~	out of the body are?			
28. ~	Where does the menstrual flow leave the female's body?	28.		
Z8.	In douching, where is the nozzel of the syringe placed?	29.		
3 0.	What sex part withdraws into the female body at the height of sexual excitement?	30 .		

Broad Sex Knowledge **

DIRECTIONS: In the blank space beside each definition below, write the number of the word that *best fits* the definition. Be sure to fill all spaces in both columns. If you do not know, guess. If you are guessing, place an X by your answer. If you want to know more about the meaning of a word, draw a cicle around your answer.

	caesarean banian conception douche The stage of physic become able to have		9. puberty 10. senility 11. semen 12. sterilization hich boys and girls	1	25. adultery 26. fornication 27. frigidity 28. genitals	29. gonads 30. hirsute 31. impotence 32. masturbation desire—especially		
	Flushing the vagma			1	fale and female se			
	The birth of a baby operation.	through the abdor	nen by a surgical		ex relations of an emale.	unmarried male w	ith an unmarried	
	Fluid containing m.	ale sex cells.		11	ex relations force	•		
	The shedding of a li A surgical operation	-	·-		ex relations of a r han husband or w	n <mark>arried p</mark> erson wit ile.	h someone other	
	coming a parent.	ii wiikii jacvenis s	person from de-	т	he outside, visible	e parts of the fema	le sex organis.	
	That time when a v	coman is tosing her	ability to have	s	elf-stimulation of	one's sex organs.		
	children. The joining of a m	rale and a female co	·II		ack of ability to p specially in men	perform normal se	x relations	
	The physical effort			11		ex glands of males	& females	
_		woman from the ti	ine her baby begins	A woman who usually limits her sex relations to one man to whom she is not married.				
	13. climax 14. coccyx 15. copulation 16. cottus	17. ejaculation 18. erection 19. tervent 20. intercourse	21. orgasm 22. ovulation 23. ovum 24. sperm		37. abortion 38. gonorrhea 39. homosexual 40. incest	41. infamy 42. miscarriage 43. prophylactic 44. promiscuity		
	The separation of t	he female egg from	the gland where	ı	hrough the sex or	ood which usually gans. y before it can live	·	
	it forms.			16		<u>-</u>	or female sex organs.	
_	The highest point of the highest two numbers		it in male or female		blood test for a	venereal diesase.		
_	The reproductive co	ells of the male.			Satural or intention to the same of the sa	onally caused birth	of a baby before	
	Sex relations.			s	ex relations with	a close relative		
_	(Write three number	ers)		li .		ers to have sex rela	• •	
	Discharge of fluid to	by the male at the l	nighest point of sex-	s	ame sex.	sex relations with		
	The enlarged and fi		e male sex organ	· •	encreal desase thr	ral used to keep or ough sex contacts.	•	
	The reproductive co				iex activities with eriod.	more than one per	rson during the same	

Demographic Information

1.	Your Age
2.	Sex
3.	Year level in school
4.	Check one of the items below which best describes your level of commitment to a relationship at this time:
	MarriedCommittedNot committed at present
	EngagedDivorced/SeparatedNever been committed
5.	If you are married, how long have you been married?
6.	Check one of the items below which best describes your religious training:
	Catholic Protestant Jewish
	None Other
7.	Are you a parent? Yes No
8.	Are your beliefs conservative (in favor of traditional standards)? Circle one response.
	A. Not at All B. Somewhat C. Definitely D. Very Definitely
9.	Are your beliefs influenced by religion?
	A. Not at All B. Somewhat C. Definitely D. Very Definitely
10.	Are your beliefs in conflict with your parents' beliefs?
	A. Not at All B. Somewhat C. Definitely D. Very Definitely E. In conflict with one but not the other
11.	Answer only if you chose response E for number 10. Are your beliefs in conflict with:
	A. Your mother, but not your father B. Your father, but not your mother

APPENDIX B

WEEKLY REACTION TOPICS

Birth Experience

- A. Following your reading on the available options for childbirth, describe how you (and your partner) would prefer to experience childbirth.
- B. Discuss why these considerations are important for you (and your partner).

Psychosocial Development

- A. Draw a picture of yourself as you recall you looked in your early teens. (You may use colors, pastels, etc.) Discuss how you felt about your body at that time. Include some of your reactions to the physical developments and changes that took place.
- B. Discuss some of the reactions "significant others" (peers, parents, siblings, friends, etc.) had to your growth and physical changes. How did that influence your self image?

Sex Education in the Home

- A. From your readings, personal experience, and learnings, develop a list of "Suggestions for Parents" for providing an education for human sexuality for their children.
- B. Compare your suggestion list to how you received your education for human sexuality at home. What impact did these teachings have on your present day attitudes about your sexuality?

Contraception and Values

- A. In a relationship who is responsible for contraception? Discuss why you feel this way.
- B. What type of contraceptive method would you and/or your partner most prefer? Discuss why you would select this method and what values are the basis of your decision.

Abortion

- A. From your readings in class and in other readings, outline both sides of the issue of abortion (you will not necessarily agree with all the points you list).
- B. How do you personally feel about the abortion issue? From where do these attitudes and feelings develop? What values do you think underlie your position on this issue?

Homosexuality

(Before reading the chapters assigned)

- A. Discuss how you feel about homosexuality.
- B. How did you acquire these attitudes and feelings?

Marital Rape

In some marital relationships, individuals are pressured physically and/or psychologically into having sexual intercourse when they would prefer not to.

- A. What values and teachings are present in our society which are conducive to this happening?
- B. How do you personally feel about this issue and what values have you been taught about interpersonal relations that influence your feelings?

Sexuality in Middle and Later Years

Let's suppose you are married and have a family. Your widowed parent is living with you. Your parent has met someone they are sexually attracted to. One morning you notice that your parent's friend has slept overnight with your parent.

- A. How would you react to this situation?
- B. What feelings and values underlie your reaction?

Love and Intimacy

A. Define love, intimacy, and sex. In what ways are these concepts the same and/or different from each

- other? Give examples of behaviors which illustrate these concepts.
- B. What teachings and/or values are the basis for your definitions?

CRITERIA FOR WEEKLY REACTION PAPERS

- 5 pts. Must contain I messages of how you think and feel, compare your present attitudes with ones you used to hold, plus specific examples from your own life which relate to the points being made. This should be approximately one page, typed, single spaced.
- 4 pts. Compare what you think and feel now to how you used to think and feel using I messages. Make sure you do not get how you think mixed up with how you feel. Some examples of feeling words are: angry, mad, happy, frustrated, confused, relieved, uncertain, elated, etc.
- 3 pts. State how you think and feel at the present by using I statements.
- 1 pt. Very brief, impersonal, and incomplete.

 $\underline{\text{NO}}$ rewrites will be accepted after the April 29, 1982 assignment.

WHO I AM SEXUALLY II

Biological Foundations
Birth Process
Teenage Sexuality
Abortion
Marital Sexual Expression
Intimacy
Values Clarification
Incest
Sexual Response
Psychosexual Development
Homosexuality
Sexual Dysfunction
Atypical Sexual Behavior

Contraception
Rape
Communication
Sexuality in the Middle Years
Education for Human Sexuality
Handicapper Sexuality
Sexually Transmitted Diseases
Pornography
Sexuality in the Later Years
Cohabitation
Awareness of Others
Ease of Discussing Sexuality

Divide your paper into two columns, one for "Knowledge" and one for "Understanding of Why You Believe as You Do." Choose four topics from the list above for which you feel you have gained new insight as to your beliefs and values.

Incorporate in your answer on <u>each</u> of the four topics, in what ways are your attitudes and/or feelings similar and/or different from when you came into the class. Place the attitude/content part of this question under the "Knowledge" column. Write the feelings/values part of your answer under column tow, "Understanding of Why You Believe as You Do."

This paper should be single spaced and be about two pages typed. You may use your paper lengthwise if you like.

Example

Knowledge/Content

Understanding of Why You Believe as You Do (feelings and values)

Contraception

I now know that using condoms and foam together is an effective means of birth control. They are almost as effective as the pill when used properly and consistently together. I had always thought that neither one was a very good method and had never considered using them together. It's good to know what their effectiveness is separately and together.

I have wanted the protection of the pill but felt uneasy about using it. I now realize that part of my uneasyness comes from my parents' views on medication. They always told us that drugs should be used sparingly and with care. By using condoms and foam together it will give me the feeling of security from pregnancy that I have always wanted. Also, this decision fits much better with my values on medications and altering my body's system. Another aspect of this method that I like is it enables my partner and I to really share the responsibility of contraception. From the

Knowledge/Content

Understanding of Why You Believe as You Do

example of my parents' relationship and the relationship of my brother and sister-in-law I have seen relationships as partnerships in which two people share the responsibility for the relationship. Things have been worked out together, not with one person taking total responsibility. It makes me feel good to know that my partner and I can share the responsibility of contraception in this way and to know that he too is in favor of condoms and foam.

APPENDIX C

INFORMATION SHEET HUMAN SEXUALITY

MAJOR		Check if you want to be a group leader				
CLASS TIME			be a grou	ip reader		
NAME						
ADDRESS			PHONE			
YEAR IN SCHOOL			AGE			
Where would you plac- views and attitudes?		n the continu	ums below in te	rms of your own		
1	2	3	4	5		
Traditional/ Conservative				Liberal		
1	2	3	4	5		
Dominant				Submissive		
Check one of the iter to a relationship.	ms below whic	ch best descr	ibes your level	of commitment		
Married		itted		t committed at presen	nt	
Engaged	Divo	rced/Separated	Ne	ver been committed		
List below persons in	n the class v	with whom you	are acquainted	•		
Do you have a handic	ap we should	be aware of?				
Why are you taking the	his course?					
What do you want from	m the course?	? (Include s	pecial topics)			
Did you have a sex ed	ducation com	rea(s) hafama	collogo? If a	o hriofly		
describe it.	addacton cour	rae(a) Delore	correge: If S	o, biletty		

Information Sheet Continued

If you wish to be a group leader/facilitator please explain why and what experience you have in leading groups.

Mark $\underline{\text{any hours and days}}$ you could meet with the Instructor for a one hour group leaders meeting.

	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5
Monday								
Tuesday								
Wednesday								
Thursday								
Friday								

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