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EXTENT OF SEXUAL KNOWLEDGE, ACCUMULATION OF SEXUAL INFORMATION,  
AND SEX EDUCATION ATTITUDES OF UNDERGRADUATE STUDENTS AT  
APPALACHIAN STATE UNIVERSITY

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the Faculty of the Department of  
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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts

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by

Ronald Harper Clitherow

August, 1971

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Title: EXTENT OF SEXUAL KNOWLEDGE, ACCUMULATION OF SEXUAL INFORMATION,  
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APPALACHIAN STATE UNIVERSITY

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Date: August, 1971

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Abstract:

The purpose of this study was to determine the (1) extent of sexual knowledge, (2) methods of collecting sexual information, and (3) attitudes toward sex education of randomly selected undergraduate students at Appalachian State University. Additionally, students' attitudes regarding an expanded sex education curricula at this institution were investigated. The participants were divided into eight strata determined by sex and academic class status (freshman, sophomore, junior, senior).

The 226 subjects participating in the study were administered a five part questionnaire designed to collect information regarding their (1) personal history, (2) previous sex education, (3) present sexual knowledge, (4) attitudes toward youths' obtainment of sex education, and (5) attitudes toward an expanded sex education curricula at Appalachian State University. Data were collected in the form of checklists (percentages) and rating scale mean intensities based on the Likert technique of scale construction. The sex knowledge inventory employed in this investigation was previously administered in a pilot experiment which consisted of thirty undergraduate students and the inventory had a coefficient of reliability of .94 as measured by the test, re-test method.

Over ninety percent of the subjects reported receiving no sex education in the home prior to seven years of age. Less than one half

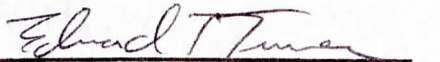


of the females and one third of the males obtained sex education at home after fifteen years of age. The school was not frequently cited as a source of sex education prior to the seventh grade; however, the school was cited more frequently than the home as a source of sex education after puberty. Sex education received in the home and school was reported more frequently among the females than the males. The church provided sex education for less than thirty percent of the subjects. Peer group discussions, the mass media, and collecting information by oneself were cited by all strata as prevalent sources of sex education.

As measured by the sex knowledge inventory employed in this investigation, there was no substantial difference between the mean scores obtained by the male and female subjects. Positive coefficients of correlation were determined between higher test scores and (1) higher chronological age and (2) higher academic class status. The subjects did not possess adequate sexual knowledge and could not realistically evaluate the extent of their present sexual knowledge.

Over ninety percent of the subjects believed that parents and teachers should be the individuals primarily responsible for providing youth with sex education. Over eighty percent of the subjects reported that they believed that there was both a present need and desire for an expanded sex education curricula at Appalachian State University. The subjects were overwhelmingly supportive of teacher education preparation in sex education.

Abstract Approved by:



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Dr. Edward T. Turner  
Chairman, Thesis Committee



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Obviously, the actual administration of the information questionnaire which was employed in the investigation could not have been conducted by myself. I sincerely appreciate the administrative and proctorial assistance of A.F., E.W., E.F., and M.P., who modestly asked that their names not be mentioned.

I am gratefully indebted to the personal interest and scholarly critique of Dr. Edward T. Turner whose assistance from the onset of this study has been invaluable and most appreciated.

Lastly, my deepest appreciation is reserved for my wife, Pamela, whose unrelenting patience and affection throughout the last two years has been beyond my highest expectations.

"I lose my respect  
for the man who can make  
the mystery of sex  
the subject of a  
coarse jest,  
yet when you speak earnestly  
and seriously on the  
subject, is silent."

Henry David Thoreau  
Cited on back cover  
of Sexual Behavior,  
April, 1970.

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## CHAPTER I

### INTRODUCTION

During the past decade, American youth have disclosed a salient desire for a renaissance in the antiquated procedures toward the teaching of human sexuality. Today's educators, be they teachers, clergymen, medical personnel, or interested parents, have encompassed within their scope of objectives the education of the total youth. Assuredly, the realization of one's own biological identity and the multitudinous ramifications of this knowledge should be considered as part of an ideal educative process for all youth. It appears evident, however, that improved preparational programs for all sex educators must be initiated before the majority of youth will be able to acquire meaningful and accurate sex education.

#### Purpose of the Study

It is the purpose of this explorative study to determine (1) the present knowledge of various human sexuality topics and (2) the attitudes toward sex education of randomly selected undergraduate students at Appalachian State University. Furthermore, the study is designed to reveal where, when, and from what specific individuals the subjects actually received sex education. Lastly, information is presented as to the subjects' attitudes regarding the present and future sex education availabilities at Appalachian State University.

### Significance of the Study

Whether American youth should or should not receive sex education has practically ceased to be an argumentable issue among most educators and parents. The majority of youth are indeed receiving some type of sex education whether it be through formal school instruction, parental instruction, peer group discussions, the mass media, or from any of the other numerous sources of sex education within our society. Unfortunately, research studies have revealed that children most often experience their first, and possibly most important sex education from peer or mass media sources.<sup>1,2,3,4</sup> Both of these influential communication sources have been widely criticized in regard to the distorted sexual facts that are disseminated and to the over sensuous description of sexual events which they present. Collective research data consistently have revealed that the majority of both adults and youth desire and support the attitude that opportunities for receiving sexual information should be available within the home, school, and church.<sup>5,6,7</sup>

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<sup>1</sup> Anne McCreary Juhasz, "Background Factors, Extent of Sex Knowledge and Source of Information," Journal of School Health, 39:38, January, 1969.

<sup>2</sup> William Blaisdell, cited by Leonard Gross, "Sex Education Comes of Age," Look, 30:22, March, 1966.

<sup>3</sup> Gordon Shipman, "The Psychodynamics of Sex Education," The Family Coordinator, 17:3, January, 1968.

<sup>4</sup> The Playboy Forum, "Sex Education Survey," Playboy, 17:65, May, 1970.

<sup>5</sup> Carl L. Harter and Vestal W. Parrish, "Maternal Preference of Socialization Agent for Sex Education," Journal of Marriage and the Family, 30:420, August, 1968.

<sup>6</sup> Walter McIntire, "Parental Attitudes Toward Family Life Education," Journal of School Health, 39:667, November, 1969.

<sup>7</sup> Lester Kirkendall and Roger Libby, "Trends In Sex Education," cited by Carlfred B. Broderick and Jessie Bernard (eds.), The Individual, Sex, and Society (Baltimore: The Johns Hopkins Press, 1969), p. 14.



However, data pertaining to the adequacy and relevancy of the sexual information and attitudes presented to youth through these societal institutions often indicate that present methods of sex education are not meeting the needs and interests of today's youth.<sup>8,9,10</sup> Skepticism as to the actual preparative adequacy of the adults providing this sexual information has been substantiated by nationwide opinion polls, educational investigations, and students' evaluations.<sup>11,12,13,14</sup>

Appalachian State University is basically a teacher preparatory oriented institution; however, the scope of the university's objectives are indeed more numerous. Heretofore, students graduating from this institution with a four year baccalaureate degree have received limited instruction as to the factual knowledge of human sexuality. The majority of graduates have not received any systematically organized instruction or preparation in regard to the utilization of various teaching methods, materials, and organizational resources which are available for the

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<sup>8</sup> Helen Manley, "Sex Education: Where, When, and How Should It Be Taught?," cited by G. Pat Powers and Wade Baskin (eds.), Sex Education: Issues and Directives (New York: Philosophical Library, Inc., 1969), p. 65.

<sup>9</sup> James Elia and Paul Gebhard, "Sexuality and Sexual Learning In Childhood," Phi Delta Kappan, 50:401, March, 1969.

<sup>10</sup> Juhasz, op. cit., p. 33.

<sup>11</sup> Isadore Rubin, The Sex Educator and Moral Values (New York: Sex Information and Education Council of the United States, 1969), p. 13.

<sup>12</sup> "Sex Education," Grade Teacher, 86:63, November, 1968.

<sup>13</sup> James L. Malfetti and Arline M. Rubin, "Sex Education: Who Is Teaching the Teachers?," The Record, 69:217, December, 1967.

<sup>14</sup> Vance Packard, The Sexual Wilderness (New York: David McKay Co., Inc., 1968), p. 409.



presentation of sexual information to youth. Students graduating from Appalachian State University have not received sex education preparatory instruction, regardless of whether their future sexuality teaching is to be performed as a professional educator, concerned parent, or both.

At the present, no educational investigation has been conducted at this institution regarding the students' needs, interests, or general knowledge regarding human sexuality. The main significance of this study is that it represents an initial explorative and quantitative interpretation of Appalachian State University's students' basic factual knowledge of human sexuality and their attitudes toward sex education.

#### Scope of the Study

Questionnaire. The measurement instrument employed for this study was comprised of a one hundred question sex knowledge test and an information and sex education attitude questionnaire. The entire test was divided into five sections which were designed to determine the subjects' (1) personal history, (2) previous sex education, (3) present knowledge in various areas of human sexuality, (4) attitudes regarding sex education, and (5) attitudes regarding the present and future sex education curricula at Appalachian State University. A copy of the entire questionnaire can be found in Appendix A, page 134.

Subject selection. The subjects selected for participation in this study were all full-time undergraduate students at this institution and represented all four academic classes: freshman, sophomore, junior, and senior. Full-time academic status (students registering for a minimum of twelve academic hours of classes) and official class rank were determined by the Registrar's Office. The students were selected by a

stratified probability sample in which the stratification, by sex and by academic class, was made prior to the random selection. Thus, eight distinct strata were included for analysis. Original letters of introduction and invitation to participate in the study were sent to 814 students, representing one sixth of all full-time undergraduate students registered as of spring quarter, 1970. Two hundred and twenty-six students consented to participate in the study, or 27.8 percent of the students who were originally invited. Of the 226 students completing the study, 96 (42 percent) were males and 130 (58 percent) were females. Tabular analysis of all eight strata comparing total student population availability with the actual representation in the study is presented in Chapter III, Table 1.

#### Definitions of Terms

Sex education. For the purposes of this study, sex education should be considered as any and all attitudes, beliefs, and facts which have been either directly given to an individual, or collected by the individual himself, and have contributed to his present understanding and appreciation of human sexuality. A more inclusive, restrictive definition of this rather nebulous term would have created greater interpretive difficulty for the students as to what they should or should not consider as sex education.

Stratified probability sample. A stratified probability sample is a sample selected by dividing the total population into strata and then selecting a random sample from each stratum.<sup>15</sup> For this study, the

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<sup>15</sup> James E. Wert, et. al., Statistical Methods in Educational and Psychological Research (New York: Appleton-Century-Crofts, Inc., 1959), p. 108.



entire population of full-time undergraduate students was identified and then stratified according to sex and academic class rank before the random sample was drawn from each stratum population.

### Limitations of the Study

1. Although the topic of this study would appear to be of much importance and interest to young adults, less than thirty percent of those students invited to participate in the study actually accepted the invitation.

2. Prior to May, 1970, no explorative study had been undertaken at this institution which would provide needed, basic information for the development of restrictive research designs within the area of sex education.

3. No comprehensive sociological investigation has been received at this institution in regard to the identification and analysis of the students' socio-economic backgrounds, numerical sibling relationship, or cultural values and beliefs. Recent literature has revealed that these factors, among others, greatly influence the type and relative value of the sex education that a child receives within our society.<sup>16,17</sup>

4. The knowledge test that was administered as part of the total research design was a self-constructed instrument being used for the first time within this study. Validation of the testing instrument was determined by curricular rather than statistical analysis.

5. Whereas much has been published in regard to sex education

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<sup>16</sup> Elia and Gebhard, op. cit., p. 404.

<sup>17</sup> Panos D. Bardis, "Influences of Family Life Education on Sex Knowledge," Journal of Marriage and the Family, 25:88, February, 1963.



during the last five years, most of the research emphasis has been placed upon youth in elementary or secondary school. Few investigations have been conducted regarding the knowledge, attitudes, and desires of college students pertaining to the areas of human sexuality and sex education.

6. Due to the broad scope of the definition of sex education which was employed in this investigation, there may have been a broad variance among the subjects' interpretations as to what they actually perceived as sex education.

7. Inasmuch as only 226 of the 814 subjects originally invited to participate in the study actually completed the questionnaire, the data obtained may represent the sexual knowledge and attitudes of those college youth at this institution who were interested enough in the topic of sexuality and sex education to attend the testing session.

## CHAPTER II

### REVIEW OF LITERATURE

Inasmuch as this study is eclectic in scope, discussion of literature pertinent to the goals, purposes, and adequateness of sex education provided within the home, school, and church has been presented. As statistical data in this area are exiguous, an attempt has been made to synthesize the available research conducted thus far in conjunction with the above societal institutions' objectives or rationales regarding sex education. Discussion and analysis of other sexual information sources, such as the medical profession, mass media, and peer groups has also been included for examination as to their significance regarding youths' sexual education.

#### Goals, Purposes, and Rationales for Sex Education

Historically, youth of virtually every culture have received some form of sex education from one or more sources within their society. In some cultures this information was provided by the older adolescents of the tribe. In other early societies the older women counselled the adolescent females, while the older tribesmen instructed the young males as to the rituals of sexuality. Likewise, other cultures completely reversed this gender role of sexual preparation for the youth. In modern societies of today, sexuality within the historical context of procreation for the preservation of the culture has been complemented by more diversified attitudes and beliefs regarding the functions and purposes of the total sexual being. As societies become more advanced, their attitudinal



diversities regarding cultural mores generally widens. In regard to the sexual development of youth, the elders of ancient tribes as well as modern parents, the tribal priests and the modern clergy, all believed they have had something meaningful to relate to a particular aspect of the youths' total sexual development.

In the United States today, it is generally accepted that the home, school, and church can potentially fulfill meaningful roles during particular stages of a child's sexual development. The majority of adults also accept the concept that members of these societal institutions should be adequately prepared and willing to help foster the transitional development of youth toward an ultimate mature understanding of sexuality through some form of sex education.

Obviously, the diversity of our society makes the attainment of quality sex education for all youth somewhat arduous. Lester Kirkendall, a highly regarded sex educator at Oregon State University, has commented that "no one system of sex values is currently accepted in theory or in practice by the great majority of Americans."<sup>1</sup> Within the United States, the prevalence of immensely diverse sexual attitudes and beliefs makes it difficult for the churches and schools to function in a complementary capacity with the home in regard to the sex education of youth. Indeed, the exact functions of these institutions is made even more uncertain due to the often cited cultural revolution which ". . . is changing the face of American social institutions such as the school, church, and family."<sup>2</sup> A national survey conducted by Time Magazine in 1969 revealed

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<sup>1</sup> Lester Kirkendall, cited by Vance Packard, The Sexual Wilderness (New York: David McKay Co., Inc., 1968), p. 68.

<sup>2</sup> Frank E. McGuigan, "Social Revolution and Sex Education," Clearing House, 43:422, March, 1969.



that opposition to sex education was registered most often by middle aged adults reflecting ". . . their discontent with the changes taking place in a world different from that in which they grew up."<sup>3</sup>

As previously mentioned, the majority of American parents, educators, ministers, and youth support the development of comprehensive sex education programs which are administered through the home, school, and church. For over two decades, governmental, medical, religious, and educational agencies have advocated improved sex education communications for American youth. Manley noted that as early as 1941, the American Association of School Administrators recommended that sex education be included within the school curriculum.<sup>4</sup> It was not until 1948 that the National Conference of the Education of Teachers recommended that sex education be included within the curriculum for all teachers.<sup>5</sup> Throughout the last decade, numerous national organizations prepared positional documents favoring systematically organized sex education programs for youth. Such esteemed organizations as the American Medical Association, the American Association for Health, Physical Education, and Recreation, the American Association of School Administrators, the American School Health Association, the National Congress of Parents and Teachers, the Synagogue Council of America, the United States Catholic Conference, the United States Department of Health, Education, and Welfare, and the National Education Association are just a few of the numerous and diverse

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<sup>3</sup> "Sex in the Classroom," Time Magazine, 94:50, July 25, 1969.

<sup>4</sup> Helen Manley, Family Life and Sex Education in the Elementary School (Washington: Department of Elementary-Kindergarten-Nursery Education, National Education Association of the United States, 1964), p. 3.

<sup>5</sup> Ibid.

organizations supporting sex education in the United States today.<sup>6</sup>

Periodically, national organizations have united to form joint committees for the purpose of creating supporting documents for sex education. In 1953, the American Association for Health, Physical Education, and Recreation and the National Association of Secondary School Principals urged family, school, and church support of sex education.<sup>7</sup> During 1960, the White House Conference on Children and Youth recommended that sex education be implemented into the school curriculum from elementary school through high school.<sup>8</sup> The joint committees of the National Education Association and the American Medical Association of 1961 and 1964 stated that the schools should ". . . accept appropriate responsibility for reinforcing the efforts of parents to transmit knowledge about the . . . psychic, moral, and physical consequences of sexual behavior."<sup>9,10</sup>

In the past, it often has been asked whom should teach sex education. Dalrymple has suggested that the approach to sex education should not be whom is going to teach it but rather ". . . who can help provide the child with an environment in which he can develop into a

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<sup>6</sup> Joanne Zazzaro, "Critics or No Critics, Most Americans Still Firmly Support Sex Education In Schools," American School Board Journal, 157:30, September, 1969.

<sup>7</sup> Joint Committee, The American Association for Health, Physical Education, and Recreation and The National Association of Secondary School Principals, "How Should You Provide Sex Education?," Administrative Problems in Health, Physical Education, and Recreation, (Washington: National Education Association, 1953), p. 16.

<sup>8</sup> Manley, op. cit., p. 4.

<sup>9</sup> Joint Committee, The National Education Association and The American Medical Association, Health Education - A Guide for Teachers and a Text for Teacher Education (Washington: National Education Association, 1969), p. 235.

<sup>10</sup> Manley, loc. cit.



mature, responsible adult who shares normally in human sexuality."<sup>11</sup>

Dalrymple's viewpoint appears to reflect the opinions of most American adults who suggest that the home, school, and church should all offer needed environments in which the child can mature sexually.

Mary Calderone, executive director of the Sex Information and Education Council of the United States and one of the nation's foremost advocates of premium sex education programs, has succinctly stated what she believed sex education should provide to youth:

Basically, an adequate sex education program is one in which the parents, the school, the community, and the church have all participated at appropriate times in the child's life, with the aim of producing mature, aware adults, capable of understanding themselves and others and of behaving responsibly as sexual people.<sup>12</sup>

Calderone's statement presented two obvious conclusions. First, sex education, if it is to be successful, must have as one of its goals the total involvement of the community. This would include interested parents, clergymen, educators, doctors, lawyers, and of course, the youth who are to benefit by such a program. Secondly, both youth and adults must be made aware that sex education represents much more than just the biological and physiological aspects of sexuality which comprise only one facet of the complex nature of the sexual being. With the inclusion of competent and understanding educators, ministers, doctors, and parents into a sex education program, youth are afforded the opportunity of discussing and evaluating the intellectual, social, psychological, emotional, legal, and religious aspects of sexuality.

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<sup>11</sup> Willard Dalrymple, Sex Is For Real: Human Sexuality and Sexual Responsibility (New York: McGraw-Hill, Inc., 1969), p. 136.

<sup>12</sup> Mary Calderone, "A Candid Conversation With the Outspoken and Embattled First Lady of Sex Education," personal interview, Playboy, 17:72, April, 1970.



Including the areas of sexuality mentioned above into a sex education program connotes more than the discussion of reproduction and also entails a youth's value system of sexual beliefs, principles, and ethics. This goal, the development of rational sexual thought in regard to one's total self and environment, has been almost non-existent in the majority of sex education programs; be they home, school, or church oriented. According to Rubin and Kirkendall, one of the major problems preventing the attainment of meaningful sex education programs is that "we are discussing sex education in a society that is almost schizophrenic in its contradictory attitudes toward sex. . . ." <sup>13</sup> The director of the Institute of Sex Research, Paul Gebhard, concurred with this theory. He stated, "An honest sex education would by definition bring painful attention to the defects in our society's attempts at dealing with the sexual impulse. . . ." <sup>14</sup> According to Gebhard, within such an approach to sex education, many of the problems evaded by adults would be "open to scrutiny" by today's adolescents. <sup>15</sup> Rubin and Kirkendall submitted that unless this type of evaluatory approach to sexuality occurs, under adult guidance, youth will not be prepared ". . . to cope with the real situations that will face them as adolescents and adults." <sup>16</sup>

Providing suitable learning environments and presenting sexual information which more realistically meets the needs of maturing youths are two of the major goals of sex education. If these goals are to be

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<sup>13</sup> Isadore Rubin and Lester Kirkendall (eds.), Sex in the Adolescent Years (New York: Association Press, 1968), p. 18

<sup>14</sup> Ibid. Citing Paul Gebhard.

<sup>15</sup> Ibid. Citing Paul Gebhard.

<sup>16</sup> Ibid.

realized, adults will have to reverse their prior policies of controlling and suppressing youths' sexual expression.<sup>17</sup> Progressive educational authorities believe that one of the gravest problems within public education today is that students are more often indoctrinated rather than educated.<sup>18</sup> Indoctrinal methods of teaching sex education appear to be presently, as in the past, overwhelmingly prevalent. "If the parent or teacher attempts to impose a set of rules on the growing individual," according to Dalrymple, "the chances are that the result will be to convince him that he must experiment with other codes of behavior."<sup>19</sup> It appears that sex and family life educators, be they parents, teachers, ministers, or others, agree at least in theory, that the youth of our society should be provided with environments in which they may collect accurate information regarding their questions of sexuality. Then, prepared with such knowledge, be given opportunities in which to make rational decisions regarding their attitudes, beliefs, and behavior patterns of sexuality.

There are, however, adults within our society that contend sex education, or its many synonyms, should not be provided to youth except at particular stages of their lives and then only in the confines of the home. Disregarding, for the present, research investigations which have indicated tenuous parental abilities in regard to the sex education of their children, it is worthy to note Clark Vincent's beliefs toward such

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<sup>17</sup> Lester Kirkendall, Sex Education (New York: Sex Information and Education Council of the United States, 1969), p. 15.

<sup>18</sup> Isadore Rubin, The Sex Educator and Moral Values (New York: Sex Information and Education Council of the United States, 1969), p. 6.

<sup>19</sup> Dalrymple, op. cit., p. 134.



parental rationale. Discussing parental objections to sex education, Vincent concluded:

This does not accompany other areas of education. We do not assume, for example, that consumer education will encourage young people to be less wise or more foolish in spending money, but that it will aid them in exercising greater wisdom in the management of budgets and finances. Nor do we assume that physical education courses will immediately lead to abuses of the physical body. Nor do we assume that to provide driver education prior to the time youth may drive legally will increase the accident rate. In fact we assume the opposite: the more education, the more respect for finances, the human body, and the car.<sup>20</sup>

In summary, adults within our society are presently admitting that children of all ages are indeed sexual beings and should, in one form or another, be provided with accurate information and competent guidance regarding human sexual development. Comprehensive sex education should be directed toward helping the youth determine the total consequences of sexual behavior in order that they may ". . . choose for themselves with some measure of rationality among competing codes of conduct."<sup>21</sup> Parents, educators, and clergymen are presently attempting to compel youth to accept sexual attitudes and beliefs which the younger members do not understand and cannot defend to their own satisfaction.<sup>22</sup>

Nevertheless, many parents have begun to realize that they are inadequately prepared to accurately discuss all aspects of sexuality with their children. Thus, other societal institutions, such as the school and the church, have attempted to realistically evaluate their possible value as sex education environments for youth.

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<sup>20</sup> Clark E. Vincent, "The Pregnant Single College Girl," Proceedings of a Symposium on Sex Education of the College Student, Journal of the American College Health Association, 15:50, May, 1967.

<sup>21</sup> Rubin, op. cit., p. 10.

<sup>22</sup> Ibid., p. 18.



### Sex Education Within the Home

Historically, the family unit has been the main source for perpetuating cultural traditions, beliefs, and attitudes within our society. The dominant influence of the family unit as an educational source is most forceful during the first ten to fifteen years of an individual's life. However, the actual beliefs and values, and the methods by which they are presented to the children, are probably as diverse as the family units themselves. Within the area of sex education, there are indications that substantial numbers of American parents either do not believe they are adequately prepared to discuss sexuality with their children or believe other social institutions, such as the school or the church, should be staffed with personnel more qualified than the parents to discuss sexuality. The purpose of this discussion is to present varying philosophies as to what the home and parents can accomplish in regard to (1) educating their children to be healthy sexual beings and (2) fostering foundations that will later serve to help the children develop rational thinking regarding their sexual development. A second objective is to present available research data that has been collected from both parents and youth regarding what actually is being transmitted within the home in reference to sex education and to what value these efforts have been to the youth.

Due to our monogamous, parental-familial oriented society structure, both parents and youth are afforded frequent and lengthy opportunities in which to begin developing the child's sexual value system. Whether or not parents are cognizant of being sex educators, their children are receiving some form of sex education every day they are members of the family unit. Rubin has submitted that the parents'

role in sexually educating their children is unique in that ". . . parents transmit values both consciously and unconsciously in the complex behaviors and feelings of day-to-day life in the family."<sup>23</sup> During the first ten to twelve years of a child's life he will receive these sexual communications and, consciously or unconsciously, incorporate many of these thoughts or actions into his rapidly developing sexual value system. According to Rubin, the majority of this information received by the child in the home is related to impending family situations and the parents' personal experiences.<sup>24</sup> "Little of this transmission is cool, rational, objective, or scientific," Rubin stated.<sup>25</sup> In regard to sex education provided within the home, sociologist Aubrey Wendling expressed the belief that "the parents always want to do the right thing, but end up doing nothing. . . ."<sup>26</sup>

Nevertheless, parents are the first teachers a child is confronted with and they are in a unique position to perform particular functions regarding the child's early sex education. One of the major responsibilities of the parents is providing opportunities for the maturing child to begin developing moral attitudes that will serve as a basic foundation for later decision making regarding sexual beliefs and habits.<sup>27</sup> Many of these attitudes are assimilated by the young child concomitantly within the framework of daily family functions accompanied by an observance of the physical and vocal interchanges of

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<sup>23</sup> Rubin, op. cit., p. 4.

<sup>24</sup> Ibid.

<sup>25</sup> Ibid.

<sup>26</sup> Aubrey Wendling, cited by Packard, op. cit., p. 35.

<sup>27</sup> Rubin, loc. cit.



his parents. The parents should, however, accept the responsibility of using the early years of a child's development to ". . . build in him self-acceptance, self-confidence, and self-control. . . ." <sup>28</sup> Most authorities of child development believe that parents must accept the fact that the young child is indeed a sexual being and capable of forming primitive sexual values at this early age; however, the child or the parents may not be aware that these values and attitudes are being developed. Just as the child absorbs the interpersonal relationship of his parents, he also vividly remembers their reactions to his sexual events. If the child's initial exploration of his genitals is met with immediate reprobation, vocal or physical, then this reaction can also be incorporated into the child's attitude toward sexuality. Obviously, ". . . avoidance, repression, rejection, suppression, embarrassment, and shock are negative forms of sex education," which can occur within the inherent emotional atmosphere of the home and family. <sup>29</sup>

Many of the cultural values, sexual and others, are consciously and unconsciously transmitted and received within the home each day, as previously discussed. Within the home's environment, conscious efforts should be made toward promoting parental-child discussions of sexuality. Both of these areas, meaningful dialogue between parent and child and the providing of basic biological and physiological sexual facts, warrant further discussion as to the parental attitudes and preparational adequacy regarding sex education.

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<sup>28</sup> Ralph Glenn Eckert, Sex Attitudes In The Home (New York: Association Press, 1956), pp. 5-6.

<sup>29</sup> Kirkendall, op. cit., p. 6.



Hinrichs and Kaplan stated, "Not only do many parents fail to understand what sex education is, but they leave its application to chance."<sup>30</sup> The accuracy of the first part of this statement is somewhat arguable. Rather, it could be stated that the majority of adults have diverse attitudes as to what they perceive their children should receive in regard to sex education and at what developmental stages of the childrens' lives this information should be presented. This rationale corresponds with the previous discussion that many parents recognize their responsibility in this area but wait to capitalize on the absolutely correct year of age or environmental atmosphere before embarking into discussions of sexuality with their children. Thus, as research data have revealed, very little sex education is being received in the home as a first source of sex education for children. The remainder of Hinrichs' and Kaplan's statement, sex education being left to chance, has been found to be an accurate judgement. According to research investigations involving parental attitudes toward sex education, there are numerous reasons why parents appear to be reticent toward providing sex education to their own children. Undoubtedly, many parents rationalize their own inadequacies by reporting that their children are not old enough to know what sexuality is and other parents state that the atmosphere for such important discussions was just not present within the home.

Thompson and Nelson reported that the "wait until later" attitude was one of the nine most prevalent reasons that were listed among

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<sup>30</sup> Marie A. Hinrichs and Robert Kaplan, "The Home, the School, and Sex Education," Today's Health, 44:16, February, 1966.

parents for not providing sex education to their children.<sup>31</sup> Other reasons listed by parents, such as reticence to give detailed responses, lack of proper vocabulary, a feeling of detachment between the parents and the child, and religious background also contributed to the reasons why parents did not provide sex education to their children.<sup>32</sup> Although it is true that more sex education is being received in the home today than in the past, it appears that parents are still waiting until the child has passed puberty before engaging in any meaningful discussions of sexuality. At this time of the youth's development, the parents usually have been replaced by the school or peer group as more influential educative sources resulting in the parents giving ultimatums or indoctrinations as far as sexual ethics and behavior are concerned. Hinrichs and Kaplan concluded that this "thou shalt not" approach to sex education is still quite prevalent among parental sex education attempts.<sup>33</sup> This procrastinatory attitude among parents does not foster the development of children who are adequately prepared to make independent, rational, and self-defending decisions regarding sexual attitudes and behavior. Within such an educational framework, many young adolescents are compelled to adhere to and at least pretentiously believe in codes of behavior and values which they have not been given opportunities to fully comprehend and cannot personally defend to their own satisfaction. Lorand, discussing this topic, suggested that a youth must be made to feel that he is an "equal of his parents" and be permitted to decide

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<sup>31</sup> Michael L. Thompson, et al., "Sex Education: A Ball Nobody Carries," Clearing House, 39:355, February, 1965.

<sup>32</sup> Ibid.

<sup>33</sup> Hinrichs and Kaplan, loc. cit.



" . . . whether he fully agrees with their principles, ethics, morals, ideals, goals, and standards."<sup>34</sup>

This type of analytical independent decision making, by definition, must be accompanied by adequate and accurate factual knowledge regarding human sexuality. Hopefully, adolescents would be quite knowledgeable of the anatomical and physiological aspects of sexuality prior to being required to assess various codes of sexual behavior and ethics. Ideally, the child should receive this fundamental information within the home from either the parents or other members of the family unit whom the child knows and trusts. "Since the first impression of sex is so lasting," stated clergyman Francis Filas, "it is critically important that the child receives it from a good background. . . ."<sup>35</sup> A previously cited study by Thompson and Nelson indicated that many parents, for one reason or another, are hesitant to expose their children to the topic of sexuality or even introduce correct terminology as to the child's bodily structures and functions. "If the children are old enough to ask a question, they are old enough to get an answer suited to their age and mental development," Filas asserted.<sup>36</sup> Obviously, the most advantageous time to introduce technically accurate terminology will vary with each child and must be determined by the parents. Filas contended that by introducing accurate and socially acceptable terminology into a child's early vocabulary the parents are helping the child develop increased appreciation and respect for his body and the complex

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<sup>34</sup> Rhoda L. Lorand, Love, Sex, and the Teenager (New York: The MacMillan Co., 1966), p. 7.

<sup>35</sup> Francis L. Filas, Sex Education In The Family (Englewood Cliffs: Prentice-Hall, Inc., 1966), p. 60.

<sup>36</sup> Ibid., p. 53.



nature of human sexuality.<sup>37</sup> The majority of children will approach their parents with spontaneous questions regarding their own bodies or bodily functions. Parents should not be reluctant toward encouraging opportunities for their children to ask questions or even presenting questions themselves to the children.<sup>38</sup> In the opinion of this author, it does not appear to be in a child's best interest to limit him with a sexual vocabulary of pseudonyms which he will eventually be forced to abandon. By a process of continued sex education within the home throughout childhood, a maturing youth may move from one plateau to another in regard to the difficulty of terminology and depth of sexual discussions with his parents. If the child feels secure within the home and his early questions were answered in an accurate and satisfying manner, he will usually return to his parental source of sexual information more frequently as he matures.<sup>39</sup> The child should be able to approach either parent with questions of sexuality and have the questions answered accurately, without embarrassing hesitation, and with confidence that his inquisitiveness will not be met with reprimands. "Both parents should be equally prepared to give instruction since a child may tend to go to one parent before the other," regarding questions of sexuality.<sup>40</sup>

Investigative research during the last decade revealed that American parents consistently support the thesis that sex education should be available within the home. Unfortunately, much of the sex

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<sup>37</sup> Ibid., p. 58.

<sup>38</sup> Ibid., p. 55.

<sup>39</sup> Lawrence Q. Crawley, et al., Reproduction, Sex, and Preparation for Marriage (Englewood Cliffs: Prentice-Hall, Inc., 1964), pp. 104-105.

<sup>40</sup> Filas, op. cit., p. 65.

education provided to youth within the home can be described as curative procedures involving hurried and belated discussions of genitals, reproduction, intercourse, birth processes, and contraception. These sexual information discussions are often permeated ". . . with overtones of parental embarrassment and a desire to get a distasteful task over with."<sup>41</sup>

Harter and Parrish, in a study conducted in Northern Louisiana, found that over ninety percent of the 2,360 mothers interviewed believed that parents should provide sex education for their children.<sup>42</sup> The mothers, both Negro and Caucasian, were given a sex knowledge test and then classified as "knowledgeable" and "not knowledgeable". The degree of knowledge possessed by the mothers revealed no appreciable difference in their attitudinal responses that parents should be ". . . the primary agent responsible for providing children with information about sex."<sup>43</sup>

Questionnaire studies involving youth usually produce a plurality of responses indicating that there is an extreme lack of sex education given within the home, especially as an initial source of sex information. A lengthy study conducted by Blaisdell between 1958 and 1963 revealed that among 25,000 adolescents only one in fourteen, or seven percent, received sex education at home as a first source of sexual information.<sup>44</sup> Less than five percent of these same youths

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<sup>41</sup> Robert R. Bell, "Parent-Child Conflict in Sexual Values," Journal of Social Issues, 22:35, April, 1966.

<sup>42</sup> Carl L. Harter and Vestal W. Parrish, Jr., "Maternal Preference of Socialization Agent for Sex Education," Journal of Marriage and the Family, 30:420, August, 1968.

<sup>43</sup> Ibid., p. 421.

<sup>44</sup> William Blaisdell, cited by Leonard Gross, "Sex Education Comes of Age," Look, 30:22, March 8, 1966.



learned about venereal disease from their parents.<sup>45</sup>

Data received by Shipman, provided by four hundred Wisconsin State University students in 1966, revealed that only five percent of the males and fourteen percent of the females reported receiving what the students called adequate sex education from their parents.<sup>46</sup>

In a New York high school where no previous sex education program had been instigated, 793 students were issued questionnaires regarding the topic. Only twenty-eight percent of these students reported receiving adequate sex education in the home whereas fifty-eight percent of the students disclosed that the sex education available within their homes did not meet their needs.<sup>47</sup> In fact, only eighteen percent of these high school students listed their parents as their primary source of sexual information.<sup>48</sup>

Whereas children are receiving more sex education in the home today than in the past, the amount of such parental educative efforts are still only negligible. Females appear to be receiving more sex education in the home than males and mothers appear to be providing the majority of the information to their children. Among 1,000 adolescents questioned in a Purdue Poll, thirty-two percent of the females and only fifteen percent of the males reported receiving sex education

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<sup>45</sup> Ibid. Citing William Blaisdell.

<sup>46</sup> Gordon Shipman, "The Psychodynamics of Sex Education," The Family Coordinator, 17:3, January, 1968.

<sup>47</sup> The Playboy Forum, "Sex Education Survey," Playboy, 17:65, May, 1970.

<sup>48</sup> Ibid., p. 66.



at home.<sup>49</sup> Shipman reported on the familial sex education interchange of 400 Wisconsin State University students and concluded that the father-son, father-daughter, and mother-son discussions were negligible.<sup>50</sup> Fifteen percent of the college males reported that childhood questions were answered satisfactorily by their fathers while twenty-one percent listed their mothers as meaningful sex educators. As the males approached adolescence, only four percent indicated that their fathers adequately answered their questions whereas ten percent reported that their mothers answered questions satisfactorily. Likewise, forty-five percent of the females stated that their mothers answered their childhood questions adequately but only twenty percent felt their adolescent questions were answered accurately and truthfully.<sup>51</sup> No data was reported as to the father-daughter educative relationship during childhood or adolescence. However, among this group of students, it was obvious that as both the males and females approached adolescence their parents became less influential as a source of sexual information. Whether the decrease in parental-child discussions, or the decrease in the meaningfulness of these discussions, was due to parental reticence to discuss sexuality or the adolescents' failure to approach their parents with questions was not determined. In conjunction with these findings, Elia and Gebhard reported that among 432 pre-pubescent children in their investigation the father fulfilled only a "marginal role" as a sex educator while the

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<sup>49</sup> Helen Manley, "Sex Education: Where, When, and How Should It Be Taught?," cited by G. Pat Powers and Wade Baskin (eds.), Sex Education: Issues and Directives (New York: Philosophical Library, Inc., 1969), p. 65.

<sup>50</sup> Shipman, loc. cit.

<sup>51</sup> Ibid., p. 5.

mother became an increasingly important source of sex education as the occupational level of the family increased.<sup>52</sup>

While sex education in the schools is not under discussion at this time, it is nevertheless interesting to reveal parental attitudes toward the school's growing influence as sources of sex education for youth. McIntire reported that parents are becoming increasingly aware that they are inadequately prepared to provide accurate answers for their children's sexual questions. Among 40,000 parents surveyed by McIntire, twenty-one percent reported themselves as being adequately prepared to offer sex education to their children whereas fifty-five percent of these parents believed they were not adequately prepared to offer such instruction to their children.<sup>53</sup> Two major recommendations were consistently offered by the parents involved in this study. First, the schools should assume a larger role in the sex education of youth and, secondly, the schools should provide "concurrent adult programs" of sex education. In fact, seventy-four percent of the parents supported such an adult education program in hope that it would help foster increased parental-child discussions of sexuality within the home.<sup>54</sup> This approach of adult education would help to alleviate parents' lack of factual knowledge regarding sexuality and help to stimulate a more relaxed environment in which topics of sexuality could be discussed within the home. Previously it was mentioned that youth need to feel that during family discussions of sexuality their ideas and beliefs are as important

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<sup>52</sup> James Elia and Paul Gebhard, "Sexuality and Sexual Learning In Childhood," Phi Delta Kappan, 50:404, March, 1969.

<sup>53</sup> Walter McIntire, "Parental Attitudes Toward Family Life Education," Journal of School Health, 39:667, November, 1969.

<sup>54</sup> Ibid., p. 668.



as those of their parents or at least worthy of deliberation. It is also equally invaluable for the parents to feel that they are adequately prepared to discuss with their children the increasing amount of factual knowledge, as well as the varying codes of sexual behavior, if true parental-child interchange is to continue throughout adolescence and into adulthood.

Dalrymple concluded that due to the lack of interest to improve their own knowledge regarding sexuality, parents are failing to help their children understand one of the most bewildering times of their lives-- puberty.<sup>55</sup> Children enter puberty at varying ages; thus, it is difficult for the schools to instigate discussions involving the radical physical changes the pubescent youth will encounter in order for the information to be meaningful to all the students. For some students, such information might be too premature, and for others, too late, in so far as being purposeful to their present needs and interests. Within the daily routine of the home, parents have an opportunity to closely observe the child's physical development and are able to provide him with information regarding the changes of pubescence at the most advantageous time of the child's life. However, Shipman's study, which was previously discussed, poignantly revealed that parental-child discussions of sexuality just prior to and throughout adolescence are severely curtailed and students reported that their adolescent questions were answered more unsatisfactorily than their childhood questions. Most parents do not capitalize upon the educational opportunities presented through the adolescent's natural sexual inquisitiveness due to a lack of time, lack

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<sup>55</sup> Willard Dalrymple, Sex Is For Real: Human Sexuality and Sexual Responsibility (New York: McGraw-Hill, Inc., 1969), pp. 138-139.

of proper vocabulary, or personal embarrassment regarding discussions of sexuality.<sup>56</sup> Authorities within sex education report that parents are usually not the best communicators of factual knowledge but should be able to transmit at least a minimal amount of information to their children regarding pubescence prior to the time these changes occur.<sup>57</sup> Unfortunately, many pubescent youth encounter their first menstrual cycle or nocturnal emission with fear, anxiety, or guilt due to a lack of previous parental instruction that these processes should be viewed as normal and healthy developmental changes toward adulthood.

The cessation of parental-child discussions of sexuality during adolescence is not due altogether to parental attitudes or their lack of knowledge. Dubbe reported that among 200 adolescent males and females that he interviewed the majority of them revealed personal hesitance toward approaching their parents with questions pertinent to sexuality.<sup>58</sup> "Among more than thirty different topics, sex was the one they had the most trouble discussing," stated Dubbe.<sup>59</sup> As the chronological age of the students increased, so did their reluctance to discuss sexual matters with their parents. For example, "sex matters (such as petting) were harder for nineteen-year-olds to talk about than for fourteen-year-olds."<sup>60</sup>

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<sup>56</sup> F. R. Wake, "Are Parents the Best Sex Educators?," cited by G. Pat Powers and Wade Baskin (eds.), Sex Education: Issues and Directives (New York: Philosophical Library, Inc., 1969), p. 296.

<sup>57</sup> Ibid., p. 297.

<sup>58</sup> Marvin C. Dubbe, "What Parents Are Not Told May Hurt," The Family Coordinator, April, 1965, cited by Richard Stiller, "Talking to Your Teenager About Sex," Sexology, 34:32, August, 1967.

<sup>59</sup> Ibid.

<sup>60</sup> Ibid.



In summary, it appears that the majority of American parents, especially fathers, have not begun to fulfill their potentials as sex educators for their children. Parents should attempt to analyze their own values and beliefs toward sexuality if indeed they expect their children to cherish and uphold these same values. If parents are to be meaningful sex educators for youth, they should become as knowledgeable as possible regarding the most recent factual information of human sexuality. Additionally, they should attempt to alleviate any personal misconceptions relating to sexuality and basic biological and physiological terminology. This would not only enable them to be better sex educators of their children but possibly might also enhance their own appreciation of human sexuality. Both parents should strive to create an atmosphere within the home environment in which a child's questions, at any age, are encouraged. Most authorities agree that increased parental education will not innately guarantee better sex education within the home or even necessarily improve parental-child discussions of sexuality. Nevertheless, increased parental knowledge and increased awareness of the needs of youth would help to foster improved and extended parental-child discussions of human sexuality within the home, which at this time could be classified as negligible at best.

#### Sex Education Within the Schools

During the last three decades, educators, school administrators, educational councils, and an increasing number of parents have agreed that a significant role toward the sex education of youth can be fulfilled within the school environment. This rationale has developed, although slowly, for several reasons. First, and most obviously, our educational system requires a minimal compulsory education for all

youth. For a period of approximately ten years, a child will be required to spend a major portion of his time within the environment of a school. Prior to five or six years of age, the majority of a child's education is performed within the family unit usually by parents or other familial relatives who are devoutly interested in the proper development of the child. At about six years of age and until approximately sixteen years of age, the environment and major responsibility for the child's education is delegated to the schools and professional educators. This does not imply that the parents' educative functions cease but rather that they are now supplemented by individuals professionally trained in particular phases of education. However, due to the length of time the child is away from the home environment, the previous opportunities for frequent parent-child discussions throughout the child's routine daily activities are curtailed. This is true of all parent-child interchanges including spontaneous questions and discussions regarding sexuality.

A second rationale for the discussion of human sexuality within the schools is founded upon the assumption that professional educators should be more adequately prepared with accurate facts and terminology regarding sexuality than the average parent. In conjunction with this attitude, it would appear that educators are generally in a better situation to stay abreast of current research findings and technical information regarding sexuality more adequately than the majority of the public. Studies previously cited, indicated that most parents not only regard their sexual terminology as inadequate but also revealed parental reticence toward discussing topics of sexuality with their children. In addition, these investigations, as well as others to be discussed later, revealed strong parental attitudes that their children receive accurate



sexual information from professionally trained individuals such as teachers, doctors, school nurses, or ministers.

A third major rationale for the school's role in the sex education of youth is one of administrative organization. Most children are going to be within the formal educational framework of our society for ten years or more. School districts and educators have an opportunity to rationally and objectively construct a sex education program that is both purposeful to the students at particular ages and also present sexual information on a continuum throughout the child's educational progression. This does not imply that the educators will dictate what is or what is not to be presented within a sex education program. As will be discussed later, the school and the educators provide the environment and personnel required to administer a well organized sex education program which has been designed by representatives from the entire community.

Although the school environment presents some unique goals and purposes toward sex education, many of the same purposes for sex education within the home are personified in the school. Parents and educators encompass many similar goals in regard to sex education such as the development of a child's individual sex role, the development of healthy sexual attitudes toward himself and others, and the development of independent and responsible thinking toward personal decisions involving sexual impulses and occurrences.<sup>61</sup> While many of the ultimate goals of sex education are similar within the home and school, the latter institution should not attempt to replace or imitate the parental role

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<sup>61</sup> Lester Kirkendall and Roger Libby, "Trends in Sex Education," cited by Carlfred B. Broderick and Jessie Bernard (eds.), The Individual, Sex, and Society (Baltimore: The Johns Hopkins Press, 1969), p. 14.

or home environment in discussions of sexuality.<sup>62</sup> Each institution, the home and the school, are capable of providing unique yet interrelating functions for the child's sexual development. In regard to the school's function in sex education, Levine stated, ". . . the school offers the ideal area in which to clarify, correct and add to the sex information already obtained by the child."<sup>63</sup> Ideally, the schools should be able to ". . . confirm from a separate source the correctness of the parents' teaching."<sup>64</sup> It has been revealed, however, that the degree of organized sex education received by the child within the home prior to school age is negligible. Thus, the school's usual functions are more of a claritive, re-educating process involving the development of proper terminology and presentation of accurate facts regarding various aspects of sexuality.

Within the chronological order of instructional endeavors, providing students with opportunities for discussions of sexuality is a relatively new task for educators. During the past five years, administrative personnel within the schools have become cognizant of the desire and need for sex education programs presented through the school. Therefore, these personnel are presently devising belated sex education curriculums ". . . with a maximum of speed and often a minimum of preparation. . . ."<sup>65</sup> The previous hesitancy on the part of educators to

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<sup>62</sup> Esther D. Schulz and Sally Williams, Family Life and Sex Education: Curriculum and Instruction (New York: Harcourt, Brace, and World, Inc., 1969), p. vi.

<sup>63</sup> Milton I. Levine, "Sex Education In The Public Elementary and High School Curriculum," Journal of School Health, 37:33, January, 1967.

<sup>64</sup> Francis L. Filas, Sex Education In The Family (Englewood Cliffs: Prentice-Hall, Inc., 1966), p. 89.

<sup>65</sup> James Elia and Paul Gebhard, "Sexuality and Sexual Learning In Childhood," Phi Delta Kappan, 50:401, March, 1969.



honestly and realistically evaluate the purposes of sex education within the schools has been reflected in many studies. Elia and Gebhard discussed data collected by the Kinsey studies which revealed that prior to 1955 none of the 432 children questioned by Kinsey reported the school as their main source of sex information.<sup>66</sup> A 1963 Purdue Poll of 1,000 adolescents revealed that only six percent of these students indicated that they had collected sex information from school sources.<sup>67</sup> A more recent study conducted in 1970 revealed that only three percent of 793 New York high school students listed the school as their major source of sex education.<sup>68</sup> This data, when viewed collectively, would indicate that at the present, as in the past, the school's efforts to organize sex education programs have been either non-existent or so poorly planned and administered that the students have failed to recognize any meaningful contribution to their sexual development through such school programs.

The apparent failure of the schools to provide meaningful sex education programs which meet the needs of the students can be due, in part, to the rapidity at which recent programs have been instigated combined with only minimal forethought and organization. Schulz and Williams reported that the three major constituents of sex education are the program's philosophy, curricular content, and teacher preparation.<sup>69</sup>

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<sup>66</sup> Ibid., p. 404.

<sup>67</sup> Helen Manley, "Sex Education: Where, When, and How Should It Be Taught?," cited by G. Pat Powers and Wade Baskin (eds.), Sex Education: Issues and Directives (New York: Philosophical Library, Inc., 1969), p. 65.

<sup>68</sup> The Playboy Forum, "Sex Education Survey," Playboy, 17:65, May, 1969.

<sup>69</sup> Schulz and Williams, op. cit., p. 3.

In order to provide a meaningful sex education program for the students, these three areas must be closely examined prior to the program's initiation. According to Schulz and Williams, this type of analytical introspection would aid in reducing future problems within a proposed sex education program or the possible failure of the program as a meaningful instrument for the students.<sup>70</sup>

It was discussed earlier that there does not appear to be one commonly accepted set of values in this country in regard to sexual attitudes and behavior. This diversity of attitude is also widely prevalent within the philosophical framework of the school's sex education functions.<sup>71</sup> Each community and school district possesses uniquely varying desires and needs for sex education and therefore will develop goals and philosophies for their sex education program which will best meet the needs of their particular students. However, there are several basic philosophical and administrative tenets that must be discussed by all schools initiating sex education programs.

Before introducing any type of new educational program, the school should be fully cognizant of the community's desire for such instruction. Within the area of sex education, both community awareness and community involvement are extremely important factors to be considered if the program is to be successful. As previously discussed, hastily constructed sex education programs are often discontinued due, in part, to the lack of parental and community support. Thompson and Derothe reported that the success of their sex education program in a

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<sup>70</sup> Ibid., p. 4.

<sup>71</sup> Seymour Holzman, "Sex Education Is Here To Stay," Sex Education Today (Englewood Cliffs: A Scholastic Teacher Report, 1968), p. 6.



California elementary school was directly related to total parental involvement from the onset of the program's conception.<sup>72</sup>

Associated with community support of a sex education program is administrative support by the school system and its personnel for such instruction. The support of school administrators is mandatory for the success of a sex education program since these individuals are often required to explain and defend the school's policies and curricula. Whereas attitudes vary as to the exact grade sex education should be implemented into the curriculum, most administrators agree that the school can perform a meaningful service for its students by providing sex education programs. As early as 1954, Eggert reported that ninety-three percent of the school superintendents questioned in his study favored the inclusion of a sex education program within their school systems.<sup>73</sup> A survey of 430 Connecticut principals in 1969 revealed that eighty percent of these administrators either "strongly" or "slightly" favored sex education programs in the schools.<sup>74</sup> Nation's Schools magazine conducted a survey in which ". . . seven out of ten school administrators desired some form of sex education program."<sup>75</sup> The total number of administrators surveyed was not revealed. Whereas teachers usually report the lack of a sex education program is due to a lack of administrative support, the administrators report that community

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<sup>72</sup> A. G. Thompson and E. F. Derothe, "Sex Education: Parental Involvement in Decision Making," Phi Delta Kappan, 49:501, May, 1968.

<sup>73</sup> C. Lee Eggert, "Critical Examination of Sex Education in the Elementary School," Research Quarterly, 25:21, May, 1954.

<sup>74</sup> Walter G. McIntire, "Attitudes of Connecticut Principals Toward Family Life Education," Journal of School Health, 39:184, March, 1969.

<sup>75</sup> "Too Much, Too Soon," Nation's Schools, 84:19, August, 1969.

apathy and the lack of qualified teachers prevent them from supporting a sex education program within their school.<sup>76</sup> In a 1966 survey of 16,000 school administrators from all fifty states, it was revealed that two thirds of the school districts surveyed provided no planned sex education program.<sup>77</sup> A similar investigation conducted in 1968 by Johnson and Schutt reported strong administrative and parental support for sex education within the schools. The authors contended that school officials cannot afford to wait for unanimous parental approval before initiating and supporting sex education programs within their schools.<sup>78</sup> It is evident, however, that in order for any sex education program to be successful the community, teachers, and school administrators must be actively involved in designing both the philosophical and curricular foundations of the program.

While basic sexuality curricula will vary among schools, dependent upon the individual needs of the students, each school system is faced with similar problems in determining both the curricular content and at what sequence in the students' educational development this information will be presented. It is not the purpose of this paper to discuss the varying degrees of curricular emphasis to which school systems have entered into sex education. This is largely dependent upon both community mores and the needs of the students. However, two philosophical or administrative problems appear to arise within almost every newly constructed sex education program.

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<sup>76</sup> "Parents Get Blame For Lack of Sex Education," Nation's Schools, 77:95, May, 1966.

<sup>77</sup> Ibid.

<sup>78</sup> Warren R. Johnson and Margaret Schutt, "Sex Education Attitudes of School Administrators," Journal of School Health, 36:68, February, 1966.



One of the first areas of discussion that inevitably arises from either the community, teachers, or administrators is at what age or grade level is the proposed sex education curricula to be introduced. National surveys have revealed a wide variance of both parental and administrative attitudes toward this problem. In fact, this obstacle alone has prevented the initiation of many sex education programs across the country. Closely related to the controversy of when sex education should be implemented is the equal variance of thought as to how sex education should be introduced into the school curriculum. The majority of educators and administrators who favor sex education believe it should be introduced as early as possible within the students' elementary school lives and continue throughout high school and college. In a national survey of elementary school teachers it was found that 95.7 percent of the teachers believed sex education should be available at the elementary school level.<sup>79</sup> In fact, 73.2 percent of these same teachers believed sex education should be initiated in kindergarten.<sup>80</sup> The previously cited survey of Connecticut principals indicated that eighty-six percent of the respondents favored a kindergarten through high school comprehensive sex education program.<sup>81</sup> Nevertheless, it has been estimated that less than one third of the nation's sex education programs begin before the fifth grade.<sup>82</sup> Most student surveys indicate

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<sup>79</sup> "Sex Education," Grade Teacher, 86:61, November, 1968.

<sup>80</sup> Ibid.

<sup>81</sup> McIntire, "Attitudes of Connecticut Principals Toward Family Life Education," loc. cit.

<sup>82</sup> "Sex Education," Grade Teacher, loc. cit.

that youth are reporting that they are receiving too little sex education which was provided too late in their lives.<sup>83</sup>

As to the implementation of sex education programs, educators are in almost total agreement that this type of information should not be placed in a single course and labeled as such: sex education. Educators favor integrating sex education into applicable areas of the present curriculum rather than isolating the topic into a separate unit within the curriculum.<sup>84</sup> The implementation of a comprehensive sex education program, which traverses many educational disciplines presently in the majority of school curricula, indicates a program involving more than the discussion of reproductive biology. Within this approach to sex education, the student begins to realize and appreciate the ramifications of sexuality and how it permeates all aspects of life. Sex education need not be limited to biology or health classes as has been prevalent in the past. Literature, history, economics, and other frequently appearing curricula have topics of discussion which center around human sexuality. Reiss has summarized this point in that an ideal sex education program should treat sexuality as a ". . . natural part of all instructional levels."<sup>85</sup>

A second recurring administrative issue within many sex education programs is that of coeducational classes. In an integrated sex education program which penetrates all educative curricula, this problem becomes negligible. However, the majority of sex education programs in

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<sup>83</sup> Kirkendall and Libby, "Trends in Sex Education," op. cit., p. 20.

<sup>84</sup> Dalrymple, Sex Is For Real: Human Sexuality and Sexual Responsibility, op. cit., p. 143.

<sup>85</sup> Ira L. Reiss, "Sex Education in the Public Schools: Problem or Solution?," Phi Delta Kappan, 50:54, September, 1968.



this country, as previously mentioned, are introduced within biology or health classes. These courses, for the most part, are designed for a hastened explanation of reproduction and are often segregated by sex for periods of reproduction discussions. Attitudinal surveys of parents, teachers, and administrators have revealed no definite consensus of opinion regarding coeducational sex education classes. Most educational and family life authorities outside of the actual teaching environment believe the question of coeducational classes should never arise due to the fact that both sexes must live with one another and that each sex should be made aware of the problems and attitudes of the other sex.<sup>86</sup>

McIntire reported that among 40,000 parents surveyed in his 1968 study, thirty-three percent objected to coeducational classes for sex education while forty-five percent of the parents favored coeducational classes.<sup>87</sup>

Among the 430 Connecticut principals surveyed by McIntire in 1969, fifty percent preferred coeducational classes for discussions of sexuality topics.<sup>88</sup>

Kirkendall and Libby reported that in a national survey of both teachers and pupils, coeducational sex education classes were usually preferred; however, the respondents agreed that segregated classes could provide more advantageous learning situations at certain times.<sup>89</sup> In conjunction with this attitude, Manley contended that if sex education classes are basically coeducational, provisions should be

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<sup>86</sup> Walter E. Mulholland, "Sex or Social Education," Clearing House, 41:333, February, 1967.

<sup>87</sup> McIntire, "Parental Attitudes Toward Family Life Education," op. cit., p. 668.

<sup>88</sup> McIntire, "Attitudes of Connecticut Principals Toward Family Life Education," loc. cit.

<sup>89</sup> Kirkendall and Libby, op. cit., p. 11.

made for a few periods of segregated discussion.<sup>90</sup> Chilman stated that while segregated sex education classes are administratively less controversial, this policy does not ". . . promote greater understanding and healthier communication between males and females. . . ."<sup>91</sup> Presently, there is no definite agreement among parents, teachers, or administrators as to the favorability of coeducational sex education classes. As of this date, no research data have been presented that confirm whether segregated or coeducational sex education programs offer the most beneficial learning environment for students.

The lack of qualified teachers has been a major problem confronting schools attempting to initiate sex education courses. As previously discussed, the lack of qualified teaching personnel was the most frequently cited reason among school administrators for not instigating sex education programs. Additionally, two separate national studies conducted by Southworth and Kenkel similarly revealed that the lack of qualified teachers was listed most often as the major rationale for not providing sex education in schools.<sup>92</sup> Schulz and Williams contended that the teacher is the most important component in a successful sex

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<sup>90</sup> Helen Manley, "Starting A Program of Sex Education," cited by Carlfred B. Broderick and Jessie Bernard (eds.), The Individual, Sex, and Society (Baltimore: The Johns Hopkins Press, 1969), p. 62.

<sup>91</sup> Catherine S. Chilman, "Some Social and Psychological Aspects of Sex Education," cited by Carlfred B. Broderick and Jessie Bernard (eds.), The Individual, Sex, and Society (Baltimore: The Johns Hopkins Press, 1969), p. 71.

<sup>92</sup> James L. Malfetti and Arline M. Rubin, "Sex Education: Who Is Teaching the Teachers?," The Record, 69:216, December, 1967. The original source of Southworth's and Kenkel's investigation was not cited by Malfetti and Rubin.



education program.<sup>93</sup> A teacher of sex education should be knowledgeable in the disciplines of biology, psychology, and sociology, but more importantly, possess ". . . an attitude of openness and understanding, a self-knowledge and awareness of prejudices, and a willingness to be honest with students," according to Schulz and Williams.<sup>94</sup> Vincent asserted that many school administrators believe that almost any teacher can be utilized for sex education instruction. The concept that human sexuality is as equally complex as other educational disciplines has not been seriously evaluated by many educators and school administrators.<sup>95</sup> Discussing the prerequisites for sex educators, Kirkendall stated, "So formidable are the specified requirements that if they were insisted upon, competent people could never be found."<sup>96</sup>

Due in part to almost a total lack of professional preparation, Rubin summarized his attitude toward present sex educators as follows:

Sex educators, in and out of schools, while ostensibly presenting objective analyses of sexual behavior, attitudes, and moral questions, violate the spirit of scientific inquiry in many ways. Often, respect for logic is completely lacking; data are ignored, manipulated, or distorted; negative and positive consequences are unfairly assessed; only one side of a controversial question is presented.<sup>97</sup>

McGonigle disclosed that in her association with educators presently

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<sup>93</sup> Schulz and Williams, Family Life and Sex Education: Curriculum and Instruction, op. cit., p. 6.

<sup>94</sup> Ibid.

<sup>95</sup> Vincent, "The Pregnant Single College Girl," op. cit., p. 51.

<sup>96</sup> Lester Kirkendall, cited by Arthur E. Gravatt, "Classroom Sex Education," Proceedings of a Symposium on Sex Education of the College Student, Journal of the American College Health Association, 15:64, May, 1967.

<sup>97</sup> Rubin, The Sex Educator and Moral Values, op. cit., p. 13.

giving human sexuality instruction, many are not qualified to discuss several aspects of sexuality even with their teaching peers.<sup>98</sup>

Unfortunately, many school systems during the last decade have hastily constructed sex education programs, staffed by unqualified personnel, in hope of appeasing public demands for the schools to assist the parents and the church in the sex education of today's youth. The majority of teachers involved in sex education programs today have volunteered for these teaching assignments but readily admit their lack of factual knowledge or professional preparation. A 1968 survey of elementary school teachers revealed that only 50.5 percent of these persons believed they were adequately prepared to give sex education instruction in school.<sup>99</sup>

The preparation of well qualified teachers is presently, as in the past, the major deterrent to the development of high quality sex education programs. According to Montagu, teacher preparation colleges are presently totally unprepared to train future teachers within the area of human sexuality.<sup>100</sup> In 1967, Johnson reported that he was unaware of any institution in this country which offered future teachers the "needed systematic training" required to provide instruction of human sexuality.<sup>101</sup>

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<sup>98</sup> Elizabeth McGonigle, "What Do Teachers Know About Sex!," What's Happening in Sex Education? (Englewood Cliffs: A Scholastic Teacher Report, 1967), p. 5.

<sup>99</sup> "Sex Education," Grade Teacher, op. cit., p. 63.

<sup>100</sup> Ashley Montagu, "The Pill, the Sexual Revolution, and the Schools," Phi Delta Kappan, 49:483, May, 1968.

<sup>101</sup> Warren R. Johnson, "The Sexual Revolution and the Colleges: A Challenge to Higher Education," Proceedings of a Symposium on Sex Education of the College Student, Journal of the American College Health Association, 15:9, May, 1967.



Rubin and Malfetti substantiated the fact that teacher preparation institutions are presently doing little to train qualified sex educators and, in fact, these institutions did not foresee any immediate implementation of curricula that would improve the quality of training for future sex educators.<sup>102</sup> The above authors originally sent their questionnaire study to 734 teacher preparation institutions representing every state in the nation. Two hundred and fifty schools, thirty-four percent, completed and returned the document. The findings revealed that only twenty-one, or eight percent, of these institutions offered a specific course or courses intended to prepare future sex educators. Twelve of these schools offered only one course; seven schools offered two courses; and two schools offered three courses intended to help prepare teachers who would be involved in sex education instruction. Of the 229 colleges that did not provide courses within this area, only six reported they had plans to initiate such curricula in the near future.<sup>103</sup> None of the 250 responding schools believed that the majority of their graduates would be competent sex educators, according to Rubin and Malfetti. In fact, when asked what percentage of their graduates would be prepared to teach sex education, the most frequently cited category was zero percent with the mean being ten percent.<sup>104</sup> The authors contended that they believed the ten percent figure was an overestimation.<sup>105</sup>

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<sup>102</sup> Malfetti and Rubin, op. cit., p. 217.

<sup>103</sup> Ibid.

<sup>104</sup> Ibid.

<sup>105</sup> Ibid.

Allen and King surveyed high school teachers throughout the nation in 1970 and found that fifty-seven percent of those teaching sex education had one semester or less of training for such instruction.<sup>106</sup>

"Teacher certification in family relations education was held by only six percent of the teachers, yet many teachers responded in favor of it."<sup>107</sup>

Furthermore, it was revealed that teachers possessing degrees or certificates above the baccalaureate level placed more importance on permitting students to form their own conclusions regarding controversial sexual topics.<sup>108</sup> The longer an individual had taught sex education courses, the more emphasis he placed upon permitting the students to form their own beliefs in regard to sexual behavior, according to Allen and King.<sup>109</sup>

Obviously, research data indicate that today's sex educators are inadequately prepared to provide human sexuality instruction to youth. If, in fact, educators seriously adhere to the belief that sex education should not be isolated into one specific course but rather permeate the entire curriculum, it would appear that all teachers should be exposed to at least a minimal amount of teacher preparation relating to all aspects of human sexuality. Thus, students' questions relating to human sexuality could be answered satisfactorily as they arise within particular classes rather than having to wait for an answer until the subject

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<sup>106</sup> Alice A. Allen and E. F. King, "Family Relations Courses," Journal of Home Economics, 62:21, January, 1970.

<sup>107</sup> Ibid., p. 22.

<sup>108</sup> Ibid., p. 21.

<sup>109</sup> Ibid.



is discussed in classes of health, biology, or home economics.<sup>110</sup>

The United States Office of Education, foreseeing the need for better prepared sex educators, announced in 1966 that funds would be made available to institutions wishing to implement sex education teacher preparation programs into their curricula.<sup>111</sup> Working closely with this governmental office, New York University has instigated such a program. The curriculum is designed basically for elementary education teachers with completion of the program leading to a master's degree in health with specialization in sex education.<sup>112</sup> As of this date, however, the majority of teachers involved in sex education are either collecting needed factual information on their own or attending seminars and summer workshops in an attempt to become as knowledgeable as possible regarding recent research findings and various teaching methods and materials of human sexuality.<sup>113</sup>

In conclusion, the majority of American parents, educators, and school administrators recognize (1) youths' need and desire for accurate sexual information and (2) that the schools should be able to provide both conducive learning environments and qualified personnel required to initiate sex education programs which will be meaningful to the students. Proposed sex education curricula should be planned and discussed by representatives of the entire community.

However, student surveys revealed that schools and teachers, as

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<sup>110</sup> Florence B. Bennel, "Eliminating Barriers to Sex Education In the Schools," Journal of School Health, 38:68, February, 1968.

<sup>111</sup> Reiss, op. cit., p. 56.

<sup>112</sup> Marian V. Hamburg, "Sex Education in the Elementary School. . . Teacher Preparation," National Elementary Principal, 48:54, November, 1968.

<sup>113</sup> Schulz and Williams, op. cit., p. 19.

well as the home and parents, are failing to provide youth with meaningful answers to their questions of sexuality. No research investigations have been presented that revealed the home or the school as the main source of sexual information for the majority of the youth being surveyed. The failure of the schools to fulfill the role of meaningful sex educators can be due, in part, to (1) their failure to realistically evaluate the sexual needs and interests of students and (2) the immense lack of teacher preparation within the area of human sexuality. It is obvious, however, that most American youth are not collecting the majority of their sexual information from conscious educational efforts of either parents or professional educators.

#### Sex Education Through the Church and Medical Profession

In addition to the home and school, there are other societal institutions within each community which should be able to provide sexual information to youth. Two of these sources, the church and medical profession, offer youth invaluable environments for discussions of sexual topics as they often adhere to a policy of complete privacy and professional confidence for the individual seeking advice. Research findings have indicated, however, that the amount of sex education which is received by youth from either the clergy or medical personnel has been negligible.

In conjunction with the home, the church can perform a major role in helping individuals form their moral values toward sexuality. The church and local clergy should be included as essential components of a total community oriented sex education program.<sup>114</sup> According to

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<sup>114</sup> Lester Kirkendall, Sex Education (New York: Sex Information and Education Council of the United States, 1969), p. 11.



ecclesiastical authorities, the church is seriously failing to meet the needs of youth in regard to sexual topics.<sup>115</sup> Hettlinger reported that it was not until 1930 that the churches officially stated within the Lambeth Conference Report that "... coitus could contribute to the bonds of love in marriage."<sup>116</sup> One of the major reasons that youth consistently report tenuous benefits from the church or clergy in regard to sexual discussions is that "... official Christendom . . . has never really come to terms with romantic love."<sup>117</sup> Hettlinger contended that most youth dismiss church related information as being overly moralistic and quite irrelevant to their current needs.<sup>118</sup>

In the past, the clergy have advocated specific sexual ethics and have issued severe admonishments for those who chose not to accept these values. Due to the paucity at which youth report the church as a meaningful contributor to their sexual education, it appears that the church, if it is to provide a meaningful environment for sexual discussion, must begin to more adequately defend its positions on sexual values and beliefs. Kirkendall reported that "the churches are in the process of overcoming their former reluctance to deal openly with sex. . . ."<sup>119</sup> Most denominations are at this time attempting to initiate sex education programs which will be meaningful to the needs of their respective church members.<sup>120</sup> The churches, according to

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<sup>115</sup> Richard F. Hettlinger, "Sex, The Church, and The College Student," Religious Education, 61:419, November, 1966.

<sup>116</sup> Ibid., p. 420.

<sup>117</sup> Ibid.

<sup>118</sup> Ibid., p. 418.

<sup>119</sup> Kirkendall, loc. cit.

<sup>120</sup> Ibid.

Packard, have recently begun to provide youth with ". . . information and thoughts that stress the positive aspects of human sexuality."<sup>121</sup>

The professional preparation for clergymen in regard to human sexuality has been inadequate by any standard. Discussing data collected by Sexology magazine, McCary reported that among the ministers providing sexuality counselling services ". . . only 15 percent of such counselling services can be considered competent."<sup>122</sup> A study of twenty-three Canadian theological seminaries, involving 229 graduating students, revealed that forty-one percent of these persons received less than three class sessions involving discussions of sexuality and family planning.<sup>123</sup> Ninety percent of these graduating clergymen received less than six weeks of instruction related to marriage and family counselling programs.<sup>124</sup> A similar study of sixty Protestant ministers in the United States revealed a general lack of knowledge among the clergymen relative to the ". . . biological and psychological sciences regarding human sexuality."<sup>125</sup> The majority of these ministers indicated that they desired to offer their services to their church members in regard to sexual matters but agreed that they were insufficiently prepared to

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<sup>121</sup> Vance Packard, The Sexual Wilderness (New York: David McKay Co., Inc., 1968), p. 409.

<sup>122</sup> James Leslie McCary, Human Sexuality (Princeton: D. van Nostrand Co., Inc., 1967), p. 7, citing "Ministers and Sex," Sexology, 25:663, 1959.

<sup>123</sup> C. R. Fielding, "What Is and What Should Be Done Regarding Training in Canadian Theological Colleges," Proceedings of a Symposium for Clergy and Physicians, Counselling in Family Planning (Toronto: The Council for Social Service, The Anglican Church of Canada, 1966), p. 17.

<sup>124</sup> Ibid.

<sup>125</sup> Glenn V. Ramsey, "Sex Questions Asked By the Clergy," cited by Hugo G. Beigel (ed.), Advances In Sex Research (New York: Harper and Row Publishers, Inc., 1963), p. 71.



competently discuss all aspects of human sexuality.<sup>126</sup>

A second community source of sex educators has been the medical profession. While an increasing number of youth are approaching their family doctors with questions of sexuality, medical authorities have been skeptical as to the physician's competencies to discuss all aspects of human sexual development.<sup>127</sup> Harold Lief, for several years an advocate for improved sex education training of the medical student, reported that the medical profession is not being adequately prepared to discuss the diverse sexual problems of their patients.<sup>128</sup> Lief asserted that the majority of doctors undoubtedly know more of the anatomical and physiological details of human sexuality than the patients they treat but lack planned training in the psychological and sociological aspects of human sexuality.<sup>129</sup>

The medical profession, realizing the need for more qualified sex educators and the services their profession can potentially perform within sex education, has begun to initiate widespread programs designed to improve the medical student's knowledge of all aspects of human sexuality. Packard reported that prior to 1965, only three of this nation's medical schools provided sex education programs for future physicians.<sup>130</sup> As of 1967, the number of medical schools providing such training has increased to thirty.<sup>131</sup> According to Masters, as of 1968

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<sup>126</sup> Ibid.

<sup>127</sup> Packard, loc. cit.

<sup>128</sup> The Playboy Forum, "Sex Education In Med School," Playboy, 15:158, June, 1968.

<sup>129</sup> Ibid.

<sup>130</sup> Packard, loc. cit.

<sup>131</sup> Ibid.

there were between forty to fifty of this nation's ninety-two medical schools offering sex education courses to their students.<sup>132</sup> However, the majority of these courses were offered as electives rather than requirements within the medical student's curriculum.<sup>133</sup> During 1969 and early 1970, the Center for the Study of Sex Education in Medicine was formed at the University of Pennsylvania. Lief reported that the program has been eagerly received by eighty-eight of the nation's medical schools and that increased sex education training is presently being administered in over half of these schools.<sup>134</sup>

The extent to which youth report the church and medical profession as sources of sex education is difficult to interpret statistically. Many investigations do not provide categories of "church" or "medical profession" for students indicating where they have received sex education. Unfortunately, these institutions are quite often included on student surveys as "other sources" of sex education. Nevertheless, both the churches and medical profession have voiced desires to help provide youth with accurate and meaningful answers to their questions regarding sexual information, behavior, and values. Both the theological seminaries and medical schools have reported that their respective students have been insufficiently trained to competently discuss all aspects of human sexuality with the public. However, both institutions are presently initiating programs of human sexuality instruction that will hopefully alleviate present deficiencies so as to

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<sup>132</sup> The Playboy Forum, loc. cit.

<sup>133</sup> Ibid.

<sup>134</sup> Harold L. Lief, "New Developments in the Sex Education of the Physician," Journal of the American Medical Association, 212:1864, June 15, 1970.



prepare clergymen and physicians who are more knowledgeable and more aware of the public's sexual problems, needs, and interests.

### Student Sexual Knowledge

It is undoubtedly true that the average adolescent is better informed in regard to sexuality than were his parents or grandparents when they were adolescents. However, present research findings have revealed that "the knowledge possessed by the average adolescent and young adult regarding the so called 'facts of life' is inadequate by almost any standard."<sup>135</sup> Unlike other educational, societal, or cultural values our society wishes to transmit to today's youth, little effort has been made to delegate prescribed responsibilities for the organized dissemination of sexual information. As previously discussed, institutions traditionally responsible for educating youth, such as the home, school, and church have been relatively ineffective as modes of sex education. For this reason, adolescents are presently being forced to gather minuscule amounts of sexual information from a multitude of sources. The resulting effect being that the majority of youth have acquired many misconceptions and inaccurate facts relating to human sexuality. Richardson reported that whereas today's society is characterized by more open discussions of sexuality ". . . this does not necessarily lead to a more enlightened and informed adolescent."<sup>136</sup>

Inasmuch as teachers, parents, and clergymen are failing, for the most part, as meaningful sex educators, adolescents are forced to collect sexual information from other sources. The two major sources of

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<sup>135</sup> Crawley, et al., Reproduction, Sex, and Preparation for Marriage, op. cit., p. iii.

<sup>136</sup> Charles E. Richardson, "Education For Family Planning," Journal of School Health, 39:539, October, 1969.

sexual information cited by youth today are peer group discussions and the mass media; both having been proven to be generally inadequate sources of accurate and realistic sexual information. Lorand contended that in her investigations of high school and college students, discussions surrounding sexuality were based upon a searching for knowledge as well as for the pure enjoyment of the discussions.<sup>137</sup> The extent to which the peer group and mass media often serve as both initial and continued major sources of sexual information for youth has been substantiated by several investigations. Juhasz reported that sixty percent of the males and fifty percent of the females in her study stated that "printed matter" was their primary source of sexual information.<sup>138</sup> The study also revealed that only ten percent of all the subjects reported that their parents provided sexual information at the appropriate times in their lives.<sup>139</sup> In a 1970 survey of 793 high school students, peer group discussions were listed as the primary source of sexual information by twenty-eight percent of the subjects.<sup>140</sup> Peer group discussions and printed matter were the most frequently cited sources of sexual information among 893 Canadian college students.<sup>141</sup> In the above investigations, parents, teachers, or religious leaders were never cited as the major contributor of sex information for the collective subject population being surveyed.

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<sup>137</sup> Rhoda L. Lorand, Love, Sex, and the Teenager (New York: The MacMillan Co., 1966), p. 3.

<sup>138</sup> Anne McCreary Juhasz, "Background Factors, Extent of Sex Knowledge and Source of Information," Journal of School Health, 39:38, January, 1969.

<sup>139</sup> Ibid.

<sup>140</sup> The Playboy Forum, loc. cit.

<sup>141</sup> Juhasz, op. cit., p. 33.



The relative value of peer group discussions regarding sexuality is often negligible in respect to the collection of accurate facts.

Juhasz' study permitted the subjects to subjectively rate themselves as to the amount or degree of sexual knowledge they perceived themselves as possessing. The subjects were then administered a sex knowledge testing instrument. The author concluded that there was no relationship between the subjects' self-analysis and the actual test score results.<sup>142</sup> While

no standard of adequacy or inadequacy was disclosed, Juhasz reported that over two thirds of the subjects lacked adequate sexual knowledge as measured by the testing instrument employed in her study.<sup>143</sup> Juhasz concluded that there was no topic in which the majority of the students were well informed and they were unable to realistically evaluate their extent of present sexual knowledge.<sup>144</sup>

The above investigation indicated that peer group sex education was not an adequate method for the collection of accurate sex information by the adolescent. Regarding youths' insufficient sexual knowledge, Elia and Gebhard asserted that ". . . a large portion of this mislabeled and incorrect information is the product of childrens' pooled ignorance. . . ." <sup>145</sup> Masters and Johnson contended that the prevalence of incorrect information being

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<sup>142</sup> Anne McCreary Juhasz, "How Accurate Are Student Evaluations of Their Knowledge of Human Sexuality?," Journal of School Health, 37:412, October, 1967.

<sup>143</sup> Juhasz, "Background Factors, Extent of Sex Knowledge and Source of Information," loc. cit.

<sup>144</sup> Juhasz, "How Accurate Are Student Evaluations of Their Knowledge of Human Sexuality?," loc. cit.

<sup>145</sup> James Elia and Paul Gebhard, "Sexuality and Sexual Learning In Childhood," Phi Delta Kappan, 50:401, March, 1969.

transmitted through the peer culture often ". . . works as a barrier to sex education from adults."<sup>146</sup>

In addition to peer group discussions, another primary source of sex education for today's youth is the many phases of the mass media. Television, motion pictures, newspapers, books, records, bill board advertisements, and other sources, have capitalized on youths' ardent search for sexual information. The lack of accurate, realistic sexual information, which frequently characterizes mass media sources, has been criticized by educators and parents. The immense influence that the mass media have upon youth has been recognized for many years. Blumer reported that it is not unusual for adolescents to imitate hair styles, clothing styles, or personal mannerisms of famous individuals.<sup>147</sup> "Love making techniques are also imitated and copied."<sup>148</sup> Blumer concluded that whereas most of these imitative actions are performed by trial and error techniques, much of the information collected through the mass media sources is unconsciously incorporated into the adolescent's actual conduct.<sup>149</sup> Although the results of Blumer's investigation are currently outdated, the impact of the mass media upon today's youth is probably equally as great.

Unfortunately, the mass media have frequently attempted to capitalize on the sensuosity of sexuality and portray sexual events in

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<sup>146</sup> William H. Masters and Virginia E. Johnson, "Interview With the Authors of Human Sexual Response," personal interview, Playboy, 15:199, May, 1968.

<sup>147</sup> Herbert Blumer, Motion Pictures and Youth (New York: The MacMillan Co., 1933), p. 56.

<sup>148</sup> Ibid.

<sup>149</sup> Ibid.



an unrealistic manner. Crawley, and others, concluded that there is actually a dichotomy between what is presented through the mass media and how society expects youth to behave sexually.<sup>150</sup> Kirkendall observed that while the mass media undoubtedly can be a powerful source of sex education, the main emphasis portrayed by these media has been ". . . toward casual, irresponsible sexuality."<sup>151</sup> Packard asserted that youth today, due to unrealistic publicity, feel pressured into sexual relationships because this is how the mass media have portrayed youth as behaving.<sup>152</sup> Observing the titles of recent song recordings, reading motion picture titles and advertisements, or perusing through book stores reveals how often today's youth are inundated with overly sensuous, unrealistic situations of sexuality.

Most educational authorities conclude that the mass media can potentially provide excellent sources for dispensing accurate sex information to large numbers of individuals. Indeed, there are presently many educators and other interested persons involved in planning educational television programs, preparing books and other reading materials, as well as producing many educationally worthy motion pictures for use by today's youth. Nevertheless, the production and presentation of educationally accurate sexual information, which is meaningful to youth, has been insufficient. Thus, youth are collecting sexual information from the most readily available, although not necessarily the most educationally desirable, mass media sources.

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<sup>150</sup>Crawley, et al., op. cit., p. 106.

<sup>151</sup>Kirkendall, op. cit., pp. 19-20.

<sup>152</sup>Packard, op. cit., p. 35.

Various investigations have indicated male and female differences in respect to the amount of accurate sexual information possessed by individuals and from what sources this information was received. Bardis reported that the test scores of forty-five males and forty-five females as measured by the McHugh Sex Knowledge Inventory indicated that the males recorded a higher mean score.<sup>153</sup> He also reported that among both sexes, there was a positive correlation between high test scores and (1) age, (2) academic class, and (3) amount of parental education.<sup>154</sup> Juhasz concluded that in her study of 893 college students, the males appeared to be better informed than the females in overall knowledge of sexual topics.<sup>155</sup> According to Juhasz, both the males and females involved in her study possessed inadequate knowledge of their own respective sexual organs and functions and possessed even less knowledge of the bodily structures and functions of the opposite sex.<sup>156</sup> The same study indicated that eighty percent of both sexes possessed negligible information regarding venereal disease.<sup>157</sup> While investigating the sexual knowledge of college students, Kilander disclosed that present college students revealed only a slight increase in knowledge in comparison to college students tested twenty-five years ago.<sup>158</sup>

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<sup>153</sup> Panos D. Bardis, "Influences of Family Life Education on Sex Knowledge," Journal of Marriage and the Family, 25:88, February, 1963.

<sup>154</sup> Ibid.

<sup>155</sup> Juhasz, "Background Factors, Extent of Sex Knowledge and Source of Information," op. cit., p. 38.

<sup>156</sup> Juhasz, "How Accurate Are Student Evaluations of Their Knowledge of Human Sexuality?," loc. cit.

<sup>157</sup> Ibid., p. 411.

<sup>158</sup> H. Frederick Kilander, "A Survey of the Public's Knowledge of Certain Aspects of Human Reproduction," Journal of School Health, 29:215, June 1959.



Additionally, Kilander concluded that among the students tested in his study (1) the male students knew more about their own bodily structures and functions than the females knew about their own sexual anatomy and (2) the males were better informed than the females regarding questions about the opposite sex.<sup>159</sup>

The fact that peer group discussions and the mass media are the major sources of sexual information for both males and females has been previously discussed; however, this appears to be more true of males than of females.<sup>159</sup> Juhasz reported that among 893 college students, females listed their parents as a source of sexual information twice as frequently as did the males.<sup>161</sup>

Presently, the influence of the home, school, or church upon youth as sources of initial and continued sex education is negligible compared to peer group discussions and the mass media. The exigency for better qualified sex educators in addition to sex education programs which accurately and realistically discuss human sexuality is reflected by the serious lack of sexual information and misinformation possessed by today's youth. Currently, adolescents generally indicate a desire for increased sexual discussions between themselves and their parents, teachers, and clergymen. However, previous approaches toward sex education by these individuals have been reported by youth as usually being irrelevant to their sexual needs and interests.

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<sup>159</sup> Ibid.

<sup>160</sup> Juhasz, "Background Factors, Extent of Sex Knowledge, and Source of Information," op. cit., p. 33.

<sup>161</sup> Ibid.

Summary

This review of literature has been an eclectic synopsis of recent and pertinent research regarding the goals and purposes of sex education within the home, school, and church. Additionally, research investigations which were relevant to youth's general sexual knowledge and methods of collecting sexual information were discussed. It was apparent that although youth have extensively utilized the mass media and peer group discussions as sources of sexual information, they, as well as adults, were supportive of increased sex education efforts within the home, school, and church.



## CHAPTER III

### PROCEDURE

#### Introduction

The participants in the study were administered a comprehensive questionnaire which was constructed to collect information regarding the subjects' (1) personal history, (2) previous sex education, (3) present sexual knowledge, (4) attitudes regarding youths' obtainment of sexual information, and (5) attitudes regarding the present and future sex education curricular availabilities at Appalachian State University.

All students voluntarily participated in the study and the questionnaire was administered to all the subjects simultaneously within the same building. The subjects were divided into strata according to academic class and sex for the purpose of comparative analysis of their attitudinal responses and their sex knowledge test scores. Each student independently completed the questionnaire. The data collected from each stratum were then totaled, which provided percentage data for strata comparisons. The sex knowledge inventory was analyzed according to each stratum's percentage of correct and incorrect responses and mean test scores.

#### Subjects

The subjects for this study were all full-time undergraduate students at Appalachian State University. A comprehensive list identifying all full-time undergraduate students who had registered for spring

quarter, 1970, was obtained from the school's Registrar's Office. The Computer Center arranged this total student listing according to the males and females within each of the four undergraduate academic classes. Thus, eight distinct strata of all full-time undergraduate students were obtained. A stratified probability sample was drawn from each stratum in order to determine those students who would be invited to participate in the study. The number of students selected within each stratum was proportional to the percentage each stratum represented within the entire full-time undergraduate student population. Data presented within Table 1 reveal that among 4,808 undergraduate students registering as of spring quarter, 814, or 16.9 percent, were selected to participate in the study. Of the 814 students initially invited to

Table 1. Subject Availability, Selection, and Actual Strata Representation

Strata	Total N Per Strata	% of Total N	N and % Contacted		N and % Com- pleting Study	
Freshman Males	712	14.81	95	11.67	28	12.39
Freshman Females	892	18.55	139	17.08	39	17.26
Sophomore Males	452	9.40	80	9.83	23	10.18
Sophomore Females	589	12.25	98	12.04	34	15.04
Junior Males	684	14.23	106	13.02	21	9.29
Junior Females	639	13.29	102	12.53	29	12.83
Senior Males	437 <sup>a</sup>	9.09	95	11.67	24	10.62
Senior Females	403 <sup>a</sup>	8.38	99	12.16	28	12.39
	<u>4,808</u>	<u>100.00</u>	<u>814</u>	<u>100.00</u>	<u>226</u>	<u>100.00</u>

<sup>a</sup> These strata do not include those students away from the university performing student teaching during spring quarter, 1970.



participate in the study, 226, or 27.8 percent, responded affirmatively. The strata sizes ranged from twenty-one to thirty-nine students with the mean stratum size being 28.3 students.

Contacting the subjects. An original letter of introduction and invitation to participate in the study was sent to the 814 students who had been randomly selected. Those students residing on campus received the letter through their individual mail boxes provided by the institution's post office. Off-campus students received this initial letter through normal mail service. The students were asked to complete and return the detachable portion of the letter to the school post office indicating whether or not they desired to participate in the study. The original letter of invitation was answered affirmatively by 148 students. One week after the original letter was sent to the students, a second letter was sent to only those students who had not returned the original letter. Seventy-eight additional affirmative replies were obtained from the second letter providing a total of 226 students who had agreed to participate in the study.

The day before the questionnaire was to be administered, the 226 subjects participating in the study were sent memorandums reminding them of the date, time, and location of the testing session. This correspondence was delivered by the previously discussed procedure. On the day the questionnaire was to be administered, all faculty members were provided with a memorandum and asked to read it in each of their classes. This letter was a further reminder to those students participating in the study of the time, date, and location of the testing session. Of the 226 students who had agreed to participate in the study, all were present for the administration of the instrument. Copies of all

correspondence sent to the students and faculty can be found in Appendix B, page 156.

### Testing Instrument

The first section of the questionnaire was designed to collect personal history information from each subject. Information pertaining to each student's class rank, age, sex, race, religion, and marital status was obtained from this section of the questionnaire. This data provided more detailed characteristics of the subjects participating in the study.

Information regarding the subjects' previous sex education was included within the second section of the questionnaire. Data as to where, when, and from what individuals the subjects had received sex education were collected within this section of the instrument. Additionally, a list of twenty-five sexual topics was presented for the students to evaluate both the extent of discussion they had obtained regarding each topic and how knowledgeable they perceived themselves about each topic. The method of rating was based upon the Likert technique of scale construction.

The sex knowledge inventory comprised the third portion of the questionnaire. The test consisted of one hundred questions which were divided into seven topical areas of human sexuality. Each section of the test was provided with an answer list to be used for selecting answers for only that particular section of the test. Over twenty-five sources were reviewed for the selection of the most pertinent sexual information to be used for the questions in the test. The test questions were constructed so that no term which was to be used as a possible answer selection appeared in the questions themselves. The



answer lists were constructed so that each list contained more answer selections than questions asked. The additional answer choices were carefully selected so as to be pertinent to the particular sexual topic being discussed. A correction factor which would compensate for random guessing was not applied to the test scores. The manner in which the test questions and answer lists were constructed would have made such a factor negligible and was not essential for the purposes of this investigation. Examples of test questions and answer selection lists can be found in Appendix A, page 134.

The fourth part of the questionnaire, similar to the second section, provided the subjects with an opportunity to indicate where, when, and from what individuals they personally believed youth should receive sex education.

Subjects' attitudes regarding both the present and future sex education opportunities at this university were collected in the final section of the questionnaire. Additionally, the participants were asked to indicate where and from whom they had received sex education while attending Appalachian State University.

Pilot study. The original questionnaire was administered to eleven staff members, seven graduate students, and thirty undergraduate students. There were two purposes for this preliminary investigation. First, the staff members and graduate students provided pertinent criticisms and suggestions which contributed to the final refinement of the instrument. Secondly, the thirty undergraduate students, representing all eight strata, actually completed the entire questionnaire once but answered the sex knowledge inventory twice. This procedure helped determine (1) an accurate estimate of the length of time the instrument

would take to complete and (2) provided, by the test, re-test method, a coefficient of reliability. A coefficient of reliability of .94 was obtained from this group of students for the sex knowledge inventory. The standard error of this coefficient of correlation was found to be .02. The Pearson Product-Moment method of correlation was employed for determining the coefficient of reliability. A copy of the correlation chart is presented in Appendix C, page 162. The extent to which the pilot group of undergraduate students were representative of the subjects participating in the final study is revealed by data within Table 2. No student participating in the pilot study was invited to participate in the final administration of the questionnaire.

Table 2. Statistical Comparison of the Sex Knowledge Inventory Scores Between Pilot Group Subjects and the Entire 226 Subjects Completing Final Study

Subjects	Mean	Median	Standard Deviation	Range of Scores
Pilot Group Subjects	65.03%	66.00%	10.47%	43%(85%-43%)
Study's 226 Subjects	64.04%	64.76%	11.94%	66%(96%-31%)

#### Administration of the Questionnaire

On May 6, 1970, the questionnaire was administered to the 226 subjects participating in the study. The testing location was in the university cafeteria, which provided a comfortable and nearly identical environment for all the students completing the instrument. The testing session was not begun until all participants had arrived and were seated. The definition of sex education, as presented in Chapter I, was read to the subjects twice and they were instructed to use this definition as a



basis for what they should consider as sex education for the purposes of this study. The subjects were instructed that there was no time limit for completing the questionnaire but that they should take as much time as necessary to adequately and accurately complete the entire instrument. The first subject finished within forty-seven minutes with the last subject requiring one hour and forty-five minutes to complete the questionnaire. Seventy percent of the subjects completed the instrument within fifty-five minutes to one hour and fifteen minutes. Less than ten percent of the subjects completed the questionnaire in less than fifty-five minutes.

During the testing session, the participants were permitted to ask claritive questions regarding the questionnaire. The author, assisted by one graduate student and one undergraduate student who had worked closely with the study from its onset, answered all questions. Subject's questions regarding the sex knowledge inventory were answered exclusively by the author.

#### Statistics Used in the Study

As this investigation was designed to be basically explorative, the majority of the data were presented in the form of stratum percentages or comparative strata percentages. A group frequency of the sex knowledge inventory scores obtained by the entire subject population was tabulated and used in determining measures of central tendency and standard deviation. A copy of the group frequency table is presented in Appendix D, page 166. The coefficient of reliability for the sex knowledge inventory, as previously discussed, was determined by the test, re-test method and was computed on the Pearson Product-Moment chart.

Summary

Of the 814 undergraduate students originally invited to participate in the study, 226, or 27.8 percent, actually agreed to complete the questionnaire. The comprehensive measuring instrument was designed to determine each subject's personal history, previous sex education, present sexual knowledge, and attitudes regarding sex education. The questionnaire was administered concurrently to all participants within the same testing location. The majority of the data were collected in the form of percentages for the purpose of individual stratum analysis as well as for strata comparisons.



## CHAPTER IV

### ANALYSIS OF DATA

#### Introduction

Data relevant to the subjects' previous sex education, attitudes regarding youths' obtainment of sex education, and attitudes regarding sex education curricular availabilities at Appalachian State University are tabulated and discussed in the form of strata percentages or comparative male-female percentages. Additionally, presentation of mean scores and percentages of correct answers obtained on the sex knowledge inventory are analyzed for each stratum and analyzed comparatively by sex.

#### Personal History of Subjects

Background characteristics of the students participating in this study are provided within Tables 3 and 4. All of the 226 participants were Caucasian and 89.92 percent of them belonged to Protestant religious denominations. Seven students, or 3.10 percent, indicated that they were presently married whereas 219, or 96.90 percent, reported that they were single. Approximately eighty-eight percent of the participants resided within university dormitories with the remaining twelve percent of the subjects residing off-campus. The majority of the subject population were characterized as being Caucasian, Protestant, single, and residing in the university's dormitories. None of the subjects reported that they were parents. Twenty-five various academic majors were declared among the participants with nine subjects undecided upon a

Table 3. Mean Ages, Race, and Religious Preference of Subjects

Strata *	Mean Age in Years	<u>Race</u>				<u>Religious Preference</u>				
		Caucasian	Negro	Oriental	Other	Protestant	Catholic	Jewish	No Preference	Other
F. M.	18.69	39				35	2		2	
F. F.	18.94	28				24	1		3	
S. M.	20.59	23				21	1	1		
S. F.	20.10	34				32	2			
J. M.	20.94	21				19			1	1
J. F.	20.94	29				27	1		1	
Sr. M.	22.78	24				20	2		2	
Sr. F.	21.81	28				25	1		2	
		<u>226</u>				<u>203</u>	<u>10</u>	<u>1</u>	<u>11</u>	<u>1</u>

Table 4. Marital Status and Local Residency of Subjects

Strata *	<u>Marital Status</u>					<u>Local Residency</u>		
	Single	Married	Widow/Widower	Separated	Divorced	Campus Dormitory	Off-Campus Residence	Other Residence
F. M.	28					24	4	
F. F.	39					39		
S. M.	23					16	7	
S. F.	34					34		
J. M.	21					17	4	
J. F.	29					29		
Sr. M.	21	3				14	10	
Sr. F.	24	4				25	3	
	<u>219</u>	<u>7</u>				<u>198</u>	<u>28</u>	

\*

Strata representation for Tables 3 and 4: Freshman Males (F.M.); Freshman Females (F.F.); Sophomore Males (S.M.); Sophomore Females (S.F.); Junior Males (J.M.); Junior Females (J.F.); Senior Males (Sr.M); Senior Females (Sr.F.).



major at the time of the study. A list of the academic majors declared by the subjects is presented in Appendix E, page 168.

Since few respondents indicated that they were either married, residing off-campus, or belonged to non-Protestant religious denominations, detailed comparisons of the sex education attitudes and the sex knowledge inventory scores between (1) married and single subjects, (2) subjects residing on and off-campus, and (3) subjects belonging to Protestant and non-Protestant religious faiths were not presented.

#### Subjects' Previous Sex Education

Sex education received in the home. The frequency with which the subjects received sex education within the home varied according to sex. Additionally, for both the males and females, sex education was received within the home more often at particular ages than during other times of the subjects' lives. Data presented in Table 5 reveal that of the 226 subjects, only sixteen, or 7.08 percent, reported receiving sex education within the home prior to seven years of age. However, during the ages of seven to fifteen years, the home and parents became more influential as a source of sex education for the subjects. In fact, most of the subjects obtained sex education within the home more frequently during the ages of seven to fifteen years than during any other age range in their lives. Over sixty percent of the participants reported receiving some form of sex education within the home during the ages of seven to fifteen years. All strata, except senior males, indicated that they had received sex education within the home less frequently after fifteen years of age than during the ages of seven to fifteen years. These findings are in agreement with data reported by

other investigations which indicated that youth receive sex education within the home less frequently as they approach middle and late adolescence.<sup>1,2</sup> Collectively, only 36.73 percent of the subjects reported receiving sex education within the home after fifteen years of age. More than one half of the subjects disclosed that they had never been provided with sex education within their homes. Generally, continuous sex education throughout childhood and adolescence was not received by the students within the home. However, the females received sexual information within the home more often than the males. Male-female comparisons regarding the frequency at which sex education was received within the home at particular ages is presented in Table 6. As discussed previously, both sexes infrequently reported obtaining information regarding sexuality from sources within the home prior to seven years of age. Before seven years of age, only 6.25 percent of the males and 7.69 percent of the females had received sex education within the home. Sexual information obtained within the home was reported more than twice as often by the females than the males during the ages of seven to fifteen years. The majority of the females, 82.31 percent, indicated that they had been provided with sexual information within the home during the ages of seven to fifteen years. However, only 38.54 percent of the males reported obtaining sex education within the home during this age range. Both sexes reported receiving sex education within the home less frequently after fifteen years of age than during

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<sup>1</sup>Robert R. Bell, "Parental-Child Conflicts in Sexual Values," Journal of Social Issues, 22:35, April, 1966.

<sup>2</sup>Gordon Shipman, "The Psychodynamics of Sex Education," The Family Coordinator, 17:3, January, 1968.



Table 5. Frequency of Subjects Receiving Sex Education Within the Home During Various Ages

Strata	Under Six Years of Age	7 - 15 Years of Age	16 Years of Age and Older	Received No Sex Education at Home
Freshman Males	2 (7.14%)	11 (39.29%)	8 (25.57%)	12 (42.86%)
Freshman Females	6 (15.38%)	35 (89.74%)	18 (46.15%)	1 (2.56%)
Sophomore Males	2 (8.70%)	10 (43.48%)	8 (34.78%)	10 (43.48%)
Sophomore Females	0 (0.00%)	28 (82.35%)	19 (55.88%)	3 (8.82%)
Junior Males	1 (4.76%)	10 (47.62%)	3 (14.29%)	10 (47.62%)
Junior Females	3 (10.34%)	21 (72.41%)	11 (37.93%)	5 (17.24%)
Senior Males	1 (4.17%)	6 (25.00%)	8 (33.33%)	13 (54.17%)
Senior Females	1 (3.57%)	23 (82.14%)	8 (28.57%)	5 (17.86%)
Total for all Strata	16 (7.08%)	144 (63.72%)	83 (36.73%)	59 (26.11%)

seven to fifteen years of age. The females, however, received sex education within the home more frequently than the males after fifteen years of age. The extent to which the males consistently received less sex education within the home than the females is revealed by the fact that three fourths of the fifty-nine subjects who reported receiving no sex education at home were males. Of the ninety-six male participants, forty-five, or 46.88 percent, indicated that they never had been provided with sexual information within the home. Conversely, only fourteen, or 10.77 percent, of the females indicated that they had received no sex education at home.

There was no conclusive relationship between the strata's academic class rank and the frequency with which the subjects reported receiving sex education in the home. However, the frequency of never receiving sex education within the home generally increased for both sexes as the strata progressed from freshman to senior class rank.

Table 6. Male-Female Frequency Comparisons of Sex Education Received Within the Home During Various Ages

Subjects	Under Six Years of Age	7 - 15 Years of Age	16 Years of Age and Older	Received No Sex Education at Home
Males	6 (6.25%)	37 (38.54%)	27 (28.13%)	45 (46.88%)
Females	10 (7.69%)	107 (82.31%)	56 (43.08%)	14 (10.77%)

Sex education received in school. The frequency with which the subjects reported receiving sex education in school is presented in Table 7. Only four subjects, or 1.77 percent, indicated that they had



received sex education during pre-elementary education. Of course, probably not all of the 226 participants attended educationally directed nursery schools or kindergartens. Sex education received during the first through the sixth grades was reported by less than twenty percent of the subjects. The schools' efforts toward providing these students with sex education was reported most frequently during grades seven through nine. Whereas approximately two thirds of the subjects reported that they had received sex education within school during grades seven through nine, only 55.75 percent of them reported receiving sexual information during the tenth through the twelfth grades. For six of the eight strata, the frequency with which sex education was received during grades ten through twelve was less than during grades seven through nine. Additionally, the extent with which sex education was received by the subjects after their freshman year of college decreased during successive years of college attendance.

As with sex education received within the home, the females reported the school as a source of sex education more frequently than the males. Data presented in Table 8 reveal that sex education received during grades one through six was seldomly reported by either sex; however, the females obtained sex education during these grades over three times as often than the males. In fact, less than ten percent of the males reported receiving sex education in school during the first through the sixth grades. During the seventh through the ninth grades, both the males and females generally reported obtaining sex education in school more frequently than during grades one through six. Approximately seventy-three percent of the females and sixty-one percent of the males received sex education in school during the seventh through the ninth grades. However, during grades ten through twelve, both the

Table 7. Frequency of Subjects Receiving Sex Education Within School During Various Grade Levels

Strata	Prior to					College Freshman	College Sophomore	College Junior	College Senior*
	First Grade	Grades 1-6	Grades 7-9	Grades 10-12					
Freshman Males	0 (0.00%)	1 (3.57%)	19 (67.86%)	18 (64.29%)	13 (46.43%)				
Freshman Females	3 (7.69%)	8 (20.51%)	31 (79.49%)	22 (56.41%)	26 (66.76%)				
Sophomore Males	0 (0.00%)	1 (4.35%)	17 (73.91%)	10 (43.48%)	14 (60.87%)		7 (30.43%)		
Sophomore Females	0 (0.00%)	12 (35.29%)	22 (64.71%)	24 (70.59%)	18 (52.94%)		16 (47.06%)		
Junior Males	0 (0.00%)	1 (4.76%)	15 (71.43%)	7 (33.33%)	14 (66.67%)		5 (23.81%)	5 (23.81%)	
Junior Females	0 (0.00%)	10 (34.48%)	21 (72.41%)	19 (65.51%)	13 (44.83%)		14 (48.28%)	11 (37.93%)	
Senior Males	1 (4.17%)	4 (16.67%)	8 (33.33%)	11 (45.83%)	9 (37.50%)		9 (37.50%)	8 (33.33%)	2 (8.33%)
Senior Females	0 (0.00%)	5 (17.86%)	22 (78.57%)	15 (53.57%)	18 (64.29%)		8 (28.57%)	5 (17.86%)	6 (21.43%)
Total for all Strata	4 (1.77%)	42 (18.58%)	155 (68.58%)	126 (55.75%)	125 (55.31%)		59 (37.11%)	29 (28.43%)	8 (15.38%)

\* These educational levels did not apply to all 226 subjects inasmuch as some participants had not yet attained either sophomore, junior, or senior class status.



males and females reported receiving sexual information in school less frequently than during grades seven through nine. Within each of the primary and secondary grade levels listed in Table 8, the females reported receiving sex education in school more often than did the males. Over fifty percent of both sexes indicated that they had received sex education during their freshman year of college. However, the obtaining of sex education during subsequent years of college attendance was reported less frequently by both the males and females.

Table 8. Male-Female Frequency Comparisons of Sex Education Received Within School During Various Grade Levels

Grade Level	Males	Females
Prior to First Grade	1 (1.04%)	3 (2.31%)
Grades 1-6	7 (7.29%)	35 (26.92%)
Grades 7-9	59 (61.46%)	96 (73.85%)
Grades 10-12	46 (47.92%)	80 (61.54%)
College Freshman	50 (52.08%)	75 (57.69%)
College Sophomore*	21 (30.88%)	38 (41.76%)
College Junior*	13 (28.89%)	16 (28.07%)
College Senior*	2 (8.33%)	6 (21.43%)

\* These educational divisions did not apply to all 226 subjects inasmuch as some participants had not yet attained either sophomore, junior, or senior class status.

Strata characteristics of sex education received in the school were more divergent than the trends regarding sex education received in the home. For the total subject population in this investigation, the schools were not as consistent as the homes in either presenting or not

presenting sexual information at particular ages. However, all male strata, except senior males, received sex education within school most frequently during grades seven through nine. Similarly, all female strata, except sophomore females, obtained sex education most often during the seventh through the ninth grades.

Sex education received through the church. The church fulfilled only a marginal role in the total sex education received by the majority of the subjects. Data are presented in Table 9 which indicate the frequency that each strata cited the church as a source of sexual information. For all strata, sex education obtained through actual church services was almost non-existent. Less than five percent of the total subjects indicated receiving sex education through formal church services. Approximately one fifth of the subjects responded that they had obtained sexual information by means of special church oriented classes. Personal conferences with clergymen regarding sexuality were reported by less than ten percent of the participants. In fact, 163 of the 226 subjects, or 72.12 percent, reported that they had received no sex education through the church.

Data in Table 10 reveal a similarity among male-female responses as to the frequency the church was cited as a source of sex education. Approximately one fifth of both sexes indicated receiving sexual information through special church classes. The fact that over seventy percent of both sexes indicated receiving no sex education through the church was in accordance with findings of other investigations.<sup>3</sup> Seven

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<sup>3</sup> Richard F. Hettlinger, "Sex, The Church, and The College Student," Religious Education, 61:419, November, 1966.



Table 9. Frequency of Subjects Receiving Sex Education Through the Church

Strata	During Church Service	Special Church Classes	Personal Conference with Clergymen	Received No Sex Education Through Church
Freshman Males	1 (3.57%)	5 (17.86%)	0 (0.00%)	22 (78.57%)
Freshman Females	3 (7.69%)	6 (15.38%)	2 (5.13%)	30 (76.92%)
Sophomore Males	0 (0.00%)	5 (21.74%)	5 (21.74%)	15 (65.22%)
Sophomore Females	3 (8.82%)	13 (38.24%)	2 (5.88%)	18 (52.94%)
Junior Males	0 (0.00%)	4 (19.05%)	3 (14.29%)	15 (71.43%)
Junior Females	1 (3.45%)	3 (10.34%)	0 (0.00%)	25 (86.21%)
Senior Males	0 (0.00%)	5 (20.83%)	3 (12.50%)	19 (79.17%)
Senior Females	0 (0.00%)	8 (28.57%)	4 (14.29%)	19 (67.86%)
Total for all Strata	8 (3.54%)	49 (21.68%)	19 (8.41%)	163 (72.12%)

religious denominations were listed by the sixty-three students who responded that they had received sexual information through the church. The Methodist, Baptist, and Lutheran faiths, in that order, were the most frequently cited religious denominations as church sources of sex education.

Subjects' ages or academic class did not affect the frequency with which the participants did or did not report the church as a source of sex education.

Table 10. Male-Female Frequency Comparisons of Sex Education Received Through the Church

Subjects	During Church Service	Special Church Classes	Personal Conference with Clergymen	Received No Sex Education Through Church
Males	1 (1.04%)	19 (19.79%)	11 (11.46%)	71 (73.96%)
Females	7 (5.38%)	30 (23.08%)	8 (6.15%)	92 (70.77%)

Sex education received through the mass media. As revealed through data presented in Table 11, the mass media were frequently cited by the subjects as sources of sex education. For each strata, books were listed as the main source of sexual information among mass media availabilities. Magazines and motion pictures ranked second and third respectively as to the frequency with which the participants reported mass media sources of sexual information. Television was listed as providing sex education for fifty percent of the respondents. Newspapers and radio programs were the two least frequently cited mass media sources of sex education among the subjects.



Table 11. Frequency of Subjects Reporting the Mass Media as Sources of Sex Education

Strata	Television	Radio	Motion Pictures	Books	Magazines	Newspapers
Freshman Males	12 (42.86%)	0 (0.00%)	17 (60.71%)	27 (96.43%)	17 (60.71%)	6 (21.43%)
Freshman Females	24 (61.54%)	5 (12.82%)	28 (71.79%)	38 (97.44%)	30 (76.92%)	15 (38.46%)
Sophomore Males	10 (43.48%)	0 (0.00%)	14 (60.87%)	19 (82.61%)	19 (82.61%)	7 (30.43%)
Sophomore Females	19 (55.88%)	2 (5.88%)	26 (76.47%)	33 (97.06%)	28 (82.35%)	15 (44.12%)
Junior Males	9 (42.86%)	1 (4.76%)	13 (61.90%)	20 (95.24%)	17 (80.95%)	6 (28.57%)
Junior Females	13 (44.83%)	2 (6.90%)	22 (75.86%)	27 (93.10%)	23 (79.31%)	9 (31.03%)
Senior Males	12 (50.00%)	2 (8.33%)	15 (62.50%)	20 (83.33%)	19 (79.17%)	11 (45.83%)
Senior Females	14 (50.00%)	4 (14.29%)	24 (85.71%)	28 (100.00%)	19 (67.86%)	9 (32.14%)
Total for all Strata	113 (50.00%)	16 (7.08%)	159 (70.35%)	212 (93.81%)	172 (76.11%)	78 (34.51%)

Comparative frequencies of male-female utilization of mass media sources for the collection of sexual information are presented in Table 12. For both the males and females, books, magazines, and motion pictures were the three mass media sources of sexual information most frequently cited. Of the six mass media categories presented in Table 12, television was reported as the fourth most prevalent source of sex education for both sexes. Newspapers provided approximately one third of both sexes with sexual information whereas radio programs were listed as sources of sex education by 10.00 percent of the females and 3.13 percent of the males. Within each of the six mass media categories, the females indicated receiving sex education more frequently than did the males. Each of the 226 participants reported receiving sexual information from at least one or more of the six mass media sources examined in this investigation.

Table 12. Male-Female Frequency Comparisons of Sex Education Received From Mass Media Sources

Mass Media Source	Males	Females
Television	43 (44.79%)	70 (53.85%)
Radio	3 (3.13%)	13 (10.00%)
Motion Pictures	59 (61.46%)	100 (76.92%)
Books	86 (89.58%)	126 (96.92%)
Magazines	72 (75.00%)	100 (76.92%)
Newspapers	30 (31.25%)	48 (36.92%)



Specific individuals cited as sources of sex education. The frequency with which the subjects listed particular individuals as sources of sex education is presented in Table 13. Collective percentages for all eight strata indicated that friends or peers provided sexual information most frequently for the majority of the subjects. Obtaining sexual information through personal endeavors was cited by 88.94 percent of the subjects. Approximately eighty percent of the participants cited teachers as sources of sex education. Nearly two thirds of the subjects indicated that their mothers had provided them with sex education whereas fathers were cited by less than one third of the subjects as a source of sex education. Siblings, other familial relatives, and clergymen were infrequently cited by the subjects as sources of sex education.

Male-female comparisons as to the frequency specific individuals were reported as sources of sexual information are recorded in Table 14. The incidence that teachers, peers, and personal endeavors were cited as sources of sex education was approximately equal for both sexes. Both the males and females infrequently cited siblings as sources of sexual information. Brothers were cited as sources of sexual information by less than fifteen percent of either the males or the females. However, the females indicated that sisters had provided them with sexual information almost three times as frequently than did the males. Similarly, other familial relatives were infrequently cited as sources of sex education by either sex; however, they were listed more than twice as often by the females than the males. There was pronounced male-female differentiation regarding parental sources of sex education. Fathers provided sex education to less than one half of the males and to less than one

Table 13. Frequency of Subjects Reporting Specific Individuals as Sources of Sex Education

Strata	Father	Mother	Brother	Sister	Other Relative	Teachers	Clergymen	Friends or Peers	Collected Information by Self
Freshman Males	13 (46.43%)	10 (35.71%)	1 (3.57%)	2 (7.14%)	4 (14.29%)	19 (67.86%)	3 (10.71%)	22 (78.57%)	26 (92.86%)
Freshman Females	9 (23.08%)	34 (87.18%)	5 (12.82%)	8 (20.51%)	9 (23.08%)	29 (74.36%)	6 (15.38%)	34 (87.18%)	35 (89.74%)
Sophomore Males	9 (39.13%)	5 (21.74%)	7 (30.43%)	2 (8.70%)	1 (4.35%)	16 (69.56%)	8 (34.78%)	23 (100.00%)	20 (86.96%)
Sophomore Females	13 (38.24%)	29 (85.29%)	5 (14.71%)	7 (20.59%)	9 (26.47%)	30 (88.24%)	9 (26.47%)	32 (94.12%)	29 (85.29%)
Junior Males	10 (47.62%)	8 (38.10%)	1 (4.76%)	1 (4.76%)	3 (14.29%)	19 (90.48%)	3 (14.29%)	20 (95.24%)	18 (85.71%)
Junior Females	3 (10.34%)	24 (82.76%)	4 (13.79%)	6 (20.69%)	5 (17.24%)	25 (86.21%)	1 (3.45%)	26 (89.66%)	28 (96.55%)
Senior Males	7 (29.17%)	11 (45.83%)	4 (16.67%)	2 (8.33%)	2 (8.33%)	21 (87.50%)	4 (16.67%)	21 (87.50%)	20 (83.33%)
Senior Females	5 (17.86%)	23 (82.14%)	3 (10.71%)	6 (21.43%)	9 (32.14%)	24 (85.71%)	7 (25.00%)	28 (100.00%)	25 (89.29%)
Total for all Strata	69 (30.53%)	144 (63.72%)	30 (13.27%)	34 (15.04%)	42 (18.58%)	183 (80.97%)	41 (18.14%)	206 (91.15%)	201 (88.94%)



fourth of the females. Mothers were cited as sources of sex education by approximately one third of the males; however, 84.62 percent of the females reported their mothers as sex educators. Lack of parental sources of sex education among the males was further indicated in that 42.71 percent of the males reported neither parent as a source of sex education. Conversely, only 12.31 percent of the female subjects indicated that neither parent had provided them with sex education.

Table 14. Male-Female Comparisons of the Frequency of Specific Individuals Cited as Sources of Sex Education

Individual	Males	Females
Father	39 (40.63%)	30 (23.08%)
Mother	34 (35.42%)	110 (84.62%)
Brother	13 (13.54%)	17 (13.08%)
Sister	7 (7.29%)	27 (20.77%)
Other Relative	10 (10.42%)	32 (24.62%)
Teachers	75 (78.13%)	108 (83.08%)
Clergymen	18 (18.75%)	23 (17.69%)
Friends or Peers	86 (89.58%)	120 (92.31%)
Collected Information by Self	84 (87.50%)	117 (90.00%)

Subjects' Evaluations of Extent of  
Discussion and Knowledge Regarding  
Various Sexual Topics

The subjects were asked to indicate the degree to which each of twenty-five selected sexual topics had been discussed with them and to also rate how knowledgeable they believed they were about the same areas of sexuality. The degree of knowledge and the extent of discussion

indicated by each strata for each of the individual twenty-five sexual topics are presented in Appendix F, page 170. The rating scales employed were based on the Likert technique of scale construction and were represented as follows:

Extent of Discussion

- 1 = Discussed very much
- 2 = Discussed, but not thoroughly
- 3 = Briefly discussed
- 4 = Not discussed at all

Extent of Knowledge

- 1 = Have much knowledge in area
- 2 = Have some knowledge in area
- 3 = Have little knowledge in area
- 4 = Have no knowledge in area

By tabulating each subject's self-ratings, a mean intensity for each strata was determined for each topic. A mean intensity was then calculated for each strata in regard to the entire list of sexual topics. The mean intensities of the extent of discussion and extent of knowledge reported by each strata for the entire list of topics are presented in Table 15.

By examining the strata collectively, it was found that for the entire subject population an average intensity of 2.16 was reported regarding the extent to which the sexual topics had been discussed with them. In the above rating scale, the 2.16 intensity would indicate that the subjects believed the topics generally had been adequately, but not extensively discussed with them. Additionally, a 2.15 mean intensity was reported by the subjects in regard to self-perception of their knowledge of the topics. In the scale employed for this investigation, a 2.15 intensity of knowledge would indicate that the subjects perceived themselves as possessing considerably more than "some knowledge" but less than "much knowledge" regarding the composite list of twenty-five sexual topics.



Data presented in Table 15 reveal strata differences regarding the subjects' self-evaluations of both the extent of discussion and extent of knowledge of the sexual topics. In each of the four academic classes, the intensity with which the topics had been discussed was greater for the females than the males. However, in each academic class, except the seniors, the males reported higher degrees of perceived knowledge than did the females. Comparing intensities of discussion with intensities of perceived knowledge it was found that all male strata reported higher intensities of knowledge than intensities of discussion. Conversely, all female strata indicated higher intensities of discussion than intensities of knowledge. Although the females

Table 15. Extent of Discussion and Extent of Knowledge Reported by Subjects Regarding Twenty-Five Selected Sexual Topics

Strata	Mean Intensities of Discussion of Sexual Topics*	Mean Intensities of Knowledge of Sexual Topics*
Freshman Males	2.20	2.11
Freshman Females	2.10	2.26
Sophomore Males	2.32	2.15
Sophomore Females	2.06	2.17
Junior Males	2.31	2.08
Junior Females	2.18	2.26
Senior Males	2.16	2.14
Senior Females	1.96	2.04
Average for all Strata	2.16	2.15

\* In the rating scales discussed on page 84, 1.00 equals the highest possible intensity and 4.00 the lowest possible intensity.

generally indicated receiving more discussion about the topics than did the males, there was no pronounced difference in the degree of knowledge each sex perceived themselves as possessing.

Among the males, the topics reported as being discussed with them most often were: (1) reproductive organs and functions, (2) heredity, (3) premarital sexual relationships, (4) dating, and (5) pregnancy. The topics discussed least often with the males were:

(1) frigidity, (2) infertility and sterilization, (3) child rearing and development, (4) impotency, and (5) pornography. Among the females, many of the same topics were reported as the most and least often discussed. Topics reported as being discussed most often with the females were: (1) menstruation, (2) dating, (3) premarital sexual relationships, (4) pregnancy, and (5) reproductive organs and functions. Topics cited as being least often discussed among the female strata were: (1) impotency, (2) pornography, (3) frigidity, (4) orgasm/climax, and (5) birth control methods.

The males perceived themselves as being most knowledgeable regarding: (1) reproductive organs and functions, (2) intercourse, (3) premarital sexual relationships, (4) dating, and (5) birth control methods. Least knowledgeable topics cited by the males were: (1) frigidity, (2) impotency, (3) infertility and sterilization, (4) child rearing and development, and (5) hormonal functions. Topics of (1) menstruation, (2) dating, (3) ovulation, (4) premarital sexual relationships, and (5) reproductive organs and functions were the areas of sexuality in which the females believed they were most knowledgeable. Topics in which the females believed they were least knowledgeable were: (1) impotency, (2) infertility and sterilization, (3) pornography, (4) frigidity, and (5) hormonal functions. Neither the males nor the females listed venereal



disease among the topics most often discussed or among the topics that they believed they were most knowledgeable.

### Sex Knowledge Inventory

As discussed previously, the instrument employed in this study to determine the subjects' present sexual knowledge consisted of one hundred matching questions which were divided into seven topical areas of sexuality.

The mean scores obtained by each stratum are presented in Table 16. Within each of the four academic classes, analogous mean scores were obtained by the male and female strata. The most substantial difference between male-female mean scores within an academic class was among the junior class rank in which the females obtained a mean test score of 66.14 percent compared to 61.86 percent for the males. Tabulation of the test scores obtained by the subjects revealed that the females obtained a mean score of 64.38 percent compared to 64.34 percent for the male participants. As measured by the testing instrument employed in this investigation, neither sex was convincingly more knowledgeable than the other in regard to the entire sex knowledge test. However, none of the eight strata obtained a mean score as high as seventy percent for the total testing instrument.

Low, positive coefficients of correlation were obtained for each sex when comparing individual test scores with each subject's age. Coefficients of correlation of .26 for the males and .28 for the females were obtained by the Pearson Product-Moment method of correlation when comparing the subjects' test scores and ages. Copies of these correlation charts are found in Appendix C, page 162. However, a .83 coefficient of correlation, determined by rank-order technique, was obtained

when comparing each stratum's mean test score with academic class rank. Generally, the length of time that the subjects had been exposed to the academic and social environment of college was more influential than chronological age in regard to obtaining a high test score on the sex knowledge inventory. Among the females, there was a perfect positive rank-order correlation between higher academic class and higher mean scores obtained by the strata. Additionally, a rank-order coefficient of correlation of .61 was obtained when comparing each stratum's mean test score with the intensity of perceived sexual knowledge reported by each stratum. However, the subjects generally overestimated their degree of knowledge when compared to their actual test scores. The males' perception of their sexual knowledge appeared to be more

Table 16. Mean Score, Standard Deviation, and Range of Scores Obtained by Each Stratum on the One Hundred Question Sex Knowledge Inventory

Strata	Mean Score	Standard Deviation	Range of Scores
Freshman Males	60.79	12.46	53 (89-37)
Freshman Females	58.51	10.68	48 (78-31)
Sophomore Males	66.48	10.53	43 (96-54)
Sophomore Females	64.24	12.69	52 (83-32)
Junior Males	61.86	6.59	28 (73-46)
Junior Females	66.14	10.60	48 (87-40)
Senior Males	68.21	13.44	52 (88-37)
Senior Females	68.64	10.99	42 (84-43)



unrealistic than the females'; although both sexes tended to perceive themselves as possessing a greater degree of knowledge than their test scores substantiated.

The percent of questions answered correctly by each stratum within each division of the sex knowledge test is presented in Table 17. Examining the strata collectively, it was found that generally the subjects were least knowledgeable regarding the (1) male's reproductive structures and functions and (2) venereal diseases. Within each of these topical areas, the subjects correctly answered approximately fifty-four percent of the questions. The majority of the subjects obtained a higher percentage of correct answers within either the areas of (1) reproductive processes and functions or (2) pregnancy and child-birth than in any other section of the test. The subjects were usually more knowledgeable regarding the female's reproductive structures and functions than those of the male.

Table 18 presents comparative percentages of correct answers obtained within each section of the test by the males and females. The females possessed more knowledge than the males regarding the reproductive structures and functions of their own respective sex. The males correctly answered 57.32 percent of the questions regarding their own sexual anatomy whereas the females correctly answered 62.64 percent of the questions pertaining to their reproductive structures and functions. However, the males possessed more knowledge than the females regarding questions of the reproductive structures and functions of the opposite sex. In fact, the males collectively obtained a higher mean score within the area of female reproductive structures and functions than within the area pertaining to their own sexual anatomy.

Table 17. Percentage of Correct Answers Obtained by Each Stratum Within Each Division of the Sex Knowledge Inventory

Strata	* Test Sections						
	A	B	C	D	E	F	G
Freshman Males	56.67%	55.86%	80.54%	70.70%	54.07%	53.60%	53.80%
Freshman Females	43.60%	53.64%	82.27%	71.15%	53.53%	47.20%	54.87%
Sophomore Males	58.27%	59.00%	85.00%	74.80%	64.93%	55.20%	65.80%
Sophomore Females	48.60%	63.86%	82.36%	77.80%	64.73%	58.50%	54.73%
Junior Males	56.53%	60.57%	82.64%	70.25%	60.33%	47.10%	53.00%
Junior Females	56.53%	61.36%	90.00%	79.15%	57.00%	57.90%	60.00%
Senior Males	57.80%	63.71%	86.36%	76.25%	65.53%	63.30%	64.13%
Senior Females	55.93%	71.71%	88.64%	81.25%	65.47%	56.80%	58.60%
Average for all Strata	54.24%	61.21%	84.73%	75.17%	60.70%	54.95%	58.12%

\* Columnar Representation: (A) Male Reproductive Structures and Functions; (B) Female Reproductive Structures and Functions; (C) Reproductive Processes and Functions; (D) Pregnancy and Childbirth; (E) Birth Control Methods and Practices; (F) Venereal Diseases; (G) Prevalent Sexual Practices.



Among four divisions of the sex knowledge inventory, (1) reproductive processes and functions, (2) birth control methods and practices, (3) venereal diseases, and (4) prevalent sexual practices, there was only a slight difference between the percentage of correct answers obtained by the males and females. Both sexes were most knowledgeable within the area of reproductive processes and functions. This was the only one of the seven divisions of the instrument in which either sex obtained a mean of eighty percent or higher of correct answers. Both sexes incorrectly answered approximately forty percent of the questions relating to birth control methods and practices. Likewise, approximately forty-five percent of the questions regarding venereal diseases

Table 18. Comparative Male-Female Percentages of Correct Answers Obtained Within Each Section of the Sex Knowledge Inventory

Test Section	Mean Percentage of Correct Answers Obtained by Males	Mean Percentage of Correct Answers Obtained by Females
Male Reproductive Structures and Functions	57.32%	51.17%
Female Reproductive Structures and Functions	59.79%	62.64%
Reproductive Processes and Functions	83.64%	85.82%
Pregnancy and Childbirth	73.00%	77.34%
Birth Control Methods and Practices	61.22%	60.18%
Venereal Diseases	54.80%	55.10%
Prevalent Sexual Practices	59.18%	57.05%

were incorrectly answered by both the males and females. There was an equal lack of adequate knowledge among both sexes involving questions of prevalent sexual practices. More than forty percent of the questions within this area of the test were incorrectly answered by both the males and females. Second to their degree of knowledge of reproductive processes and functions, both sexes were most knowledgeable within the area of pregnancy and childbirth. The females, who answered 77.34 percent of the questions correctly, were slightly more knowledgeable regarding pregnancy and childbirth than the males, who correctly answered 73.00 percent of the questions. Within each of the four academic classes, the females were more knowledgeable than the males in the area of pregnancy and childbirth.

The data in Table 17 (page 90) indicate that the ability to answer questions correctly within certain areas of the test was affected by the subjects' academic class. Among the females, a higher percentage of correct answers regarding the male's sexual anatomy were obtained among the senior and junior strata than among the freshman and sophomore strata. Similarly, among the males, the ability to correctly answer a higher percentage of questions pertaining to the reproductive structures and functions of the opposite sex was directly related to higher academic class status. Among the males, there was no relationship between the subjects' academic class and the ability to correctly answer questions regarding their own sexual anatomy. However, as the female strata progressed from freshman to senior, generally, their ability to correctly answer questions regarding their own sexual anatomy and functions increased. Among the females, the highest percentage of correct answers involving questions of pregnancy and childbirth was



obtained by the seniors with each preceding academic class obtaining progressively fewer correct answers. The senior males were more knowledgeable of pregnancy and childbirth than any of the other male strata. In each of the seven divisions of the sex knowledge inventory, the senior strata obtained higher percentages of correct answers than the freshman strata for both the males and females.

Subjects' Attitudes Regarding the  
Obtainment of Sex Education

Sex education within the home. Although the participants generally supported the attitude that youth should be provided with sexual information within the home, less than one third of the subjects indicated that sex education should begin prior to the age of six years and continue throughout adolescence. However, no subject reported that sex education should never be available within the home. Examining the attitudes of the subjects collectively, as presented in Table 19, it was found that they believed sex education should be provided to youth within the home most frequently during the ages of seven to fifteen years. Providing sex education to youth within the home after fifteen years of age was supported by over sixty percent of the subjects while only approximately forty-three percent of them supported the attitude that children should receive sex education at home prior to six years of age.

Data presented in Table 20 indicated that the females were more supportive of sex education within the homes than the males. More than one half of the females and less than one third of the males reported that sex education should be provided to youth within the home prior to seven years of age. Over ninety percent of both sexes supported the

Table 19. Percentage of Subjects Supporting Sex Education for Youth Within the Home During Various Ages

Strata	Under Six Years of Age	7 - 15 Years of Age	16 Years of Age and Older	No Sex Educa- tion Should Be Received at Home
Freshman Males	7 (25.00%)	25 (89.29%)	11 (39.29%)	0 (0.00%)
Freshman Females	20 (51.28%)	39 (100.00%)	30 (76.92%)	0 (0.00%)
Sophomore Males	5 (21.74%)	22 (95.65%)	13 (56.52%)	0 (0.00%)
Sophomore Females	19 (55.88%)	31 (91.18%)	29 (85.29%)	0 (0.00%)
Junior Males	5 (23.81%)	20 (95.24%)	4 (19.05%)	0 (0.00%)
Junior Females	17 (58.62%)	25 (86.21%)	21 (72.41%)	0 (0.00%)
Senior Males	11 (45.83%)	22 (91.67%)	13 (54.17%)	0 (0.00%)
Senior Females	15 (53.57%)	28 (100.00%)	21 (75.00%)	0 (0.00%)
Total for all Strata	99 (43.81%)	212 (93.81%)	142 (62.83%)	0 (0.00%)



attitude that youth should receive sexual information within the home during seven to fifteen years of age. The most pronounced male-female attitudinal variance occurred regarding sex education within the home after the age of fifteen years. Providing youth with opportunities to discuss sexuality and collect sexual information within the home after the age of fifteen was supported by more than three fourths of the females and less than one half of the males.

Table 20. Comparative Percentages of Male-Female Attitudes Toward Providing Sex Education to Youth Within the Home During Various Ages

Subjects	Under Six Years of Age	7 - 15 Years of Age	16 Years of Age and Older
Males	28 (29.17%)	89 (92.71%)	41 (42.71%)
Females	71 (54.62%)	123 (94.62%)	101 (77.69%)

While less than ten percent of the subjects reported that they had actually received sex education at home prior to seven years of age, over forty-three percent of them believed sexual information should be available to youth within the home during early childhood. Similarly, only one third of the subjects reported receiving sex education within the home after fifteen years of age; however, approximately two thirds of them believed that, ideally, it should be available during these years of a youth's development. Although less than two thirds of the participants indicated that they had received sexual information at home during the ages of seven to fifteen years, approximately ninety-three

percent of them supported sex education within the home for youth during these ages.

Sex education within the school. Percentage representation of of the subjects' attitudes regarding when youth should receive sex education within school is presented in Table 21. Only exiguous support for providing youth with sex education during pre-elementary education was indicated by the participants. Approximately one fourth of the subjects supported school oriented sex education for children prior to the first grade. However, support for sex education provided to youth during grades one through twelve was indicated by the subjects. Within a youth's elementary and secondary education, support for sex education provided by the school was reported most often during grades seven through nine. Whereas more than seventy percent of the participants believed sex education should be available to youth within the school environment during grades one through six and ten through twelve, 87.61 percent of the subjects were supportive of providing youth with sexual information during grades seven through nine.

Attitudes registered by the subjects revealed that providing youth with opportunities for sex education during college was supported less often than during grades one through twelve. Approximately three fourths of the subjects advocated providing college freshman with sex education; however, only one half or less of the students believed colleges should attempt to provide sexuality curricula to sophomores, juniors, or seniors.

Comparative data presented in Table 22 reveal that the females believed there was an exigency for sex education throughout a youth's



Table 21. Percentage of Subjects Supportive of Sex Education During Various School Grade Levels

Strata	Prior to First Grade	Grades 1-6	Grades 7-9	Grades 10-12	College Freshman	College Sophomore	College Junior	College Senior
Freshman Males	3 (10.71%)	16 (57.14%)	25 (89.29%)	20 (71.43%)	18 (64.29%)	10 (35.71%)	10 (35.71%)	11 (39.29%)
Freshman Females	13 (33.33%)	26 (66.67%)	37 (94.87%)	34 (87.18%)	31 (79.49%)	22 (56.41%)	20 (51.28%)	19 (48.71%)
Sophomore Males	4 (17.39%)	10 (43.48%)	22 (95.65%)	21 (91.30%)	19 (82.61%)	10 (43.48%)	8 (34.78%)	9 (39.13%)
Sophomore Females	12 (35.29%)	27 (79.41%)	31 (91.18%)	29 (85.29%)	28 (82.35%)	20 (58.82%)	18 (52.94%)	18 (52.94%)
Junior Males	0 (0.00%)	14 (66.67%)	13 (61.90%)	11 (52.38%)	14 (66.67%)	4 (19.05%)	4 (19.05%)	8 (38.10%)
Junior Females	5 (17.24%)	25 (86.21%)	24 (82.76%)	25 (86.21%)	24 (82.76%)	19 (65.52%)	17 (58.62%)	17 (58.62%)
Senior Males	6 (25.00%)	17 (70.83%)	20 (83.33%)	17 (70.83%)	13 (54.17%)	13 (54.17%)	8 (33.33%)	10 (41.67%)
Senior Females	10 (35.71%)	26 (92.86%)	26 (92.86%)	23 (82.14%)	22 (78.57%)	18 (64.29%)	15 (53.57%)	15 (53.57%)
Total for all Strata	53 (23.45%)	161 (71.24%)	198 (87.61%)	180 (79.65%)	169 (74.78%)	116 (51.33%)	100 (44.25%)	107 (47.35%)

academic life more frequently than did the males. Although there was only limited support for providing youth with sexual information during kindergarten or nursery school, the females advocated such a policy more than twice as often as did the males. Both sexes agreed that sex education should be provided to youth most frequently during grades seven through nine. However, the females, more often than the males, were supportive of the school's endeavors for providing sex education to youth in grades one through six and ten through twelve. Providing students with sexual information during college, especially after the freshman year, was supported more often among the females than the males.

Table 22. Comparative Percentages of Male-Female Attitudes Toward Providing Sex Education to Youth During Various School Grade Levels

Grade Level	Males	Females
Prior to First Grade	13 (13.54%)	40 (30.77%)
Grades 1-6	57 (59.38%)	104 (80.00%)
Grades 7-9	80 (83.31%)	118 (90.77%)
Grades 10-12	69 (71.88%)	111 (85.38%)
College Freshman	64 (66.67%)	105 (80.77%)
College Sophomore	37 (38.54%)	79 (60.77%)
College Junior	30 (31.25%)	70 (53.85%)
College Senior	20 (20.83%)	41 (31.54%)

The subjects overwhelmingly indicated that sex education should be provided to youth within school more frequently than the extent to which they had actually received such information through school programs. Less than one fourth of the participants actually received sex



education during grades one through six; however, 71.24 percent of the subjects favored such a policy. Additionally, fifty-five percent of the subjects reported actually receiving sexual information during grades ten through twelve whereas over three fourths of them supported sex education programs within the school during these grade levels. Although there was not extensive support for sex education curricula for college students after the freshman year, the subjects did support such a policy more frequently than the degree with which they reported actually receiving sex education during college.

Sex education within the church. Among this group of subjects, providing youth with sex education through the church, especially through special church classes and personal conferences with clergymen, was advocated. As revealed by data in Table 23, over eighty percent of the subjects supported the attitude that the church should provide youth with special classes involving discussions of sexuality. Fifty percent of the respondents believed that clergymen should be available for private or small group discussions with youth regarding topics of sexuality. Less than ten percent of the participants advocated discussions of sexuality during actual church services. Additionally, only 7.96 percent of the subjects indicated that the church should not dispense sexual information to youth at any time.

Data presented in Table 24 indicate that there were similar male-female attitudinal responses to the church's role toward the sex education of youth. Approximately fifty percent of both sexes supported the attitude that clergymen should provide youth with opportunities for personal conferences regarding sexuality. However, the females indicated slightly more support than the males toward providing youth with

**Table 23. Percentage Representation of Subjects' Attitudes  
Regarding the Church's Role Toward the Sex Education of Youth**

<b>Strata</b>	<b>During Church Service</b>	<b>Special Church Classes</b>	<b>Personal Conference with Clergymen</b>	<b>Receive No Sex Education Through Church</b>
<b>Freshman Males</b>	3 (10.71%)	20 (71.43%)	9 (32.14%)	5 (17.86%)
<b>Freshman Females</b>	2 (5.13%)	31 (79.49%)	16 (41.03%)	4 (10.26%)
<b>Sophomore Males</b>	2 (8.70%)	22 (95.65%)	15 (65.22%)	0 (0.00%)
<b>Sophomore Females</b>	2 (5.88%)	31 (91.18%)	12 (35.29%)	3 (8.82%)
<b>Junior Males</b>	0 (0.00%)	15 (71.43%)	11 (52.38%)	3 (14.29%)
<b>Junior Females</b>	2 (6.90%)	26 (89.66%)	18 (62.07%)	1 (3.45%)
<b>Senior Males</b>	3 (12.50%)	18 (75.00%)	14 (58.33%)	2 (8.33%)
<b>Senior Females</b>	4 (14.29%)	26 (92.86%)	18 (64.29%)	0 (0.00%)
<b>Total for all Strata</b>	18 (7.96%)	189 (83.63%)	113 (50.00%)	18 (7.96%)



special church directed classes regarding topics of sexuality. Neither sex frequently advocated that the church fulfill no role toward the sex education of youth.

Table 24. Comparative Percentages of Male-Female Attitudes Toward the Church's Role in the Sex Education of Youth

Subjects	During Church Service	Special Church Classes	Personal Conference with Clergymen	Receive No Sex Education Through Church
Males	8 (8.33%)	75 (78.13%)	49 (51.04%)	10 (10.42%)
Females	10 (7.69%)	114 (87.69%)	64 (49.23%)	8 (6.15%)

As previously discussed, approximately three fourths of the subjects reported receiving no information which had contributed to their present understanding of sexuality through the church; yet, less than ten percent of them advocated that the church provide no sex education to youth. Whereas only one fifth of the participants indicated that they had obtained information regarding sexuality from special church classes, over four fifths of them advocated such church programs for youth. Likewise, less than ten percent of the respondents indicated that they had obtained sex education from personal conferences with clergymen, however, fifty percent of the subjects supported this policy for providing youth with sexual information.

Sex education through the mass media. The majority of the participants advocated the use of various mass media sources by youth for the collection of sexual information. Among the mass media categories listed in Table 25, books were the most frequently listed by all eight

Table 25. Percentage Representation of Subjects' Attitudes Regarding Various Mass Media as Sources of Sex Education

Strata	Television	Radio	Motion Pictures	Books	Magazines	Newspapers
Freshman Males	16 (57.14%)	4 (14.29%)	13 (46.43%)	27 (96.43%)	18 (64.29%)	8 (28.57%)
Freshman Females	22 (56.41%)	10 (25.64%)	21 (53.85%)	35 (89.74%)	26 (66.67%)	12 (30.77%)
Sophomore Males	13 (56.52%)	6 (26.09%)	14 (60.87%)	23 (100.00%)	19 (82.60%)	12 (52.17%)
Sophomore Females	23 (67.65%)	6 (17.65%)	22 (64.71%)	34 (100.00%)	24 (70.59%)	17 (50.00%)
Junior Males	15 (71.43%)	1 (4.76%)	10 (47.62%)	18 (85.71%)	8 (38.10%)	3 (14.29%)
Junior Females	18 (62.07%)	7 (24.14%)	15 (51.72%)	29 (100.00%)	28 (96.55%)	16 (55.17%)
Senior Males	13 (54.17%)	6 (25.00%)	14 (58.33%)	22 (91.67%)	18 (75.00%)	9 (37.50%)
Senior Females	20 (71.43%)	5 (17.86%)	17 (60.71%)	28 (100.00%)	16 (57.14%)	11 (39.29%)
Total for all Strata	140 (61.95%)	45 (19.91%)	126 (55.75%)	216 (95.58%)	157 (69.47%)	88 (38.94%)



strata as a possible source of sex education for youth. Over sixty percent of the subjects advocated the use of magazines and television as sources of sex education. Fifty-five percent of the participants supported the use of motion pictures as a means of providing youth with information regarding sexuality. The subjects were least supportive of radio programs and newspapers as sources of sex education.

As illustrated in Table 26, both the males and females reported similar frequencies with which they supported the mass media as sources of sex education. Over ninety percent of both sexes indicated that books should be employed as a source of sexual information for youth. The female respondents registered more frequent support of the use of all the mass media categories as a source of sex education than did the males.

The subjects had previously indicated extensive use of the mass media as sources of their own sex education and, correspondingly, advocated continued use of these mass media sources of sexual information for youth. Among the subjects, motion pictures were cited more often

Table 26. Comparative Percentages of Male-Female Attitudes Toward Various Mass Media as Sources of Sex Education

Mass Media Source	Males	Females
Television	57 (59.38%)	83 (63.85%)
Radio	17 (17.71%)	28 (21.54%)
Motion Pictures	51 (53.13%)	75 (57.69%)
Books	90 (93.75%)	126 (96.92%)
Magazines	63 (65.63%)	94 (72.31%)
Newspapers	32 (33.33%)	56 (43.08%)

than television as sources of their own sex education. However, the subjects indicated that, ideally, they believed television should be employed more frequently than motion pictures as sources of sex education for youth.

Specific individuals recommended as sources of sex education.

Data in Table 27 reveal that the respondents believed that youth should be able to obtain information regarding sexuality from numerous individuals, including collecting such information through personal efforts. The individuals most frequently cited as sources of sex education were mothers, fathers, teachers, and clergymen. The attitude that youth should be provided with sexual information from either parent and teachers was supported by over ninety-five percent of the subjects. Sex education provided by the clergy was advocated by 87.17 percent of the subjects. Approximately seventy-eight percent of the respondents agreed that youth should attempt to collect information regarding sexuality through personal efforts. Less than three fourths of the subjects supported peer group sex education. Obtaining sexual information from siblings or other relatives was supported by approximately one half of the subjects.

Attitudinal differentiations among the male and female subjects as to which individuals should most frequently provide youth with sexual information are presented in Table 28. Approximately equal support was indicated among both sexes regarding fathers, mothers, teachers, and collecting information by oneself as sources of sex education for youth. However, the females reported mothers more frequently than fathers as possible sources of sex education and, conversely, the males cited fathers more often than mothers as potential sex educators. The belief



Table 27. Frequency of Subjects' Endorsement of Specific Individuals as Sources of Sex Education

Strata	Father	Mother	Brother	Sister	Other Relative	Teachers	Clergymen	Friends or Peers	Collect Information by Self
Freshman Males	26 (92.86%)	27 (96.43%)	10 (35.71%)	10 (35.71%)	12 (42.86%)	26 (92.86%)	23 (82.14%)	14 (50.00%)	22 (78.57%)
Freshman Females	37 (94.87%)	39 (100.00%)	24 (61.54%)	24 (61.54%)	23 (58.97%)	37 (94.87%)	34 (87.18%)	28 (71.79%)	28 (71.79%)
Sophomore Males	23 (100.00%)	20 (86.96%)	6 (26.09%)	5 (21.74%)	8 (34.78%)	23 (100.00%)	20 (86.96%)	15 (65.22%)	18 (78.26%)
Sophomore Females	33 (97.06%)	34 (100.00%)	21 (61.76%)	22 (64.71%)	22 (64.71%)	34 (100.00%)	32 (94.12%)	30 (88.24%)	28 (82.35%)
Junior Males	21 (100.00%)	20 (95.24%)	6 (28.57%)	6 (28.57%)	7 (33.33%)	19 (90.48%)	15 (71.43%)	12 (57.14%)	17 (80.95%)
Junior Females	27 (93.10%)	29 (100.00%)	20 (68.97%)	21 (72.41%)	22 (75.86%)	28 (96.55%)	26 (89.66%)	23 (79.31%)	22 (75.86%)
Senior Males	24 (100.00%)	24 (100.00%)	13 (54.17%)	12 (50.00%)	12 (50.00%)	23 (95.83%)	20 (83.33%)	15 (62.50%)	18 (75.00%)
Senior Females	28 (100.00%)	28 (100.00%)	16 (57.14%)	16 (57.14%)	18 (64.29%)	28 (100.00%)	27 (96.43%)	22 (78.57%)	24 (85.71%)
Total for all Strata	219 (96.90%)	221 (97.79%)	116 (51.33%)	116 (51.33%)	124 (54.87%)	218 (96.46%)	197 (87.17%)	159 (70.35%)	177 (78.32%)

that siblings or other familial relatives should provide youth with sexual information was endorsed by approximately two fifths of the males and three fifths of the females. Utilization of the clergy as sex educators was also supported more frequently among the females, 91.54 percent, than the males, 81.25 percent. Peer group sources of sex education were not extensively supported among the male subjects; however, 79.23 percent of the females advocated peer groups as sources of youths' sex education.

Table 28. Comparative Percentages of Male-Female Attitudes Regarding Specific Individuals as Sources of Sex Education

Individual	Males	Females
Father	94 (97.92%)	125 (96.15%)
Mother	91 (94.79%)	130 (100.00%)
Brother	35 (36.46%)	81 (62.31%)
Sister	33 (34.38%)	83 (63.85%)
Other Relative	39 (40.63%)	85 (65.38%)
Teachers	91 (94.79%)	127 (97.69%)
Clergymen	78 (81.25%)	119 (91.54%)
Friends or Peers	56 (58.33%)	103 (79.23%)
Collect Information by Self	75 (78.13%)	102 (78.46%)

Although less than one third of the subjects reported actually receiving sexual information from their fathers, over ninety-five percent of the respondents believed that fathers should contribute to their children's sex education. Similarly, clergymen were cited by less than twenty percent of the subjects as sources of their sex education, yet



87.17 percent of the subjects supported the utilization of the clergy for providing youth with information related to human sexuality. Additionally, sexual information provided by siblings and other relatives was endorsed by more than one half of the subjects, although less than twenty percent of the participants actually obtained sexual information from these sources. Conversely, approximately ninety percent of the subjects indicated that they had collected sexual information from friends or peers and through personal endeavors; however, only three fourths of the subjects advocated these methods of collecting sexual information for youth.

Subjects' Attitudes Regarding  
the Present and Future Sex  
Education Availabilities at  
Appalachian State University

Subjects' attitudes regarding an expanded sex education curricula at this institution. The subjects were asked to indicate if, in their opinion, an expanded sex education curricula was presently needed and desired at Appalachian State University. As revealed by percentages in Table 29, the subjects overwhelmingly supported the attitude that increased sex education curricular availabilities are presently both needed and desired at Appalachian State University. Less than five percent of the respondents believed that such a curriculum was presently neither needed nor desired.

The subjects were provided with a list of nine topical areas of sexuality and asked to indicate the intensity of emphasis each area should receive within a college sex education curricula. Emphasis rating was performed according to the Likert technique of scale construction and the rating scale employed was as follows: (1) extreme

Table 29. Frequency of Subjects Supportive of an Expanded Sex Education Curricula at Appalachian State University

Strata	Need: Yes Desire: Yes	Need: Yes Desire: No	Need: No Desire: Yes	Need: No Desire: No
Freshman Males	21 (75.00%)	4 (14.29%)	0 (0.00%)	3 (10.71%)
Freshman Females	36 (92.31%)	2 (5.13%)	0 (0.00%)	1 (2.56%)
Sophomore Males	16 (69.56%)	7 (30.43%)	0 (0.00%)	0 (0.00%)
Sophomore Females	32 (94.12%)	2 (5.88%)	0 (0.00%)	0 (0.00%)
Junior Males	18 (85.71%)	2 (9.52%)	0 (0.00%)	1 (4.76%)
Junior Females	21 (72.41%)	7 (24.14%)	0 (0.00%)	1 (3.45%)
Senior Males	19 (79.17%)	1 (4.17%)	0 (0.00%)	4 (16.67%)
Senior Females	25 (89.29%)	2 (7.14%)	0 (0.00%)	1 (3.57%)
Total for all Strata	188 (83.19%)	27 (11.95%)	0 (0.00%)	11 (4.87%)



emphasis; (2) much emphasis; (3) little emphasis; and (4) no emphasis. The mean intensity of emphasis with which each stratum rated each topical area of sexuality is presented in Table 30. In collectively analyzing the mean intensity of each topical area for all eight strata it was revealed that the subjects advocated that all nine areas of sexuality receive either "extreme" or "much" emphasis within a college sex education curricula. The areas of sexuality in which the subjects believed the most emphasis should be provided were: (1) biological and physiological, (2) emotional and psychological, (3) teaching methods, and (4) sociological and cultural.

Inasmuch as all eight strata indicated similar intensities with which these various sexual topics should be emphasized within a college curriculum, there was little male-female attitudinal differentiation of ratings. However, the females usually indicated a slightly higher intensity of emphasis within these areas of sexuality than did the male subjects. The biological and physiological aspects of sexuality was the only area in which the males reported a higher mean intensity rating than the females. There was no substantial differentiation between academic class and the degree with which the strata reported each area should be emphasized.

Subjects' attitudes regarding class structure, class size, and course structure of sex education curricula. All but seven of the 226 participants believed that students attending Appalachian State University should receive systematically organized instruction regarding human sexuality as part of their total academic curriculum. In regard to class structure, there was infrequent support for segregating students by sex during class discussions of sexuality. Over two thirds

Table 30. Strata Mean Intensities of Emphasis Regarding Various Aspects of Sexuality Within a College Sex Education Curricula\*

Strata	Biological and Physiological	Social and Cultural	Emotional and Psychological	Moral	Religious	Legal	Historical	Language Barriers	Teaching Methods
Freshman Males	1.54	1.65	1.65	2.19	2.46	2.19	2.69	2.15	1.89
Freshman Females	1.61	1.58	1.37	1.71	2.00	1.87	2.63	2.24	1.63
Sophomore Males	1.39	1.83	1.65	2.26	3.39	2.44	3.17	2.35	1.52
Sophomore Females	1.56	1.88	1.53	1.88	2.15	1.97	2.59	2.29	1.62
Junior Males	1.15	1.60	1.30	2.30	2.90	2.65	3.05	2.05	1.55
Junior Females	1.52	1.59	1.31	1.97	2.35	2.10	2.72	2.35	1.62
Senior Males	1.36	1.55	1.27	1.68	2.05	1.77	2.41	2.09	1.41
Senior Females	1.43	1.43	1.32	2.25	2.43	1.89	2.82	2.00	1.46
Average for all Strata	1.45	1.64	1.43	2.03	2.47	2.11	2.76	2.19	1.59

\* In the above tabular analysis, 1.00 equals the highest possible intensity and 4.00 the lowest possible intensity.



of the subjects reported that all classes involving discussions of sexuality should be coeducational whereas one fourth of the subjects indicated that segregated classes could sometimes provide more optimal learning situations for college students. No subject responded that all college sex education classes should be segregated according to sex. The females indicated a desire for occasionally segregating sex education classes during college more frequently than did the males. However, the frequency with which the females desired segregated classes declined as the strata progressed from freshman to senior class status.

Fifty-seven percent of the participants advocated limiting college courses basically involving discussions of human sexuality to twenty students or less in order to obtain optimal environments for learning and individual idea expression. Thirty-eight percent of the subjects believed that class size could be as high as thirty students and still maintain an ideal environment for learning and opportunities for self-expression.

In regard to course structure, approximately three fourths of the subjects advocated the initiation of both instructor oriented (lecture) and student oriented (seminar) courses involving information relevant to human sexuality. Only one sixth of the respondents indicated a desire for all courses basically involving discussions of human sexuality to be student oriented, or presented in seminar structure.

Approximately ninety percent of the subjects agreed that a college sex education curricula should attempt to present students with (1) basic facts and terminology related to sexuality, (2) opportunities for expressing and exchanging ideas and beliefs regarding sexuality, and (3) instruction regarding the various teaching methods and materials available for sex education.

Sources of subjects' sexual information while attending Appalachian State University. Data presented in Table 31 reveal that during attendance at Appalachian State University, 82.74 percent of the subjects received information regarding human sexuality in at least one academic course. College roommates or peers provided sexual information or opportunities for discussions of sexuality for approximately eighty percent of the respondents. Less than one percent of the subjects reported either their college adviser or psychological services as sources of sexual information while attending Appalachian State University. Obtainment of sexual information from the local clergy was reported by 1.77 percent of the participants. Private or semi-private meetings with university instructors were listed as a source of sex education by 8.41 percent of the subjects.

The only substantial male-female difference regarding where or from what individuals sex education was obtained during college was among the frequency with which peers or roommates were reported as sources of sex education. Less than two thirds of the males indicated that they had received information regarding sexuality from college roommates or peers whereas 90.77 percent of the females reported these individuals as sources of sex education during college. Although the males indicated receiving sexual information from instructors in private or small group meetings more frequently than females, neither sex listed this source frequently.

Academic departments in which the subjects reported receiving information regarding sexuality. As previously discussed, of the 226 participants in this study, 187, or 82.74 percent reported receiving information which contributed to their present understanding of sexuality



Table 31. Frequency of Subjects Reporting Various Sources of Sex Education During College Attendance

Strata	Academic Course	Private or Small Group Meeting with Instructor	College Adviser	Psychological Services	Local Clergy	Roommates or Peers
Freshman Males	23 (82.14%)	1 (3.57%)	0 (0.00%)	0 (0.00%)	1 (3.57%)	16 (57.14%)
Freshman Females	25 (64.10%)	1 (2.56%)	0 (0.00%)	1 (2.56%)	1 (2.56%)	35 (89.74%)
Sophomore Males	19 (82.61%)	5 (21.74%)	1 (4.35%)	0 (0.00%)	0 (0.00%)	17 (73.91%)
Sophomore Females	33 (97.06%)	1 (2.94%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	31 (91.18%)
Junior Males	18 (85.71%)	4 (19.05%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	13 (61.90%)
Junior Females	25 (86.21%)	1 (3.45%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	26 (89.66%)
Senior Males	20 (83.33%)	4 (16.67%)	1 (4.17%)	0 (0.00%)	2 (8.33%)	16 (66.67%)
Senior Females	24 (85.71%)	2 (7.14%)	0 (0.00%)	1 (3.57%)	0 (0.00%)	26 (92.86%)
Total for all Strata	187 (82.74%)	19 (8.41%)	2 (0.89%)	2 (0.89%)	4 (1.77%)	180 (79.65%)

within at least one academic course during college. Data presented in Table 32 reveal that the subjects received sexual information within courses provided by several academic departments. Among the subjects reporting that they had received information relevant to human sexuality within an academic course, 164, or 87.70 percent indicated that they had received such information through the biology department. Approximately two thirds of the subjects reported that they had obtained sexual information within courses provided by the psychology department. The only other academic departments which were frequently cited by the participants as providing courses in which they had obtained information regarding human sexuality were (1) health and physical education and (2) sociology and anthropology. A detailed list of the specific courses reported by the subjects as those which most meaningfully provided them with sexual information is presented in Appendix G, page 174.

Subjects' attitudes toward which academic departments at Appalachian State University should provide sex education curricula. Data presented in Table 33 indicate that approximately one third of the subjects recommended that courses basically involving discussions of human sexuality be isolated within one specific academic department. The most frequently cited academic departments in which the subjects believed sex education curricula should be concentrated were either (1) biology, (2) health and physical education, (3) psychology, or (4) sociology. There was no relationship between sex or academic class status and the frequency with which the subjects indicated a preference for centralizing sex education curricula within one specific academic department. However, of the seventy-seven subjects supporting this attitude, fifty-six, or 72.74 percent recommended the same department as their own



Table 32. Frequency of Subjects Receiving Sex Education Within Various Academic Departments  
at Appalachian State University

Academic Department	Freshman Males	Freshman Females	Sophomore Males	Sophomore Females	Junior Males	Junior Females	Senior Males	Senior Females	Total * Students
Art		2	1	2				2	7 (3.74%)
Biology	20	15	21	29	16	21	17	25	164 (87.70%)
Chemistry/Physical Science		3	2	4					9 (4.81%)
Education					4	1	1	2	8 (4.28%)
English	3	6	5	4	2	3	2		25 (13.37%)
Health/Physical Education	7	4	9	17	11	13	8	16	85 (45.46%)
History		1		2	4	1	1	1	10 (5.35%)
Home Economics		1		1				1	3 (1.60%)
Psychology	7	11	14	21	14	20	18	16	121 (64.71%)
Religion and Philosophy		2	4	3	2	1	2	2	16 (8.56%)
Sociology and Anthropology	3	10	6	10	2	9	10	10	60 (32.09%)
Speech	2	4	1	1	2	1			11 (5.88%)

\* Percentages based on 187 subjects receiving sexuality information in academic course(s).

academic major as the department in which sex education curricula should be concentrated. Approximately two thirds of the participants advocated providing sex education curricula within more than one academic department. The departments most often reported by the subjects as those which should mutually offer students curricula regarding human sexuality were (1) biology, (2) health and physical education, (3) psychology, and (4) sociology and anthropology. The frequency with which the subjects endorsed specific academic departments at Appalachian State University as those which should provide sex education curricula to students is presented in Appendix H, page 176.

Table 33. Percentage Representation of Subjects' Attitudes Regarding Departmental Assignment of Sex Education Curricula

Strata	Sex Education Curricula Should be Isolated Within One Specific Academic Department	Sex Education Curricula Should be Provided Within Various Academic Departments
Freshman Males	3 (10.71%)	25 (89.29%)
Freshman Females	14 (35.90%)	25 (64.10%)
Sophomore Males	9 (39.13%)	14 (60.87%)
Sophomore Females	12 (35.29%)	22 (64.71%)
Junior Males	6 (28.57%)	15 (71.43%)
Junior Females	11 (37.93%)	18 (62.07%)
Senior Males	13 (54.17%)	11 (45.83%)
Senior Females	9 (32.14%)	19 (67.86%)
Total for all Strata	77 (34.07%)	149 (65.93%)



### Summary

The majority of the subjects participating in this investigation were characterized as being (1) Caucasian, (2) Protestant, (3) single, and (4) residing in university dormitories.

Approximately two thirds of the subjects indicated that they had received sex education at home during seven to fifteen years of age. However, only one third of the subjects received sex education at home after fifteen years of age. The females reported receiving sex education at home more frequently than did the males, especially after fifteen years of age. More than three fourths of the participants obtained sex education in school during grades seven through nine. Less than one fifth of the subjects received sex education in school prior to grade seven. Approximately one half of the participants received sex education in school during the tenth through the twelfth grades. Sex education received during college was reported most frequently during the freshman year of attendance. As with the home, the females reported the school as a source of sex education more often than did the males. Seventy-two percent of the subjects reported that they had obtained no previous sex education from the clergy. Over ninety percent of the subjects listed books as a source of their sex education. Other mass media such as motion pictures, magazines, and television were also frequently listed by the respondents as sources of their sex education.

These college students, especially the males, could not realistically evaluate the degree of their sexual knowledge. On a one hundred question sex knowledge inventory, none of the eight strata obtained a mean score as high as seventy percent. Whereas neither sex was substantially more knowledgeable than the other, high test scores were positively related to (1) higher chronological age and (2) higher academic



class rank (freshman, sophomore, junior, and senior). The females were more knowledgeable than the males regarding their own respective sexual structures and functions. However, the males were more knowledgeable than the females regarding the sexual structures and functions of the opposite sex. Both sexes possessed inadequate knowledge of venereal diseases.

In regard to youths' obtainment of sexual information, the participants overwhelmingly supported the home, school, and church as environments where sex education should be received. Although approximately only one half of the subjects believed that children should receive sexual information in the home prior to seven years of age, ninety-three percent of the subjects endorsed the attitude of providing youth with sex education in the home during seven to fifteen years of age. Sex education received in school during grades one through twelve was supported by approximately seventy percent of the subjects. Additionally, eighty-three percent of the respondents advocated special church classes as a source of sex education for youth. The subjects believed that parents, teachers, and clergymen should be utilized more frequently than peer groups as sources of sex education.

Two thirds of the subjects advocated an expanded sex education curricula at Appalachian State University. The subjects indicated that a college sex education curriculum should attempt to provide students with (1) basic facts and terminology related to sexuality, (2) opportunities for expressing and exchanging ideas and beliefs regarding sexuality, and (3) information relevant to teaching methods and materials of sex education. Two thirds of the respondents advocated a sex education curriculum mutually constructed and administered by several academic departments rather than isolating sex education curricula within



one specific academic department. Two thirds of the subjects endorsed the attitude that all courses basically involving discussions of sexuality be coeducational.

## CHAPTER V

### SUMMARY

#### Introduction

The purpose of this investigation was to determine the knowledge and attitudes of randomly selected undergraduate students within the area of sex education. Two hundred and twenty-six students at Appalachian State University were administered a questionnaire designed to obtain information regarding their (1) personal history, (2) previous sex education, (3) present sexual knowledge, (4) attitudes toward youths' obtainment of sex education, and (5) attitudes regarding the present and future sex education availabilities at Appalachian State University. Original letters of invitation to participate in the study were sent to 814 students, of which 226 agreed to complete the questionnaire. The subjects were divided into strata according to sex and academic class status (freshman, sophomore, junior, and senior). The sex knowledge inventory employed in this study had been previously administered to a group of thirty undergraduate students and was found to have a coefficient of reliability of .94 as determined by the test, re-test technique. Subjects' attitudes regarding their previous sex education and attitudes toward youths' obtainment of sexual information were collected in the form of checklists and tabulated by percentages or scale intensity rankings as measured by the Likert technique of scale construction. Mean scores obtained on the sex knowledge inventory were tabulated for each of the eight strata for comparative analysis.



## Results

Subjects' personal history. The participants in this study were all full-time undergraduate students attending Appalachian State University. All subjects were Caucasian and ranged in age from eighteen to twenty-three years. Approximately ninety percent of the subjects belonged to Protestant religious denominations. Less than twelve percent of the subjects resided off-campus with the majority of them residing in university dormitories. Only three percent of the subjects were married and none of the participants indicated that they were parents. Twenty-five various academic majors were reported by the 226 subjects completing the questionnaire.

Subjects' previous sex education. Among this group of subjects, sex education received within the home was reported more often by females than males. For both sexes, however, sexual information obtained in the home prior to seven years of age was infrequently cited. Additionally, less than one half of the females and one third of the males received sex education at home after fifteen years of age. Both sexes indicated receiving sex education at home most frequently during seven to fifteen years of age. Approximately forty-seven percent of the males and eleven percent of the females disclosed that they had obtained no sex education at home.

The subjects generally indicated receiving sex education more frequently within the school than within the home. Sex education received during the first through the sixth grades was reported by less than twenty percent of the subjects. However, sex education received in school during grades one through six was reported three times more frequently among the females than the males. Sex education provided by the

school was reported by both sexes as occurring most often during grades seven through nine. Additionally, the subjects indicated receiving information regarding sexuality less frequently during grades ten through twelve than during the seventh through the ninth grades. Only fifty-five percent of the subjects reported that they had obtained information which contributed to their present understanding of sexuality during their freshman year of college. In fact, the subjects disclosed that they had obtained sexual information less frequently during their sophomore, junior, and senior years of college attendance than during their freshman year. As with sex education provided within the home, the females, more often than the males, cited the school as a source of sexual information during elementary, secondary, and college levels of education.

The church provided sex education to only a marginal number of the respondents. Over seventy percent of the subjects reported that they had received no sex education through the church. Approximately twenty percent of the subjects indicated that they had obtained information regarding sexuality within special church directed classes. Personal conferences with clergymen were seldomly cited as a source of sex education; however, such conferences were reported more frequently among the males than the females. Failure to cite the church as a source of sexual information was not affected by the participants' sex or academic class status.

The mass media were repeatedly cited by the respondents in all strata as sources of their sex education. Books, magazines, and motion pictures were reported most frequently by both the males and females as mass media sources of sexual information. Fifty percent of the subjects indicated that they had obtained information regarding sexuality from



television. As with the home and the school, the female participants cited the mass media as sources of sex education more frequently than did the males.

Approximately ninety percent of the subjects indicated that they had obtained sexual information through their own personal endeavors or from friends and peers. Sex education obtained from teachers was cited by four fifths of the subjects. Mothers were reported more than twice as often as fathers as sources of sex education. The male subjects reported receiving sex education slightly more often from fathers than mothers; however, two fifths of the males did not receive sexual information from either parent. Fathers were cited as sources of sex education by less than twenty-five percent of the females whereas mothers were listed by eighty-five percent of the females as sex educators. Siblings, other familial relatives, and clergymen were infrequently cited by either sex as sources of sexual information.

The subjects were presented with a list of twenty-five sexual topics and asked to rate the extent to which these topics had been discussed with them and the degree of knowledge which they perceived themselves as possessing regarding each topic. Collectively analyzing the entire list of sexual topics, it was found that the females usually reported receiving discussions of the topics more frequently than did the males, yet the males consistently reported higher intensities of perceived knowledge than did the female respondents.

Sex knowledge inventory. Examination of the sex knowledge test scores revealed that none of the eight strata obtained a mean score as high as seventy percent. Among both the males and females, a high, positive coefficient of correlation was obtained between higher academic



class status and higher test scores. However, a low, positive coefficient of correlation was obtained between higher test scores and higher chronological age. In regard to the total testing instrument, neither sex was substantially more knowledgeable than the other. The females were more knowledgeable than the males regarding their own respective sexual structures and functions. However, the males were more knowledgeable than the females regarding the sexual structures and functions of the opposite sex. In fact, the male participants obtained a higher mean score within the section of the inventory relating to the female reproductive structures and functions than within the section pertaining to their own respective sexual anatomy. Among the seven topical areas of sexuality presented within the inventory, both sexes were most knowledgeable within the areas of reproductive processes and functions and pregnancy and childbirth. Both sexes incorrectly answered approximately forty percent of the questions relating to venereal diseases, prevalent sexual practices, and birth control methods and practices.

Subjects' attitudes toward youths' obtainment of sex education.

Sex education provided to youth within the home was supported more frequently among the females than the males, especially prior to seven years of age and after fifteen years of age. Over ninety percent of the subjects endorsed supplying youth with sexual information within the home during seven to fifteen years of age.

Extensive support was indicated by both sexes for providing sex education to youth in school during grades one through twelve. Eighty percent of the females and sixty percent of the males believed sexual information should be available to youth within school sometime during the first through the sixth grades. Similar intensities of support were



registered toward sex education during the tenth through the twelfth grades. However, the subjects' most frequent endorsement of the school's role in the sex education of youth was reported for grades seven through nine. Supplying students with sexual information or opportunities for discussions of sexuality during college was supported less frequently than during youth's elementary or secondary education. Approximately three fourths of the respondents advocated providing college freshman with sex education. School efforts to provide sexual information to youth throughout their education was supported more frequently by the females than the males.

Ecclesiastical personnel and programs were recurrently endorsed by the subjects as sources of sex education for youth. Special church directed classes initiated to provide youth with sexual information received the support of more than eighty percent of the subjects. Approximately fifty percent of both the males and females were supportive of private discussions with clergymen as a feasible source of sex education. Less than ten percent of the participants believed that the church should abstain from providing youth with information relevant to sexuality.

The availability of mass media sources, especially books, were frequently endorsed by the subjects as means of collecting sexual information by youth. Increased utilization of television for the presentation of sexual information to children and adolescents was supported by two thirds of the subjects.

Mothers, fathers, teachers, and clergymen were the most frequently cited individuals as persons who should provide sex education to youth. Approximately ninety-five percent of the respondents believed

youth should receive sexual information from parents and teachers. Obtainment of sexual information through peer group discussions was advocated by approximately seventy percent of the subjects.

Subjects' attitudes regarding sex education availabilities at Appalachian State University. Two thirds of the respondents speculated that there was both a need and a desire among Appalachian State University students for increased sex education availabilities at the university. The participants believed that within a college sex education curriculum, the biological, physiological, psychological, and emotional aspects of sexuality should receive extreme emphasis. Additionally, extensive support was indicated toward providing college youth with discussions of various teaching methods and materials employed within sex education. Two thirds of the subjects maintained that all college sex education curricula, basically involving discussions of sexuality, should be coeducationally structured. However, one third of the subjects believed that more optimal learning experiences for students could occasionally be obtained within segregated discussions of sexuality.

Over eighty percent of the subjects reported receiving information regarding sexuality within one or more academic courses during college attendance. Academic departments at Appalachian State University in which the subjects reported receiving sexual information most frequently were biology, health and physical education, and psychology. Additionally, peer group or roommate sources of sex education during college attendance were cited by approximately eighty percent of the subjects, although more frequently cited by the females than the males.



Two thirds of the participants believed that college sex education curricula should not be isolated within one specific academic department. The prevalent attitude among this group of subjects was that several academic departments encompass disciplines which are pertinent to human sexuality. Whereas art, english, and history were among the several academic departments in which the subjects believed sex education curricula could be developed, the most often cited departments in which the respondents believed students should receive sexual information were biology, health and physical education, sociology, and psychology.

### Conclusions

1. For these subjects, the home was more influential as a source of sex education prior to puberty than during the ages of middle and late adolescence. Conversely, the school fulfilled only a marginal role in the sex education of the subjects prior to puberty (approximately the seventh grade); however, the school was a more influential source of sex education than the home after puberty.
2. The church was not an influential source of sex education for the majority of both the male and female subjects.
3. Even though the females received sex education more frequently than the males within the home and school, both sexes possessed similar degrees of sexual knowledge as determined by the testing instrument employed in this investigation.
4. Higher academic class rank (freshman, sophomore, junior, senior) was more influential than chronological age in respect to obtaining high scores on the sex knowledge inventory.
5. The subjects, especially the males, were usually unable to realistically evaluate the extent of their present sexual knowledge.

6. The subjects did not possess adequate knowledge regarding their own sexual anatomy and functions and possessed little knowledge of the sexual structures and functions of the opposite sex.

7. The female subjects were more supportive of sex education within the home and the school than were the males. However, academic class rank did not substantially affect the extent to which either sex endorsed the home, school, and church as those societal environments which should be primarily responsible for providing youth with sex education and opportunities for discussions of sexuality.

8. As supported by the attitudes of the subjects in this investigation, parents, teachers, and clergymen should be the individuals primarily responsible for providing sexual information to youth.

9. Due to (1) the subjects' lack of adequate sexual knowledge and (2) their desire for increased sex education availabilities during college, Appalachian State University should seriously evaluate the feasibility of implementing a systematically organized sex education curricula designed to meet the needs and interests of the students.

### Discussion

Data collected in this study were obtained from a homogeneous group of subjects as was ascertained from the subjects' personal background history. Further study regarding the sexual knowledge and attitudes of college students who are (1) non-Caucasian, (2) non-Protestant, (3) married, and (4) residing off-campus should be conducted.

Skepticism as to the frequency the subjects reported receiving no sex education at home, especially prior to seven years of age, should not be discounted. It is feasible that a subject of college age was not presently cognizant of his parents' sex education efforts which occurred



during the subject's early childhood or infancy. In fact, the frequency with which the subjects reported receiving no sex education at home increased as the mean age of the strata increased and as the strata progressed from freshman to senior class rank. If, as data in this investigation revealed, sex education was received in the home less frequently as the subjects became older, it can be speculated that parents placed more emphasis on sex education when both they and their children were younger. It is possible that the parents were not reluctant to provide answers to their young children's basic sexual questions. However, as both the parents and the subjects became older, the parents may have been more hesitant to enter into detailed discussions of many aspects of sexuality. The prevalence of parental reluctance to discuss sexuality with their adolescent children was previously discussed in Chapter II. If the frequency of parental-child discussions of sexuality had occurred most frequently during early childhood, and then these discussions gradually decreased in frequency or became non-existent, it is understandable that a subject of eighteen years of age or older may not have remembered parental-child discussions of sexuality which occurred more than ten years ago. Additionally, as was discussed in Chapter II, much of the sex education transmitted and received within the home is accomplished subconsciously within the activities of the family's daily routine and personal interchanges. It would be difficult for a subject to indicate actual parental attempts of sex education inasmuch as many of the sexual attitudes and beliefs are absorbed within the every day behavior and actions of the family unit.

The bases for concluding that the subjects possessed inadequate sexual knowledge were as follows: (1) none of the eight strata obtained

a mean test score as high as seventy percent, (2) only eighteen percent of the subjects correctly answered as many as three fourths of the test questions, and (3) approximately two thirds of the subjects could not obtain a score as high as seventy percent. The statement that the subjects possessed inadequate sexual knowledge was a subjective rather than statistical evaluation inasmuch as the sex knowledge inventory employed in this investigation has not been administered to any other similar group of college subjects.

Although there was no substantial difference between the mean scores obtained by the male and female subjects on the sex knowledge inventory, it was evident that the females consistently reported receiving sex education within the home and school more frequently than did the males, especially during and after puberty. The fact that the females indicated receiving sex education more frequently than did the males could be due, in part, to the female's more overt pubescent biological and physiological occurrences such as menstruation and breast development.

Analysis of the data collected from these subjects indicated that the females, more frequently than the males, were supportive of sex education within the home, school, and church. The more frequent support of sex education registered by the females could be related to (1) the fact that the females had actually experienced more sex educational efforts than the males and (2) that the subjects' mothers were cited more frequently than their fathers as sources of sex education. This investigation, as well as others, revealed that fathers fulfilled only a marginal role in the sex education of their children and that youth indicated receiving sex education more frequently from their



mothers than from their fathers.<sup>1,2</sup> It is possible that within our society an attitude has developed whereas although both males (fathers) and females (mothers) endorse sex education for children within the home, the mother is expected to assume the major responsibility of providing sexual information to the children.

#### Recommendations for Further Study

1. Whereas this study determined the subjects' desire for sex education availabilites during college, further investigation should be conducted regarding the actual sexual habits and behavior of the youth attending Appalachian State University.

2. Inasmuch as the majority of the participants were unable to realistically evaluate the extent of their sexual knowledge, a qualitative study distinguishing the actual lack of sexual information from misinformation should be conducted.

3. In order to determine the need for sex educator preparatory instruction at Appalachian State University, studies should be initiated regarding (1) any sex educator preparatory programs currently being administered within other North Carolina colleges and (2) present and future employment availabilities within the area of sex and family life education.

4. An explorative investigation, utilizing a similar questionnaire format as employed in this study, should be administered to a group of subjects and their parents. Such an investigation could depict

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<sup>1</sup>Gordon Shipman, "The Psychodynamics of Sex Education," The Family Coordinator, 17:3, January, 1968.

<sup>2</sup>James Elia and Paul Gebhard, "Sexuality and Sexual Learning In Childhood," Phi Delta Kappan, 50:404, March, 1969.

parental-child differentiations regarding what the child believed he had received relative to sex education within the home compared to the parents' perception of what they had presented to their children in regard to sexual information. Additionally, comparative parental-child data relevant to attitudes toward sex education could be collected and analyzed.

5. Inasmuch as only a few selected religious denominations were cited by the subjects as providing them with information regarding sexuality, further study should be conducted in an attempt to identify and analyze those religious faiths which are currently providing programs of sex education to their congregational youth.



## APPENDICES

## APPENDIX A

Questionnaire Employed to Collect Sex Education  
Knowledge and Attitudes of  
Study's Participants\*

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Introduction

The following five part questionnaire is designed to determine the facts relating to your (1) personal history, (2) previous sex education, (3) present knowledge within various areas of sexuality, (4) attitudes regarding sex education, and (5) attitudes regarding the present and future sex education curricula at Appalachian State University. This is not an intelligence test. The entire questionnaire should be taken anonymously and the results will be strictly confidential. It is important that you do not omit or fail to answer any question. Please read all questions carefully and answer them as accurately as possible. Thank you for your time and interest in this project.

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Please Do Not Write Your Name Or Student Account

Number Anywhere On This Questionnaire

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\* The content of the questionnaire is identical to what the students received. However, the format has been altered due to the manuscript regulations of this document.



## PART ONE

PERSONAL HISTORY

1. Present class rank at Appalachian State University (check one) :  
Freshman \_\_\_\_\_ Sophomore \_\_\_\_\_ Junior \_\_\_\_\_ Senior \_\_\_\_\_
2. Present age (write in) : \_\_\_\_\_ Years \_\_\_\_\_ Months
3. Sex (check one) : \_\_\_\_\_ Male \_\_\_\_\_ Female
4. Race (check one) :  
\_\_\_\_\_ Caucasian  
\_\_\_\_\_ Negro  
\_\_\_\_\_ Oriental  
\_\_\_\_\_ Other (write in)  
\_\_\_\_\_
5. Religious preference (check one) :  
\_\_\_\_\_ Protestant  
\_\_\_\_\_ Catholic  
\_\_\_\_\_ Jewish  
\_\_\_\_\_ No Preference  
\_\_\_\_\_ Other (write in)  
\_\_\_\_\_
6. Academic major at Appalachian State University (write in) :  
\_\_\_\_\_
7. Present marital status (check one) :  
\_\_\_\_\_ Single  
\_\_\_\_\_ Married  
\_\_\_\_\_ Widow/Widower  
\_\_\_\_\_ Separated  
\_\_\_\_\_ Divorced
8. Are you a parent? (check one) : \_\_\_\_\_ Yes \_\_\_\_\_ No
9. If you are a parent, how many children do you have? (write in number) :  
\_\_\_\_\_
10. Local residency (check one) :  
\_\_\_\_\_ Campus dormitory  
\_\_\_\_\_ Off-campus apartment or room  
\_\_\_\_\_ Off-campus, living with  
\_\_\_\_\_ parents or relatives  
\_\_\_\_\_ Other residency (write in)  
\_\_\_\_\_

## PART TWO

### PREVIOUS SEX EDUCATION

1. Please check all subheadings within each area that apply to where  
and when you have received previous sex education.

- a. Home: \_\_\_\_\_ Under 6 years of age  
 \_\_\_\_\_ 7-15 years of age  
 \_\_\_\_\_ 16 years of age and older  
 \_\_\_\_\_ I have received no sex education at home
- b. School: \_\_\_\_\_ Prior to the first grade  
 \_\_\_\_\_ Grades 1-6  
 \_\_\_\_\_ Grades 7-9  
 \_\_\_\_\_ Grades 10-12  
 \_\_\_\_\_ Freshman at Appalachian State University  
 \_\_\_\_\_ Sophomore at Appalachian State University  
 \_\_\_\_\_ Junior at Appalachian State University  
 \_\_\_\_\_ Senior at Appalachian State University

If you have received sex education at a junior college, or other institutions of higher learning, please write in the name of the school(s) below.

Junior College(s) \_\_\_\_\_

Other institution(s) \_\_\_\_\_  
of higher learning \_\_\_\_\_

- c. Church: \_\_\_\_\_ During actual church service  
 \_\_\_\_\_ Special church directed classes  
 \_\_\_\_\_ Personal conferences with minister  
 \_\_\_\_\_ or other clergymen

If you checked any of the above areas regarding sex education received through the church, please write in the name of the denomination of the church(s) below.

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d. Mass Media: \_\_\_\_\_ Television  
 \_\_\_\_\_ Radio  
 \_\_\_\_\_ Motion pictures  
 \_\_\_\_\_ Books  
 \_\_\_\_\_ Magazines  
 \_\_\_\_\_ Newspapers  
 \_\_\_\_\_ Other (write in)  
 \_\_\_\_\_

e. Other (write in): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 (such as symposiums, clinics,  
 organizations, etc.)

f. \_\_\_\_\_ I have received no sex education from any of the above  
 sources at any time.

2. From the list below, please check all sources from whom you have  
 received previous sex education.

\_\_\_\_\_ Father  
 \_\_\_\_\_ Mother  
 \_\_\_\_\_ Brother  
 \_\_\_\_\_ Sister  
 \_\_\_\_\_ Other relative  
 \_\_\_\_\_ Teachers  
 \_\_\_\_\_ Ministers  
 \_\_\_\_\_ Friends or peers  
 \_\_\_\_\_ Have collected information on my own  
 \_\_\_\_\_ Other sources (write in)  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_ I have received no sex education from any of  
 the above sources

3. Below is a list of twenty-five words associated with sex education.

The purpose of this inventory is to determine those elements of human sexuality which have been discussed with you by either your parents or other relative, ministers, teachers, friends, or other individuals.

Please CIRCLE the one number that corresponds with the degree or intensity that these topics have been discussed with you. The rating scale is as follows:

1 = Discussed very much

2 = Discussed, but not thoroughly

3 = Briefly discussed

4 = Not discussed at all

1	2	3	4	Heredity
1	2	3	4	Puberty
1	2	3	4	Dating
1	2	3	4	Premarital sexual relationships
1	2	3	4	Marriage
1	2	3	4	Reproductive organs and functions
1	2	3	4	Intercourse
1	2	3	4	Menstruation
1	2	3	4	Ovulation
1	2	3	4	Pregnancy
1	2	3	4	Abortion
1	2	3	4	Birth processes
1	2	3	4	Birth control methods
1	2	3	4	Venereal diseases
1	2	3	4	Infertility and sterilization
1	2	3	4	Homosexuality and other sexual practices
1	2	3	4	Pornography
1	2	3	4	Orgasm/climax
1	2	3	4	Fetal development
1	2	3	4	Masturbation
1	2	3	4	Fertilization
1	2	3	4	Impotency
1	2	3	4	Frigidity
1	2	3	4	Hormonal functions
1	2	3	4	Child rearing and development



4. Below you will find the same list of words that were in the previous question. The purpose of this question is for you to rate yourself as to the degree of knowledge you have in these areas of sex education. Please CIRCLE the one number that corresponds to the degree of knowledge you have in each of these areas. Think about each topic carefully and then rate yourself as accurately as possible. The rating scale is represented as follows:

- 1 = Have much knowledge in area  
 2 = Have adequate knowledge in area  
 3 = Have little knowledge in area  
 4 = Have no knowledge in area

1	2	3	4	Heredity
1	2	3	4	Puberty
1	2	3	4	Dating
1	2	3	4	Premarital sexual relationships
1	2	3	4	Marriage
1	2	3	4	Reproductive organs and functions
1	2	3	4	Intercourse
1	2	3	4	Menstruation
1	2	3	4	Ovulation
1	2	3	4	Pregnancy
1	2	3	4	Abortion
1	2	3	4	Birth processes
1	2	3	4	Birth control methods
1	2	3	4	Venereal diseases
1	2	3	4	Infertility and sterilization
1	2	3	4	Homosexuality and other sexual practices
1	2	3	4	Pornography
1	2	3	4	Orgasm/climax
1	2	3	4	Fetal development
1	2	3	4	Masturbation
1	2	3	4	Fertilization
1	2	3	4	Impotency
1	2	3	4	Frigidity
1	2	3	4	Hormonal functions
1	2	3	4	Child rearing and development

## PART THREE

SEX KNOWLEDGE INVENTORY

This instrument is designed to test your knowledge of facts and terminology regarding several areas of human sexuality. The inventory is comprised of one hundred matching questions which have been divided into seven categories. Answer all questions regardless of whether you know the correct answer. Please take ample time to read the questions carefully and then answer them as accurately as your present knowledge allows. The general directions for the entire test are given below.

---

Directions

1. Each section of the test is preceded by an answer selection list which is to be used for that section of the test. All answer selection lists are arranged in alphabetical order so as to enhance rapid location of your answers.
2. In the blank space to the left of each definition, write the number of the word that best fits the answer for the question.
3. It is possible that an answer can be used more than once within each section.
4. If you do not know a particular answer, GUESS.

(Test begins on following page)



# A. Knowledge of Male Sex Structures and Functions

- |                 |              |                  |                  |
|-----------------|--------------|------------------|------------------|
| 1. Circumcision | 6. Estrogen  | 11. Semen        | 16. Testosterone |
| 2. Cowper's     | 7. Penis     | 12. Seminal      | 17. Ureter       |
| 3. Ejaculation  | 8. Prepuce   | vessicle         | 18. Urethra      |
| 4. Epididymis   | 9. Prostrate | 13. Seminiferous | 19. Vas Deferens |
| 5. Erection     | 10. Scrotum  | tubule           | 20. Zygote       |
|                 |              | 14. Sperm        |                  |
|                 |              | 15. Testis       |                  |

- \_\_\_\_\_ 1. The reproductive gonad of the male is called a (an):
- \_\_\_\_\_ 2. The sac-like structure containing the male's reproductive gonads is called the:
- \_\_\_\_\_ 3. The reproductive germ cells of the male are called:
- \_\_\_\_\_ 4. The tube carrying the male's reproductive germ cells to the ejaculatory duct is called the:
- \_\_\_\_\_ 5. The structure within the male's gonads which is responsible for germ cell production is called the:
- \_\_\_\_\_ 6. The male's reproductive germ cells combined with added glandular secretions is called:
- a) \_\_\_\_\_ 7. Three glands which add fluids that combine with the male's  
b) \_\_\_\_\_ reproductive germ cells are: (Three answers)  
c) \_\_\_\_\_
- \_\_\_\_\_ 8. The sex hormone produced in the male's reproductive gonad is:
- \_\_\_\_\_ 9. The male's organ of copulation is the:
- \_\_\_\_\_ 10. The enlarging and hardening of the male's organ of copulation is known as a (an):
- \_\_\_\_\_ 11. The foreskin of the male's organ of copulation is called the:
- \_\_\_\_\_ 12. The structure that carries urine out of the male's organ of copulation is called the:
- \_\_\_\_\_ 13. The structure that carries the reproductive fluid out of the male's organ of copulation is called the:

B. Knowledge of Female Sex Structures and Functions

- |                   |              |                  |                  |
|-------------------|--------------|------------------|------------------|
| 1. Bartholin's    | 6. Estrogen  | 11. Menarche     | 16. Progesterone |
| 2. Cervix         | 7. Fallopian | 12. Menstruation | 17. Ureter       |
| 3. Clitoris       | 8. tube      | 13. Ovary        | 18. Uterus       |
| 4. Corpus leuteum | 9. Fimbria   | 14. Ovulation    | 19. Vagina       |
| 5. Endometrium    | 10. Graafian | 15. Ovum         | 20. Vulva        |
|                   | follicle     |                  |                  |
|                   | 10. Hymen    |                  |                  |

- \_\_\_\_\_ 1. The reproductive gonad of the female is called the:
- \_\_\_\_\_ 2. The reproductive germ cell of the female is called the:
- \_\_\_\_\_ 3. The male germ cell and female germ cell normally unite in the:
- \_\_\_\_\_ 4. The sensory erectile structure of the female is the:
- \_\_\_\_\_ 5. The pear-shaped organ of the female where the unborn child normally develops is called the:
- \_\_\_\_\_ 6. The structure which receives the male's organ of copulation is the:
- \_\_\_\_\_ 7. The entrance to the female structure which receives the male's organ of copulation is partly covered by a thin membrane called the:
- \_\_\_\_\_ 8. The external female genitalia are called the:
- \_\_\_\_\_ 9. The hormone produced in the female's reproductive gonad is known as:
- \_\_\_\_\_ 10. The discharging of the female's germ cell from the reproductive gonad is known as:
- \_\_\_\_\_ 11. The cyclic discharging of blood and other materials from the female's reproductive tract is known as:
- \_\_\_\_\_ 12. The bubble-like structure located on the female's reproductive gonad which contains the mature germ cell is called the:
- \_\_\_\_\_ 13. The organ where the unborn child normally develops is covered with a mucous membrane called the:
- \_\_\_\_\_ 14. The external female genitalia are moistened by the secretions of a gland called:



C. Knowledge of Reproductive Processes and Functions

- |                  |                 |                      |
|------------------|-----------------|----------------------|
| 1. Castration    | 6. Frigidity    | 11. Masturbation     |
| 2. Coitus        | 7. Hysterectomy | 12. Menopause        |
| 3. Episiotomy    | 8. Impotence    | 13. Orgasm           |
| 4. Fertility     | 9. Infertility  | 14. Puberty          |
| 5. Fertilization | 10. Intercourse | 15. Tubular ligation |

- \_\_\_\_\_ 1. A low degree of sexual desire in women is called:
- a) \_\_\_\_\_ 2. Two terms that mean a sexual relationship are: (Two answers)  
b) \_\_\_\_\_
- \_\_\_\_\_ 3. The inability of the male's organ of copulation to harden is known as:
- \_\_\_\_\_ 4. The climax of sexual excitement is known as:
- \_\_\_\_\_ 5. The time in a person's life when sexual maturity occurs is known as:
- \_\_\_\_\_ 6. The joining of both the male's and female's reproductive germ cells is called:
- \_\_\_\_\_ 7. An inability to produce offspring is called:
- \_\_\_\_\_ 8. When the female's organ which normally holds the unborn child during pregnancy is surgically removed, the operation is called a (an):
- \_\_\_\_\_ 9. The removal of the male's reproductive gonads is called:
- \_\_\_\_\_ 10. The deliberate self-stimulation of one's own sex glands is called:

D. Knowledge of Pregnancy and Child Birth

- |                 |               |               |                    |
|-----------------|---------------|---------------|--------------------|
| 1. Abortion     | 7. Episiotomy | 13. Gestation | 19. Obstetrician   |
| 2. Amnionic sac | 8. Fallopian  | 14. Identical | 20. Pediatrician   |
| 3. Breech birth | tube          | twins         | 21. Placenta       |
| 4. Cervix       | 9. Fetus      | 15. Labor     | 22. Umbilical cord |
| 5. Cesarean     | 10. Forcep    | 16. Lactation | 23. Vagina         |
| section         | delivery      | 17. Meiosis   | 24. Vertex         |
| 6. Embryo       | 11. Fraternal | 18. Mitosis   | delivery           |
|                 | twins         |               | 25. Zygote         |
|                 | 12. Gene      |               |                    |

- \_\_\_\_\_ 1. Once the germ cells of the male and female have united, the new cell is called a (an):
- \_\_\_\_\_ 2. The united germ cell enlarges by a process known as:
- \_\_\_\_\_ 3. The element needed to transmit hereditary characteristics is called a (an):
- \_\_\_\_\_ 4. During the first eight weeks of development, the human organism is known as a (an):
- \_\_\_\_\_ 5. After the first eight weeks of development, the human organism is known as a (an):
- \_\_\_\_\_ 6. The fluid-like membrane surrounding the unborn child is called the:
- \_\_\_\_\_ 7. When a woman believes she is pregnant she should consult a (an):
- \_\_\_\_\_ 8. The organ from which the unborn child receives nourishment is called the:
- \_\_\_\_\_ 9. The organ supplying nourishment is connected to the unborn child by the:
- \_\_\_\_\_ 10. The development of the child within the mother is called:
- \_\_\_\_\_ 11. The stages of forceful contractions that help the mother expell the child from her body is known as:
- a) \_\_\_\_\_ 12. In delivery, the unborn child must pass through two  
b) \_\_\_\_\_ reproductive structures called the: (Two answers)
- \_\_\_\_\_ 13. The term which means the premature termination of a pregnancy at any stage of development is a (an):
- \_\_\_\_\_ 14. An operation in which the child is delivered through an incision in the abdominal wall is a (an):



D. Knowledge of Pregnancy and Child Birth (continued)

- \_\_\_\_\_ 15. A delivery in which the child's buttocks is presented first is known as a (an):
- \_\_\_\_\_ 16. A birth procedure in which long metal instruments are inserted into the mother's birth canal to aid the birth of the child is called a (an):
- \_\_\_\_\_ 17. Two babies which develop from one united germ cell are called:
- \_\_\_\_\_ 18. The secreting of milk from the mother's breasts is known as:
- \_\_\_\_\_ 19. The surgical cutting of the female's external genitalia to ease the birth process is known as a (an):

# E. Knowledge of Birth Control Methods and Practices

- |               |                  |                  |               |
|---------------|------------------|------------------|---------------|
| 1. Abstinence | 6. Contraception | 11. Impotence    | 16. Tubular   |
| 2. Artificial | 7. Diaphragm     | 12. Intrauterine | ligation      |
| insemination  | 8. Douche        | device           | 17. Uterus    |
| 3. Castration | 9. Hormonal pill | 13. Rhythm       | 18. Vagina    |
| 4. Coitus     | 10. Hysterectomy | method           | 19. Vaginal   |
| interruptus   |                  | 14. Spermicide   | sponge        |
| 5. Condom     |                  | 15. Sterility    | 20. Vasectomy |

- \_\_\_\_\_ 1. The prevention of the union of the male's and female's germ cells is called:
- \_\_\_\_\_ 2. The failure of either the male or female to produce a mature germ cell is called:
- \_\_\_\_\_ 3. The birth control device used by women which is made of soft rubber and shaped like a shallow cup is a (an):
- \_\_\_\_\_ 4. This soft rubber cup-shaped device worn by women actually prevents the male's reproductive germ cells from entering the:
- \_\_\_\_\_ 5. A birth control device which is used by the male and is made of strong rubber material is called a (an):
- \_\_\_\_\_ 6. A special cream or jelly which destroys or immobilizes the male's germ cell is called a (an):
- \_\_\_\_\_ 7. The flushing out of a women's birth canal area immediately after a sexual relationship in order to prevent pregnancy is called a (an):
- \_\_\_\_\_ 8. A birth control device which actually prevents the development of a mature female germ cell is called a (an):
- \_\_\_\_\_ 9. A soft plastic birth control device which, when inserted into the female's womb, assumes a spiral or coil shape is known as a (an):
- \_\_\_\_\_ 10. In the United States today, the most often used birth control device is a (an):
- \_\_\_\_\_ 11. A method of birth control based upon periodic abstinence from sexual relationships is known as:
- \_\_\_\_\_ 12. A method of birth control involving the withdrawal of the male's organ of copulation from the female prior to the release of the reproductive fluid is known as:
- \_\_\_\_\_ 13. A surgical method of birth control involving the cutting of the tube which carries the male germ cells to the ejaculatory duct is called a (an):



E. Knowledge of Birth Control Methods and Practices (continued)

- \_\_\_\_\_ 14. A surgical method of birth control involving the cutting of the female's oviduct is called a (an):
- \_\_\_\_\_ 15. The least effective birth control method in the United States today is a (an):

F. Knowledge of Venereal Diseases

- |                        |                        |                        |
|------------------------|------------------------|------------------------|
| 1. Bejel               | 6. Gonorrhea           | 11. Penicillin         |
| 2. Chancroid           | 7. Granuloma inguinale | 12. Sexual intercourse |
| 3. Condom              | 8. Kissing             | 13. Silver nitrate     |
| 4. Congenital syphilis | 9. Lice                | 14. Syphilis           |
| 5. Diaphragm           | 10. Paresis            | 15. Wassermann         |

- \_\_\_\_\_ 1. The most common venereal disease in the United States today is:
- \_\_\_\_\_ 2. The venereal disease caused by a small spirochete called Treponema pallidum is called:
- \_\_\_\_\_ 3. The transmission of venereal diseases is most commonly through:
- \_\_\_\_\_ 4. An antibiotic commonly used to cure venereal diseases in their early stages is:
- \_\_\_\_\_ 5. A discharging of pus from the urethra is an early symptom of:
- \_\_\_\_\_ 6. A form of non-venereal syphilis is called:
- \_\_\_\_\_ 7. A prophylactic device often used by men to help prevent contracting venereal disease is called a (an):
- \_\_\_\_\_ 8. A germicide which is applied to the eyes of a baby to prevent possible venereal infection is called:
- \_\_\_\_\_ 9. A blood test often used to detect syphilis is called a (an):
- \_\_\_\_\_ 10. An untreated venereal disease which can be transmitted from the mother to the child during pregnancy is called:



# G. Knowledge of Prevalent Sexual Practices

- |                  |                  |                |                  |
|------------------|------------------|----------------|------------------|
| 1. Adultery      | 6. Fornication   | 11. Lesbianism | 16. Rape         |
| 2. Cunnilingus   | 7. Frotteurism   | 12. Masochism  | 17. Sadism       |
| 3. Exhibitionism | 8. Hermaphrodite | 13. Mistress   | 18. Transsexual  |
| 4. Felatio       | 9. Homosexuality | 14. Pedophilia | 19. Transvestism |
| 5. Fetishism     | 10. Incest       | 15. Prostitute | 20. Voyeurism    |

- \_\_\_\_\_ 1. A sexual relationship between members of the same sex is generally known as:
- \_\_\_\_\_ 2. A woman that has sexual relationships for pay is called a (an):
- \_\_\_\_\_ 3. Receiving sexual gratification from viewing the sexual acts of others is called:
- \_\_\_\_\_ 4. A sexual relationship between persons of such close relationship that their marriage is prohibited by law is called:
- \_\_\_\_\_ 5. Receiving sexual gratification from viewing, fondling, or handling inanimate objects is called:
- \_\_\_\_\_ 6. Sexual relations forced upon another person is called:
- \_\_\_\_\_ 7. The oral-genital relationship involving the stimulation of the female's genitalia by the tongue is called:
- \_\_\_\_\_ 8. Sexual relationships between an unmarried male and an unmarried female is called:
- \_\_\_\_\_ 9. Receiving sexual satisfaction by suffering physical pain is called:
- \_\_\_\_\_ 10. A voluntary sexual relationship with someone other than his or her own spouse is called:
- \_\_\_\_\_ 11. The oral-genital relationship involving the insertion of the male's organ of copulation into the mouth is called:
- \_\_\_\_\_ 12. A sexual relationship of an adult with a child is called:
- \_\_\_\_\_ 13. A sexual relationship between two females is called:
- \_\_\_\_\_ 14. Receiving sexual excitement by wearing the clothes of the opposite sex is called:
- \_\_\_\_\_ 15. A person that possesses both male and female genitalia is called a (an):

## PART FOUR

PERSONAL ATTITUDES REGARDING THE ACCUMULATION  
OF ONE'S SEX EDUCATION

1. Please check all subheadings within each area that apply to where  
and when you believe sex education should be available.

- a. Home:            ☐ Under 6 years of age  
                         ☐ 7-15 years of age  
                         ☐ 16 years of age and older  
                         ☐ No sex education should be  
                                 received in the home
- b. School:           ☐ Prior to the first grade  
                         ☐ Grades 1-6  
                         ☐ Grades 7-9  
                         ☐ Grades 10-12  
                         ☐ Freshman year of college  
                         ☐ Sophomore year of college  
                         ☐ Junior year of college  
                         ☐ Senior year of college  
                         ☐ Other institutions of higher learning  
                         ☐ No sex education should be  
                                 received in school
- c. Church:           ☐ During actual church service  
                         ☐ Special church directed classes  
                         ☐ Personal conferences with clergymen  
                         ☐ No sex education should be  
                                 received in church
- d. Mass  
   Media:           ☐ Television  
                         ☐ Radio  
                         ☐ Motion pictures  
                         ☐ Books  
                         ☐ Magazines  
                         ☐ Newspapers  
                         ☐ Other (write in)



2. Please check all sources from whom you believe sex education should be available.

☐ Father  
☐ Mother  
☐ Brother  
☐ Sister  
☐ Other relative  
☐ Teachers  
☐ Ministers or other clergymen  
☐ Friends or peers  
☐ Collect information by one's self  
☐ Other sources (write in)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

☐ I do not believe sex education should be received from any of the above sources.

## PART FIVE

PERSONAL ATTITUDES REGARDING THE PRESENT AND  
POSSIBLE EXPANDED SEX EDUCATION CURRICULA  
AT APPALACHIAN STATE UNIVERSITY

1. Do you believe there is a need for an expanded sex education curricula at Appalachian State University? (check one)

\_\_\_\_\_ Yes                  \_\_\_\_\_ No

2. Do you believe there is a desire for an expanded sex education curricula at Appalachian State University? (check one)

\_\_\_\_\_ Yes                  \_\_\_\_\_ No

3. Only answer this question if you believe that sex education should be available as part of a student's academic work at Appalachian State University. Please CIRCLE the one number that corresponds to the degree or intensity that you believe these areas of sexuality should be emphasized within a sex education curricula. The rating scale is represented as follows:

1 = Extreme emphasis

2 = Much emphasis

3 = Little emphasis

4 = No emphasis

- |   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | Biological and physiological aspects of sexuality |
| 1 | 2 | 3 | 4 | Social and cultural aspects of sexuality          |
| 1 | 2 | 3 | 4 | Emotional and psychological aspects of sexuality  |
| 1 | 2 | 3 | 4 | Moral aspects of sexuality                        |
| 1 | 2 | 3 | 4 | Religious aspects of sexuality                    |
| 1 | 2 | 3 | 4 | Legal aspects of sexuality                        |
| 1 | 2 | 3 | 4 | Historical aspects of sexuality                   |
| 1 | 2 | 3 | 4 | Language barriers of sexuality                    |
| 1 | 2 | 3 | 4 | Teaching methods of sexuality                     |



4. Only answer this question if you believe sex education should be available as a part of a student's academic work at Appalachian State University. Please check all areas that apply to how you believe sex education courses and classes should be structured.

- a. Class structure:
- ☐ All classes should be separated according to the sex of the student
  - ☐ Some sex education classes should be separated according to the sex of the student
  - ☐ All sex education classes should be coeducational
  - ☐ No preference
- b. Class size: For optimum learning and personal idea expression, I would favor limiting the size of sex education classes to: (check one)
- ☐ Under 20 students
  - ☐ 20-30 students
  - ☐ 30-40 students
  - ☐ Over 40 students
- c. Structure of courses:
- ☐ All courses should be instructor oriented (lecture)
  - ☐ Some courses should be instructor oriented (lecture)
  - ☐ Some courses should be student oriented (seminar)
  - ☐ All courses should be student oriented (seminar)
  - ☐ Some courses should emphasize the learning of basic facts and terminology related to sexuality
  - ☐ Some courses should emphasize the expressing and exchanging of ideas and beliefs of sexuality
  - ☐ Some courses should emphasize the actual teaching of sex education

5. Please check all areas that apply to where or from whom you have received previous sex education while attending Appalachian State University.

- ☐ In a course as a member of a large class  
☐ In a course as a member of a small class  
☐ From an instructor in a private or small group conference or meeting  
☐ From your college adviser  
☐ From psychological services  
☐ From local ministers or other clergymen  
☐ From roommate or peers  
☐ Other (write in) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
☐ I have received no sex education from any of the above sources while attending Appalachian State University

6. Please check all academic departments at Appalachian State University in which you have received information regarding sex education or human sexuality.

- ☐ Biology  
☐ Chemistry or Physical Science  
☐ English  
☐ History  
☐ Religion and Philosophy  
☐ Psychology  
☐ Sociology and Anthropology  
☐ Education  
☐ Home Economics  
☐ Art  
☐ Health and Physical Education  
☐ Music  
☐ Speech  
☐ Other (write in) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

7. If you checked or added any department in question 6, please indicate by department and course number those courses which were most meaningful to you. \_\_\_\_\_  
 \_\_\_\_\_



8. If an expanded sex education curricula was designed at Appalachian State University, would you favor having all learning experiences taught in only one academic department, providing qualified instructors were available within that department? (check one)

\_\_\_\_\_ Yes      \_\_\_\_\_ No

- a. If your answer to the above question was "yes", which department would you choose to instruct learning experiences in sex education? (write in) \_\_\_\_\_
- b. If your answer to the above question was "no", please check all departments you believe should offer learning experiences in sex education, providing qualified instructors were available within the departments.

\_\_\_\_\_ Biology  
 \_\_\_\_\_ Chemistry and Physical Science  
 \_\_\_\_\_ English  
 \_\_\_\_\_ History  
 \_\_\_\_\_ Religion and Philosophy  
 \_\_\_\_\_ Psychology  
 \_\_\_\_\_ Sociology and Anthropology  
 \_\_\_\_\_ Education  
 \_\_\_\_\_ Home Economics  
 \_\_\_\_\_ Art  
 \_\_\_\_\_ Health and Physical Education  
 \_\_\_\_\_ Music  
 \_\_\_\_\_ Speech  
 \_\_\_\_\_ Others (write in)

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Appendix B

Letters of Transmittal to  
Subjects and Faculty

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April 22, 1970

Dear Appalachian Student:

I am currently engaged in a master's thesis research project regarding the knowledge and attitudes of Appalachian State University students in the area of sex education. As you are probably aware, this facet of education is presently of great importance to students and educators throughout the nation. It is my hope that this study will be of equal importance to you and will be of value to you in your future endeavors.

The purpose of the study is twofold. First, the study is designed to secure information regarding the present knowledge and attitudes of Appalachian State University students in the area of sex education. Secondly, I hope to collect information which will enlighten this institution as to what Appalachian students are currently receiving in this area of education, and most importantly, what their desires are, if any, toward an expanded sex education curricula at this university.

In order for this study to be of significance, you, the student, must supply the needed information. You were one of the few students chosen from the entire student body to participate in the study. It will require approximately only one hour of your time; which I realize is quite valuable at this time of the academic year. I sincerely believe that you will find it a very meaningful and self-enlightening hour. Your answers, of course, will be strictly confidential.

The information needed to be secured from the students will be collected in one session. This meeting will be held on May 6, 1970 at 7:15 P. M. in the West Wing (new side) of the Cafeteria. It is requested that you arrive at the cafeteria between 7:00 P. M. and 7:15 P. M. Please detach the slip at the bottom of page two, indicating whether or not you will be able to participate in the study. Please fold the slip so that my return address is showing and return it either to the Student Center Post Office or the secretary in the Department of Health and Physical Education in Varsity Gymnasium by Monday, May 4, 1970. Please keep this letter as a reminder as to the date, time, and location of the meeting.



The ultimate success of this study will depend on whether Appalachian students are interested enough in the area of sex education to devote an hour of their time supplying the needed information. I sincerely hope you will be able to find the time to participate in the study which I believe will be valuable to you, other Appalachian State University students, and the entire institution.

Sincerely,

Ronald H. Clitherow  
Graduate Assistant  
Department of Health and  
Physical Education

-----

\_\_\_\_\_ I will participate in the study.

\_\_\_\_\_ I will not be able to participate in the study.

Ronald H. Clitherow

Student Center Post Office: Main Desk

OR

Department of Health and Physical Education

Varsity Gymnasium

(printed on reverse side)

April 29, 1970

Dear Appalachian Student:

As of this date, I have received neither an affirmative nor negative reply from you regarding your needed participation in the sex education knowledge and attitude study which I am conducting

I am sure that this time of the academic year is quite "hectic" for most students and that definite commitments are sometimes impossible to make in advance. As mentioned in my previous letter, you were one of the few students selected to participate in this study and to serve as a "representative" for your peers. It is earnestly hoped that you will be able to find about one hour within your busy schedule in order to take part in this study.

As a reminder, the meeting will be held on Wednesday, May 6, 1970. Please arrive at the West Wing (new side) of the Cafeteria between 7:00 P. M. and 7:15 P. M.

Please detach page two of this letter, indicating whether or not you will be able to participate in the study and return it by Monday, May 4, 1970 to the Student Center Post Office or the secretary in the Department of Health and Physical Education, Varsity Gymnasium.

Thank you again for your time and interest in this endeavor

Sincerely,

Ronald H. Clitherow  
Graduate Assistant  
Department of Health and  
Physical Education



\_\_\_\_\_ I will participate in the study.

\_\_\_\_\_ I will not be able to participate in the study.

Ronald H. Clitherow

Student Center Post Office: Main Desk

OR

Department of Health and Physical Education

Varsity Gymnasium

(printed on reverse side)

May 5, 1970

Dear Appalachian Student:

Thank you for your prompt, affirmative reply regarding your participation in the sex education knowledge and attitude study which I am conducting. This is merely a reminder that the meeting is tomorrow night.

When: Wednesday, May 6, 1970  
Arrive between 7:00 P. M. and 7:15 P. M.

Where: West Wing (new side) of the cafeteria

Thank you again for your time and interest in this study. I am looking forward to seeing you tomorrow night.

Sincerely,

Ronald H. Clitherow  
Graduate Assistant  
Department of Health and  
Physical Education



Date: Wednesday, May 6, 1970  
To: All Appalachian State University Faculty  
From: Ronald H. Clitherow  
Graduate Assistant  
Department of Health and Physical Education  
Topic: Student testing session for master's thesis

Dear Faculty Member:

I would greatly appreciate your cooperation in reading the statement below to all of your undergraduate classes on Wednesday, May 6, 1970.

Statement to Students

This is a reminder, to only those students who were contacted by letter, that the meeting to secure information regarding your knowledge and attitudes of sex education is to be held tonight, Wednesday, May 6, 1970 in the Cafeteria. Again, this reminder only applies to those students who were contacted by letter and were asked to participate in this study.

(Please Read Twice)

Thank you for your time and cooperation in this matter.

Sincerely,

Ronald H. Clitherow  
Graduate Assistant  
Department of Health and  
Physical Education

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## Appendix C

Pearson Product-Moment Correlation Charts

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### CORRELATION CHART FOR COMPUTATION OF PEARSON PRODUCT-MOMENT COEFFICIENT OF CORRELATION

X SCALE REPRESENTS Female Subject's Range of Ages (Years and months)

### Y SCALE REPRESENTS Female Subject's Range of Sex Knowledge Inventory Scores

	-100	-90	-80	-70	-60	-50	-40	-30	-20	-10		10	20	30	40	50	60	70	80	90	100
	-90	-81	-72	-63	-54	-45	-36	-27	-18	-9		9	18	27	36	45	54	63	72	81	90
	-80	-72	-64	-56	-48	-40	-32	-24	-16	-8		8	16	24	32	40	48	56	64	72	80
	-70	-63	-56	-49	-42	-35	-28	-21	-14	-7		7	14	21	28	35	42	49	56	63	70
90- 87	-60	-54	-48	-42	-36	-30	-24	-18	-12	-6	1	6	12	18	24	30	36	42	48	54	60
86- 83	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5		5	10	15	20	25	30	35	40	45	50
82- 79	-40	-36	-32	-28	-24	-20	-16	-12	-8	-4	2	4	6	8	12	16	20	24	28	32	36
78- 75	-30	-27	-24	-21	-18	-15	-12	-9	-6	-3	2	3	4	6	9	12	15	18	21	24	27
74- 71	-20	-18	-16	-14	-12	-10	-8	-6	-4	-2	5	2	4	6	8	10	12	14	16	18	20
70- 67	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	4	2	3	4	5	6	7	8	9	10	
66- 63							3	2	2	2	4	3	1	2							
62- 59	10	9	8	7	6	5	4	3	2	1	3	2	1	3	-4	-5	-6	-7	-8	-9	-10
58- 55	20	18	16	14	12	10	8	6	4	2	2	2	1	4	-6	-10	-12	-14	-16	-18	-20
54- 51	30	27	24	21	18	15	12	9	6	4	3	2	1	6	-9	-12	-15	-18	-21	-24	-27
50- 47	40	36	32	28	24	20	16	12	8	4	1	4	1	8	-12	-16	-20	-24	-28	-32	-36
46- 43	50	45	40	35	30	25	20	15	10	5		5	1	10	-15	-20	-25	-30	-35	-40	-45
42- 39	60	54	48	42	36	30	24	18	12	6		6	1	12	-18	-24	-30	-36	-42	-48	-54
38- 35	70	63	56	49	42	35	28	21	14	7	1	7	1	14	-21	-28	-35	-42	-49	-56	-63
34- 31	80	72	64	56	48	40	32	24	16	8	1	8	1	16	-24	-32	-40	-48	-56	-64	-72
	90	81	72	63	54	45	36	27	18	9		9	1	18	-27	-36	-45	-54	-63	-72	-81
	100	90	80	70	60	50	40	30	20	10		10	1	20	-30	-40	-50	-60	-70	-80	-90
f							14	17	15	21	24	11	15	7	5	0	0	1			
d	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1		1	2	3	4	5	6	7	8	9	10
x'							-56	-51	-30	-21	0	11	30	21	20	0	0	7			
x''							224	153	60	21	0	11	60	63	80	0	0	49			

$f$	$d$	$y$	$y^2$	$+y$	$-$
	10				
	9				
	8				
	7				
1	6	6	36	0	0
5	5	25	125	50	-10
7	4	28	112	28	-4
10	3	30	90	39	-15
20	2	40	80	22	-52
16	1	16	16	8	-19
19		0	0	0	0
13	-1	-13	13	11	-9
9	-2	-18	36	32	-12
9	-3	-27	81	42	-6
10	-4	-40	160	84	-8
4	-5	-20	100	40	-10
2	-6	-12	72	0	-30
3	-7	-21	147	56	0
2	-8	-16	128	24	0
	-9				
	-10				
$\Sigma f$ (N)	$\Sigma y$	$\Sigma y^2$	$\Sigma xy$	$\Sigma xy$	
130	-22	1196	436	-175	
$\Sigma x'$			$\Sigma xy'$		
-69			261		

$$\frac{\Sigma x'}{N} = \frac{\frac{-69}{130}}{130} = - .53$$

$$\left(\frac{\sum x'}{N}\right)^2 = (-.53)^2 = .2809$$

$$\frac{\sum x^2}{N} = \frac{721}{130} = 5.5461$$

$$\frac{\Sigma y'}{N} = \frac{\frac{-22}{130}}{1} = - .17$$

$$\left(\frac{\sum y}{N}\right)^2 = (-.17)^2 = .0289$$

$$\frac{\Sigma y'^2}{N} = \frac{\frac{1196}{130}}{130} = 9.2000$$

$$\frac{\Sigma x'y'}{N} = \frac{\frac{261}{130}}{130} = 2.0076$$

$$\sigma_x = \sqrt{\frac{\sum x^2}{N} - \left(\frac{\sum x}{N}\right)^2} = \sqrt{5.2652}$$

2.29

$$\sigma_y = \sqrt{\frac{\sum y'^2}{N} - \left(\frac{\sum y'}{N}\right)^2} = \sqrt{9.1711}$$

$$= 3.03$$

$$r = \frac{\frac{\sum x'y'}{N} - \left(\frac{\sum x'}{N}\right)\left(\frac{\sum y'}{N}\right)}{\sqrt{\left[\frac{\sum x'^2}{N} - \left(\frac{\sum x'}{N}\right)^2\right]\left[\frac{\sum y'^2}{N} - \left(\frac{\sum y'}{N}\right)^2\right]}}$$

$$\sigma_x \cdot \sigma_y$$

$$= \frac{2.01}{6.94} \frac{-(-.53)(-.17)}{}$$

$$= 1.28$$

$$\sigma_r = \frac{1-r^2}{\sqrt{N}} = \frac{1-.08}{\sqrt{130}}$$

$$= \frac{.92}{11.40} = .08$$

## Appendix D

Group Frequency of Sex Knowledge Inventory  
Scores Obtained by Study's  
226 Participants

Score	f (cf)	d	d <sup>2</sup>	fd	fd <sup>2</sup>
96% - 95%	1 (226)	16	256	16	256
94% - 93%		15	225		
92% - 91%		14	196		
90% - 89%	1 (225)	13	169	13	169
88% - 87%	3 (224)	12	144	36	432
86% - 85%	3 (221)	11	121	33	363
84% - 83%	5 (218)	10	100	50	500
82% - 81%	3 (213)	9	81	27	243
80% - 79%	7 (210)	8	64	56	448
78% - 77%	8 (203)	7	49	56	392
76% - 75%	9 (195)	6	36	54	324
74% - 73%	19 (186)	5	25	95	475
72% - 71%	13 (167)	4	16	52	208
70% - 69%	12 (154)	3	9	36	108
68% - 67%	16 (142)	2	4	32	64
66% - 65%	15 (126)	1	1	15	15
64% - 63%	15 (111)	0	0	0	0
62% - 61%	14 ( 96)	-1	1	-14	14
60% - 59%	13 ( 82)	-2	4	-26	52
58% - 57%	10 ( 69)	-3	9	-30	90
56% - 55%	10 ( 59)	-4	16	-40	160
54% - 53%	14 ( 49)	-5	25	-70	350



Score	f (cf)	d	d <sup>2</sup>	fd	fd <sup>2</sup>
52% - 51%	5 (35)	-6	36	-30	180
50% - 49%	8 (30)	-7	49	-56	392
48% - 47%	4 (22)	-8	64	-32	256
46% - 45%	1 (18)	-9	81	-9	81
44% - 43%	6 (17)	-10	100	-60	600
42% - 41%	2 (11)	-11	121	-22	242
40% - 39%	2 ( 9)	-12	144	-24	288
38% - 37%	4 ( 7)	-13	169	-52	676
36% - 35%	1 ( 3)	-14	196	-14	196
34% - 33%		-15	225		
32% - 31%	2 ( 2)	-16	256	-32	512
				$\Sigma fd = 60$	$\Sigma fd^2 = 8,082$

$$\begin{aligned} \text{Mean} &= 63.50 + \left( \frac{60}{226} \times 2 \right) = \\ &63.50 + .54 = \\ &\underline{64.04} \end{aligned}$$

$$\begin{aligned} \text{Median} &= 64.50 + \left( \frac{2}{15} \times 2 \right) = \\ &64.50 + .26 = \\ &\underline{64.76} \end{aligned}$$

$$\begin{aligned} \text{Standard Deviation} &= \sqrt{\frac{\Sigma fd^2}{N} - \left( \frac{\Sigma fd}{N} \right)^2} = \\ &= \sqrt{\frac{8,082}{226} - \left( \frac{60}{226} \right)^2} = \\ &= \sqrt{35.7611 - .0729} = \\ &= \sqrt{35.6882} = \\ &= 2 \times 5.97 = \\ &\underline{11.94} \end{aligned}$$

## Appendix E

## Academic Majors Indicated by the Subjects

Academic Majors	Freshman Males	Freshman Females	Sophomore Males	Sophomore Females	Junior Males	Junior Females	Senior Males	Senior Females	Total Students
Art		4		3					7
Biology	5	3	1	2	1	1	2	3	18
Business	7	1	6	3	4	2	5	1	29
Chemistry					1				1
Elementary Education	1	13		7	1	11		3	36
English	2	4	3	3		3			15
French						1			1
Geology	1								1
Health and Phy- sical Edu- cation	4	1	4	7	4	3	6	4	33
History	1	1	1			1	1	1	6
Home Economics		1		2		1		2	6
Industrial Arts	1	1	1		1		1		5
Library Science				1					1
Mathematics		1			1			2	4
Music		1			2	1			4
Philosophy and Religion			2						2
Physics			1				2		3
Political Science	1		2		1		1		5



Academic Majors	Freshman Males	Freshman Females	Sophomore Males	Sophomore Females	Junior Males	Junior Females	Senior Males	Senior Females	Total Students
Primary Education		1		2		4		5	12
Psychology	1		1		3	1		3	9
Social Science		1			1		4		6
Sociology		2	1	1			2	1	7
Spanish					1				1
Special Education				2				2	4
Speech Pathology								1	1
Undeclared	4	4		1					9

## Appendix F

Degrees of Discussion and Perceived Knowledge  
Subjects Reported Regarding Twenty-Five  
Selected Sexual Topics

Topic	Strata Mean Intensities of Discussion							
	Freshman Males	Freshman Females	Sophomore Males	Sophomore Females	Junior Males	Junior Females	Senior Males	Senior Females
Heredity	1.5	1.4	2.1	1.7	2.3	2.0	1.5	1.5
Puberty	2.3	2.2	2.4	2.2	2.3	2.0	1.9	1.7
Dating	2.0	1.4	1.9	1.7	2.0	1.3	1.9	1.5
Premarital Sexual Relationships	2.1	1.6	1.9	1.7	2.0	1.7	1.7	1.5
Marriage	2.1	1.8	2.1	1.8	2.1	1.7	1.8	1.5
Reproductive Organs and Functions	1.9	1.6	1.6	1.6	1.6	1.8	1.8	1.6
Intercourse	2.0	1.9	1.9	2.0	2.0	2.3	2.1	1.9
Menstruation	2.1	1.3	2.4	1.4	2.3	1.6	2.3	1.3
Ovulation	2.4	2.0	2.7	1.9	2.6	2.0	2.3	1.8
Pregnancy	1.9	1.7	1.9	1.6	2.2	1.6	1.9	1.6
Abortion	2.2	2.1	2.2	2.3	2.4	2.5	2.2	2.3
Birth Processes	1.9	2.3	2.3	1.9	2.2	2.1	2.0	1.8
Birth Control Methods	2.0	2.2	2.2	1.9	2.1	2.3	2.0	1.8
Venereal Diseases	2.2	2.3	2.0	2.0	2.3	2.3	2.1	1.8

\* Rating scale employed to determine degree of discussion was as follows: 1 = Discussed very much; 2 = Discussed, but not thoroughly; 3 = Briefly discussed; 4 = Not discussed at all.



## Strata Mean Intensities of Discussion

Topic	Freshman Males	Freshman Females	Sophomore Males	Sophomore Females	Junior Males	Junior Females	Senior Males	Senior Females
Infertility and Sterilization	2.5	2.6	2.9	2.6	2.6	2.7	2.5	2.4
Homosexuality and Other Sexual Practices	2.5	2.4	2.6	2.3	2.4	2.3	2.4	2.1
Pornography	2.6	2.5	2.6	2.5	2.6	2.9	2.4	2.6
Orgasm/Climax	2.5	2.6	2.7	2.6	2.3	2.7	2.5	2.6
Fetal Development	2.1	2.1	2.4	2.0	2.3	2.1	2.2	1.7
Masturbation	2.5	2.5	2.3	2.6	2.1	2.6	2.1	2.2
Fertilization	1.9	1.9	2.1	1.7	2.0	2.1	2.0	2.0
Impotency	1.8	3.0	2.9	2.5	2.8	2.8	2.7	2.8
Frigidity	3.1	2.6	3.0	2.6	2.9	2.7	2.9	2.6
Hormonal Functions	2.0	2.4	2.4	2.4	2.4	2.5	2.5	2.4
Child Rearing and Development	2.9	2.1	2.4	1.9	2.7	1.9	2.3	2.0

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Strata Mean Intensities of Perceived Knowledge\*

Topic	Freshman Males	Freshman Females	Sophomore Males	Sophomore Females	Junior Males	Junior Females	Senior Males	Senior Females
Heredity	1.9	1.9	2.1	2.2	2.1	2.1	2.3	2.1
Puberty	2.1	2.2	2.4	2.2	2.1	2.0	2.2	1.9
Dating	1.8	1.5	1.7	1.7	1.7	1.6	1.9	1.5
Premarital Sexual Relationships	1.9	1.9	1.5	2.0	1.5	1.9	1.9	1.8
Marriage	2.1	2.2	1.9	2.0	1.9	2.4	2.0	1.9
Reproductive Organs and Functions	1.6	2.0	1.5	1.9	1.4	2.0	1.7	1.8
Intercourse	1.6	2.1	1.5	1.9	1.6	2.2	1.9	2.0
Menstruation	1.9	1.4	1.9	1.5	1.9	1.4	1.9	1.3
Ovulation	2.3	1.9	2.2	1.9	2.3	1.9	2.2	1.8
Pregnancy	1.9	1.9	1.9	2.0	2.0	1.9	2.0	1.9
Abortion	2.3	2.4	2.2	2.5	2.4	2.6	2.3	2.4
Birth Processes	2.1	2.4	2.4	2.1	1.9	2.2	2.0	1.9
Birth Control Methods	1.9	2.4	1.9	2.0	1.7	2.2	1.8	1.7
Venereal Diseases	2.1	2.7	2.2	2.3	2.1	2.6	2.1	2.2
Infertility and Sterilization	2.5	2.8	2.6	2.6	2.6	2.9	2.5	2.5
Homosexuality and Other Sexual Practices	2.2	2.5	2.4	2.6	2.5	2.5	2.2	2.2

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\* Rating scale employed to determine degree of knowledge was as follows: 1 = Have much knowledge in area; 2 = Have some knowledge in area; 3 = Have little knowledge in area; 4 = Have no knowledge in area.



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 Strata Mean Intensities of Perceived Knowledge

Topic	Freshman Males	Freshman Females	Sophomore Males	Sophomore Females	Junior Males	Junior Females	Senior Males	Senior Females
Pornography	2.1	2.5	2.2	2.6	2.4	2.7	2.3	2.5
Orgasm/Climax	1.9	2.3	2.4	2.4	2.1	2.4	2.2	2.2
Fetal Development	2.4	2.5	2.4	2.1	2.1	2.1	2.3	1.9
Masturbation	1.9	2.6	1.9	2.4	1.9	2.5	2.0	2.2
Fertilization	1.9	2.1	2.2	1.9	1.9	2.1	2.1	1.9
Impotency	2.7	2.9	2.7	2.5	2.4	2.8	2.5	2.6
Frigidity	2.7	2.6	2.7	2.4	2.5	2.7	2.6	2.4
Hormonal Functions	2.3	2.5	2.4	2.4	2.4	2.7	2.4	2.5
Child Rearing and Development	2.7	2.4	2.6	2.2	2.6	2.1	2.3	2.0

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## Appendix G

**Academic Courses at Appalachian State University  
Which Provided Subjects Most Meaningful  
Information Regarding Human Sexuality**

Academic Department	Course Number	Course Title	Number of Students
Biology	101, 102, and 103	Introduction to Life Science	87
	107	Elementary Education Biology	7
	201	Invertebrate Zoology	2
	203	Animal Ecology	5
	301	Animal Physiology	1
	454	Genetics	2
Health and Physical Education	101	Personal Health	9
	102	Family, School, and Community Health	33
	103	First Aid	5
	210	Human Anatomy	8
	211	Human Physiology	2
	212	Physiology of Muscular Activity	1
	320	Principles and Philosophies of Health and Physical Education	7
	401	Methods and Materials in Health Education	1
Psychology	201, 202	General Psychology	29
	301	Human Growth and Development	6



Academic Department	Course Number	Course Title	Number of Students
Psychology (continued)	302	Educational Psychology	7
	303	Principles of Behavior	9
	320	Motivation	1
	499	Psychology of Early Childhood	1
Sociology	198	Marriage and Family Relations	11
	201	General Sociology	13
	305	Family Organization and Interaction	1
	310	Juvenile Delinquency	1
	480	Sociology of the Family	1
Anthropology	210	General Anthropology	2
English	101, 102, and 103	Grammar and Composition	3
	201	English Literature	2
Religion	203	Introduction to the Old Testament	1
Speech	101	Fundamentals of Speech	2

## Appendix H

Frequency of Subjects Supportive of  
Sex Education Curricula Provided by  
Various Academic Departments

Academic Department	Freshman Males	Freshman Males	Sophomore Males	Sophomore Females	Junior Males	Junior Females	Senior Males	Senior Females	Total Students *
Art	1	2	2	1					6 (4.03%)
Biology	24	23	14	22	13	18	11	16	141 (94.63%)
Chemistry/ Physical Science	3	5		4		2			14 (9.40%)
Education	5	10	6	10	7	7	5	8	58 (38.93%)
English	2	3	2	1	2		1	1	12 (8.05%)
Health and Physical Education	22	22	14	19	13	18	10	16	134 (89.93%)
History	2	3	1	1				3	10 (6.71%)
Home Economics	5	2	10	9	8	5	3	7	49 (32.89%)
Psychology	18	19	12	17	14	14	11	15	120 (80.54%)
Religion and Philosophy	9	9	6	8	5	6	3	6	52 (34.90%)
Sociology and Anthropology	15	13	11	15	8	13	8	13	96 (64.43%)
Speech	1	1	3	2					7 (4.70%)

\* Percentages based on 149 students advocating sex education curricula within more than one academic department.



## BIBLIOGRAPHY

### A. Books

- Beigel, Hugo G. (ed.). Advances In Sex Research. New York: Harper and Row Publishers, Inc., 1963.
- Blumer, Herbert. Motion Pictures and Youth. New York: The MacMillan Co., 1933.
- Broderick, Carlfred B., and Jessie Bernard (eds.). The Individual, Sex, and Society. Baltimore: The Johns Hopkins Press, 1969.
- Child Study Association of America. What to Tell Your Children About Sex. New York: Permabooks, 1965.
- Coleman, James S. The Adolescent Society. New York: Free Press of Glencoe, 1961.
- Cox, Frank D. Youth, Marriage, and the Seductive Society. Dubuque: Wm. C. Brown Co., 1969.
- Crawley, Lawrence Q., et al. Reproduction, Sex, and Preparation for Marriage. Englewood Cliffs: Prentice-Hall, Inc., 1964.
- Dalrymple, Willard. Sex Is For Real: Human Sexuality and Sexual Responsibility. New York: McGraw-Hill, Inc., 1969.
- Davis, Maxine. Sex and the Adolescent. New York: Dial Press, 1958.
- DeMartino, Manfred F. Sexual Behavior and Personality Characteristics. New York: Citadel Press, 1963.
- Duvall, Evelyn M. Why Wait Till Marriage. New York: Association Press, 1965.
- Eckert, Ralph Glenn. Sex Attitudes In the Home. New York: Association Press, 1956.
- Eickhoff, Andrew R. A Christian View of Sex and Marriage. New York: Free Press, 1966.
- Ellis, Albert. The American Sexual Tragedy. New York: Lyle Stuart, 1962.
- Erikson, Erik H. Childhood and Society. New York: W. W. Norton, 1963.
- Filas, Francis L. Sex Education In The Family. Englewood Cliffs: Prentice-Hall, Inc., 1966.
- Feucht, O. E., et al., (eds.). Sex and the Church. St. Louis: Concordia Publishing House, 1966.
- Group for the Advancement of Psychiatry. Sex and the College Student. New York: Fawcett World Library, 1968.
- Hettlinger, Richard. Living With Sex. New York: Seabury Press, 1965.



- Hilu, Virginia (ed.). Sex Education and the Schools. New York: Harper and Row Publishers, Inc., 1967.
- Johnson, Warren R. Human Sex and Sex Education. Philadelphia: Lea and Febiger, 1963.
- Kirkendall, Lester A. Premarital Intercourse and Interpersonal Relationships. New York: Julian Press, 1961.
- Lorand, Rhoda L. Love, Sex, and the Teenager. New York: The MacMillan Co., 1966.
- Masters, William H., and Virginia E. Johnson. Human Sexual Response. Boston: Little, Brown and Co., 1966.
- Medinnus, Gene R. (ed.). Readings in Psychology of Parent-Child Relations. New York: John Wiley and Sons, 1967.
- McCary, James Leslie. Human Sexuality. Princeton: D. van Nostrand Co., Inc., 1967.
- Neisser, Edith. Mothers and Daughters. New York: Harper and Row Publishers, Inc., 1967.
- Packard, Vance. The Sexual Wilderness. New York: David McKay Co., Inc., 1968.
- Powers, G. Pat, and Wade Baskin (eds.). Sex Education: Issues and Directives. New York: Philosophical Library, Inc., 1969.
- Rainwater, Lee. Family Design: Marital Sexuality, Family Size, and Contraception. Chicago: Aldene, 1965.
- Reiss, Ira L. Premarital Sexual Standards in America. New York: Free Press of Glencoe, 1960.
- Reuben, David. Everything You Wanted to Know About Sex--But Were Afraid To Ask. New York: David McKay Co., Inc., 1970.
- Rubin, Isadore, and Lester Kirkendall (eds.). Sex in the Adolescent Years. New York: Association Press, 1968.
- Rutledge, Aaron. Premarital Counselling. Cambridge, Mass.: Schenkman, 1966.
- Schulz, Esther D., and Sally Williams. Family Life and Sex Education: Curriculum and Instruction. New York: Harcourt, Brace, and World, Inc., 1969.
- Schur, Edwin M. (ed.). The Family and the Sexual Revolution. Bloomington, Indiana: Indiana University Press, 1964.
- Stein, Joseph. Maturity in Sex and Marriage. New York: Coward-McCann, 1963.



Thomas, John R. Catholic Views on Sex, Love, and Marriage. Garden City, New York: Hanover House, 1958.

Vincent, Clark E. Unmarried Mothers. New York: Free Press of Glencoe, 1961.

Wynn, J. C. Sex, Family, and Society. New York: Association Press, 1966.

Wert, James E., et al. Statistical Methods in Educational and Psychological Research. New York: Appleton-Century-Crofts, Inc., 1959.

#### B. Pamphlets and Documents

Barr, Donald. Sex Education Today. Englewood Cliffs: A Scholastic Teacher Report, 1968.

Christensen, Harold T. Sex, Science, and Values. New York: Sex Information and Education Council of the United States, 1969.

Fielding, C. R. Proceedings of a Symposium for Clergy and Physicians. Counselling in Family Planning. Toronto: The Council for Social Service, The Anglican Church of Canada, 1966.

Holzman, Seymour. Sex Education Today. Englewood Cliffs: A Scholastic Teacher Report, 1968.

Joint Committee, The American Association for Health, Physical Education, and Recreation and The National Association of Secondary School Principals. Administrative Problems in Health, Physical Education, and Recreation. Washington: National Education Association, 1969.

Joint Committee, The National Education Association and The American Medical Association. Health Education--A Guide for Teachers and a Text for Teacher Education. Washington: National Education Association, 1969.

Kirkendall, Lester. Sex Education. New York: Sex Information and Education Council of the United States, 1969.

\_\_\_\_\_ and Isadore Rubin. Sexuality and the Life Cycle. New York: Sex Information and Education Council of the United States, 1969.

Manley, Helen. Family Life and Sex Education in the Elementary School. Washington: Department of Elementary-Kindergarten-Nursery Education, National Education Association of the United States, 1966.

McGonigle, Elizabeth. What's Happening in Sex Education?. Englewood Cliffs: A Scholastic Teacher Report, 1967.

Rubin, Isadore. The Sex Educator and Moral Values. New York: Sex Information and Education Council of the United States, 1969.



Segal, Zev. "A Comparison of Sex Education Attitudes of Graduate Students in Elementary Education and Graduate Students in Secondary Education." Unpublished Doctor's dissertation, New York University, 1962.

### C. Periodicals

Allen, Alice A., and E. F. King. "Family Relations Courses," Journal of Home Economics, 62:19-22, January, 1970.

Bardis, Panos D. "Influences of Family Life Education on Sex Knowledge," Journal of Marriage and the Family, 25:85-88, February, 1963.

Bell, Robert R. "Parent-Child Conflict in Sexual Values," Journal of Social Issues, 22:35, April, 1966.

Bennel, Florence B. "Eliminating Barriers to Sex Education In The Schools," Journal of School Health, 38:68-71, February, 1968.

Calderone, Mary. "A Candid Conversation With the Outspoken and Embattled First Lady of Sex Education," personal interview, Playboy, 17:63-78+, April, 1970.

Calderwood, Deryck. "Adolescents' Views on Sex Education," Journal of Marriage and the Family, 27:291-298, May, 1965.

Committee on Educational Standards and Certification for Family Life Educators. "Family Life and Sex Education: Proposed Criteria for Teacher Education," The Family Coordinator, 19:183-186, April, 1970.

Eggert, C. Lee. "Critical Examination of Sex Education in the Elementary School," Research Quarterly, 25:20-25, May, 1954.

Elia, James, and Paul Gebhard. "Sexuality and Sexual Learning In Childhood," Phi Delta Kappan, 50:401-405, March, 1969.

Foster, Greg R. "Sex Information Versus Sex Education: Implications For School Health," Journal of School Health, 37:248-250, May, 1967.

Friggens, Paul. "Shameful Neglect of Sex Education," PTA Magazine, 61:4-9, May, 1967.

Gravatt, Arthur E. "Classroom Sex Education," Proceedings of a Symposium on Sex Education of the College Student. Journal of the American College Health Association, 15:61-64, May, 1967.

Gross, Leonard. "Sex Education Comes of Age," Look, 30:20-23, March 8, 1966.

Hamburg, Marian V. "Sex Education in the Elementary School . . . Teacher Preparation," National Elementary Principal, 48:52-56, November, 1968.



- Harter, Carl L., and Vestal W. Parrish, Jr. "Maternal Preference of Socialization Agent for Sex Education," Journal of Marriage and the Family, 30:418-426, August, 1968.
- Helz, Mary K. "What the College Student Doesn't Know," Proceedings of a Symposium on Sex Education of the College Student. Journal of the American College Health Association, 15:15-19, May, 1967.
- Hendryson, Elizabeth. "The Case For Sex Education," PTA Magazine, 63: 20-21, May, 1969.
- Hettlinger, Richard F. "Sex, The Church, and The College Student," Religious Education, 61:418-423, November, 1966.
- Hinrichs, Marie A., and Robert Kaplan. "The Home, the School, and Sex Education," Today's Health, 44:16+, February, 1966.
- Hoyman, H. S. "Should We Teach About Birth Control in High School Sex Education," Journal of School Health, 38:545-555, November, 1968.
- Johnson, Warren R. "The Sexual Revolution and the Colleges: A Challenge to Higher Education," Proceedings of a Symposium on Sex Education of the College Student. Journal of the American College Health Association, 15:5-9, May, 1967.
- \_\_\_\_\_ and Margaret Schutt. "Sex Education Attitudes of School Administrators," Journal of School Health, 36:64-68, February, 1966.
- Juhasz, Anne McCreary. "How Accurate Are Student Evaluations of Their Knowledge of Human Sexuality?," Journal of School Health, 37:409-412, October, 1967.
- \_\_\_\_\_. "Background Factors, Extent of Sex Knowledge and Source of Information," Journal of School Health, 39:32-39, January, 1969.
- Kilander, H. Frederick. "A Survey of the Public's Knowledge of Certain Aspects of Human Reproduction," Journal of School Health, 29:211-215, June, 1959.
- Kronhausen, Phyllis, and Eberhard Kronhausen. "Sex Education: The Orphan of American Schools," Phi Delta Kappan, 43:128-132, December, 1961.
- Levine, Milton I. "Sex Education In The Public Elementary and High School Curriculum," Journal of School Health, 37:30-39, January, 1967.
- Lief, Harold L. "New Developments in the Sex Education of the Physician," Journal of the American Medical Association, 212:1864-1866, June 15, 1970.
- Luckey, Eleanore B., and Gilbert D. Nass. "A Comparison of Sexual Attitudes and Behavior In An International Sample," Journal of Marriage and the Family, 31:364-379, May, 1969.



- Malfetti, James L., and Arline M. Rubin. "Sex Education: Who Is Teaching the Teachers?," The Record, 69:213-222, December, 1967.
- Masters, William H., and Virginia E. Johnson. "Interview With the Authors of Human Sexual Response," personal interview, Playboy, 15:67+, May, 1968.
- McIntire, Walter G. "Attitudes of Connecticut Principals Toward Family Life Education," Journal of School Health, 39:183-185, March, 1969.
- \_\_\_\_\_. "Parental Attitudes Toward Family Life Education," Journal of School Health, 39:666-668, November, 1969.
- Mirande, Alfred M. "Reference Group Theory and Adolescent Behavior," Journal of Marriage and the Family, 30:572-577, November, 1968.
- Montagu, Ashley. "The Pill, the Sexual Revolution, and the Schools," Phi Delta Kappan, 49:480-484, May, 1968.
- Mulholland, Walter E. "Sex or Social Education," Clearing House, 41:332-333, February, 1967.
- "Parents Get Blame For Lack of Sex Education," Nation's Schools, 77:95, May, 1966.
- Potter, Jessie, and Roger Libby. "Who Should Plan Your District's Sex Education Program?," American School Board Journal, 157:19-22, December, 1969.
- Reiss, Ira L. "Sex Education in the Public Schools: Problem or Solution?," Phi Delta Kappan, 50:52-56, September, 1968.
- Richardson, Charles E. "Education For Family Planning," Journal of School Health, 39:537-540, October, 1969.
- Schoel, Doris R. "The School Nurse: Her Role in Sex Education," Journal of School Health, 36:200-206, May, 1966.
- "Sex Education: Develop an Attitude Before You Develop a Program," American School Board Journal, 156:38-42, November, 1968.
- "Sex Education," Grade Teacher, 86:60-63, November, 1968.
- "Sex In the Classroom," Time Magazine, 94:50, July 25, 1969.
- Shipman, Gordon. "The Psychodynamics of Sex Education," The Family Coordinator, 17:3-12, January, 1968.
- Stiller, Richard. "Talking to Your Teenager About Sex," Sexology, 34:31-33, August, 1967.
- The Playboy Forum. "Sex Education in Med School," Playboy, 15:53-59+, June, 1968.

The Playboy Forum. "Sex Education Survey," Playboy, 17:55-66+, June, 1968.

"The School Administrator," An Organizational Position Statement. American Association of School Administrators, February, 1971, p. 21.

Thompson, A. G., and E. F. Derothe. "Sex Education: Parental Involvement in Decision Making," Phi Delta Kappan, 49:501-503, May, 1968.

"Too Much, Too Soon," Nation's Schools, 84:19+, August, 1969.

Vincent, Clark E. "The Pregnant Single College Girl," Proceedings of a Symposium on Sex Education of the College Student. Journal of School Health, 15:42-54, May, 1967.

Zazzaro, Joanne. "Critics or No Critics, Most Americans Still Firmly Support Sex Education In Schools," American School Board Journal, 157:30-32, September, 1969.



