

**A COMPARISON OF SEX KNOWLEDGES  
OF AUSTIN PEAY STATE UNIVERSITY  
FRESHMEN TO NATIONAL NORMS**

**BY**

**MARSHALL ANDERSON TOOMBS, III**

-07

A COMPARISON OF SEX KNOWLEDGES OF AUSTIN PEAY STATE  
UNIVERSITY FRESHMEN TO NATIONAL NORMS

---

A Research Paper  
Presented to  
the Graduate Council of  
Austin Peay State University

---

In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
in Education

---

by  
Marshall Anderson Toombs, III

July 1970

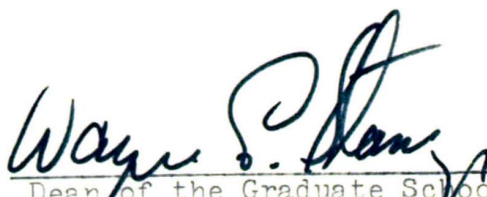


To the Graduate Council:

I am submitting herewith a Research Paper written by Marshall Anderson Toombs, III entitled "A Comparison of Sex Knowledges of Austin Peay State University Freshmen to National Norms" I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts in Education, with a major in Health and Physical Education.

  
Major Professor

Accepted for the Council:

  
Dean of the Graduate School

## ACKNOWLEDGEMENTS

The author wishes to express his appreciation to Dr. Clayton Powers for his counsel and suggestions during the preparation of this manuscript.

Appreciation is also expressed to Don Clardy and Dr. Robert Baugh for their cooperation in the use of their classes during the Spring of 1970.

The author also extends appreciation to his wife for her many contributions and typing the manuscript.

## TABLE OF CONTENTS

CHAPTER	PAGE
I. THE PROBLEM.....	1
Statement of the Problem.....	1
Justification of the Study.....	1
II. LIMITATIONS AND HYPOTHESES.....	3
Limitations.....	3
Hypotheses.....	3
III. REVIEW OF THE LITERATURE.....	4
IV. REPORT OF THE STUDY.....	13
Selection of Students.....	13
V. PROCEDURE.....	14
The Test.....	14
Treatment of the Test.....	14
VI. ANALYSIS OF DATA.....	15
Sex Knowledge Inventory.....	15
Experimental Test.....	17
VII. SUMMARY AND CONCLUSION.....	21
BIBLIOGRAPHY.....	22

## CHAPTER I

Today as the many aspects of health education are taught in our schools, one of the most pressing problems is that of sex education. The health programs in many areas of the country are devoid of any real instruction in the field of sex education. Many programs just pass over this phase of the curriculum and leave it to the discretion of the individual or the parents for instruction in this area.

### I. THE PROBLEM

STATEMENT OF THE PROBLEM. It will be the purpose of this study to determine (1) that the Freshman students at Austin Peay State University will be of no difference in their general knowledge of Sex Education than those other students tested in the United States, and (2) that there is a need for Sex Education units to be an intergrated part of the Health Education Curriculum in every school.

JUSTIFICATION OF THE STUDY. Much has been said of the need for better programs of Health Education of which Sex Education should be an integral part. This idea was expressed by Chesser and Dawe in this manner:

When sex education is attempted in school, it must be accepted as fundamental, that is not to be isolated, but that it shall be incorporated in a general scheme of work that offers a suitable background. The important thing is that sex instruction shall emerge naturally and without undue emphasis; that it shall

be a part of a course, as sex is a part of life.<sup>1</sup>

Another point of justification would be Kilander's statement that follows:

Adolescent boy and girls need and desire scientific answers to their questions about human reproduction and related technical areas, and the school should meet this need. At school the information can be given objectively and without emotional blocks, for the teacher is interested in all boys and girls and not just one specific child.<sup>2</sup>

The author here contends that studies have been made in the field of sex education, but in many areas of the country these studies have not been put to use in health curriculum programs.

---

1

Eustace Chesser and Zee Dawes, The Practice of Sex Education (New York: Rey Publishers, 1946), p.71.

2

H. Frederick Kilander, "Family Life Education", School Health Education (New York: The MacMillan Co., 1962)

## CHAPTER II

### LIMITATIONS & HYPOTHESES

#### I. LIMITATIONS

The author was limited in his research to testing only those students who were enrolled in Health 126 classes in the Spring of 1970 at Austin Peay State University. The author was also limited to only fifty students tested, of which twenty-five were males and twenty-five were females. Those students tested were Freshman students who had not had any previous health courses at Austin Peay State University.

#### II. HYPOTHESES

The null hypotheses of this study is: It is the assumption of this writer that the students tested at Austin Peay State University will prove to have the same knowledge of Sex structures and vocabulary as those students of the same age and maturation levels tested before.



## CHAPTER III

### REVIEW OF THE LITERATURE

In reviewing some facts which lead to the decisions to have a good Sex Education program one must look more closely at certain facts. When senior high school girls talk about the Sex Education in their high school, the majority of them think in terms of animated films on menstruation. Many programs are taught through the use of General Science or Biology courses in which the subject of Sex Education is barely mentioned and hurriedly gone over. Many times this is the extent of their concept and frequently the teacher's concept of Sex Education. If one is to look into this problem more deeply, it is found that these students have been "living" and learning sex education unknowingly since the day that they were born. Sex education is far more than the reproductive education they think of. This is not just new terminology. It is a broader envelopment of life, and to use a relatively new descriptive term that will probably replace sex education, sexuality education.

Many adults think that today's teenagers know so much more about reproduction than previous generations did, but it is a question of how much they correctly know. How much of their information is factual? Where did they get

the information? If this "vast knowledge" is correct and factual, what is the role of the parent, school, church and community in the knowledge?

Turner, Sellery and Smith give an indication of the new educational role with this statement:

The child receives his sex education today from many sources and at an early age. Mass media of communication bring ideas to child and adult alike. Television, radio, motion pictures, picture magazines, and newspapers constantly bombard the child with ideas relating to sex. He may see the birth of a baby pictured in a magazine, observe many forms of love-making on the television and at the cinema, hear jokes about sex on the radio, and read about sex crimes in the newspaper. To counteract the impact of these experiences, the combined efforts of the home, school, and church are required in order to provide children and youth with scientific information, sound sex attitudes, and desirable standards of conduct.<sup>3</sup>

Where should attitudes about sex start? When does sex education begin? At Puberty? Ten years of age? Sixth grade? Certainly not, it begins at birth. And when does it end? It ends with death. Attitudes about self, others, roles, personality, and the process of life are only a few examples of sexual attitudes for almost everything that relates to life is to some extent and degree sexuality.

Sex is for one thing a phase or aspect of personality. It has a direct relationship to physical development and emotional adjustment. It strongly conditions the thinking of an individual. Probably no other single fact influences the life of a person as much as membership in one or the other sex. Ways of thinking,

---

<sup>3</sup>C.E. Turner, C. Morley Sellery, and Sara L. Smith, School Health and Health Education (3rd. ed., St. Louis: C. V. Mosby Co., 1957), p. 272.

customs of behavior, social role, vocational activities, choice of associates, mode of dress, and many other important factors are strongly conditioned by virtue of being male or female.

An individual's happiness as a person, his success as a family member and a social being, and his contribution as a citizen are either enhanced or destroyed by his success or failure in fitting into his sex role, and in directing his sexual impulses wisely.<sup>4</sup>

In addition to attitudes, there must be the use of the mind in making decisions. In order to make decisions there must be information available. It seems logical that the majority of people agree that the home should be the rearing grounds of sexuality. Unfortunately should and being are two different things. Because many parents are shirking their responsibilities in this area for a number of different reasons, one of which is their lack of factual information and means of relating the information. It becomes, increasingly, the responsibility of other agencies and individuals to supply factual information.

Education for adjustment to sex begins at home, long before the child starts school, and not as many parents believe, at the time of the physiological changes of puberty. Attitudes are formed early in life; the child learns from the responses to many situations made by the parents in the home. For example, ideas about sex are provided by early toilet training, recognition of differences between boys and girls, pregnancy, infant care, pets and other animals, and even dress, mannerisms, and role of various members of the family.<sup>5</sup>

---

<sup>4</sup>Lester A. Kirkendall, Sex Education as Human Relations (New York: Inor Publications, Inc., 1950), p. 1.

<sup>5</sup>Arthur L. Harnett and John H. Shaw, Effective School Health Education (New York: Appleton-Century-Crofts, Inc., 1959), p. 51.



This indicates if we wait until the child is old enough to be taught by outside agencies, then we may have waited too late. Far greater are the opportunities for the parents to help the child to develop standards of personal conduct and the strength of character to maintain them,<sup>6</sup> than for outside agencies to undertake this all important task.

Within the framework of the church are the opportunities of teaching love, family life, marriage and other related subjects both in word and in action. The church appears to be going even farther than these above mentioned traditional areas. Recently in a series of Sunday School lessons for junior high students, there was a unit of five lessons in the Methodist literature on the self. It included lessons on the psychological, physical, social, and religious aspects of the individual.<sup>7</sup> Even though the Church is playing a greater teaching role in the area of sexuality education, how many children does the Church reach?

There are many fine organizations that are striving to fill the gap in the lack of understanding among children and youth in the area of sexuality. Just how much these can do is debatable. Even with their outreach, they touch only a few. There are programs developed in the Y.W.C.A.

---

<sup>6</sup>Turner, Sellery, and Smith, op. cit., p. 272

<sup>7</sup>Sam S. Barefield, "Journey in Search of a Self", Christian Adventure (June, July, August, 1967), pp. 5-22.



and the Y.M.C.A., Girl Scouts, Boy Scouts, etc. Even as a combined effort is made by these and other agencies to initiate beneficial educational programs, what lasting effect can these have. There are many good things that come from such programs, but probably the greatest drawback is the infrequency of the meetings and the brevity of these.

This then leaves the school.

All agencies which touch the lives of children and youth have an obligation to prepare them for their function as members of a family now, and as potential husbands, wives, and parents later. The schools, however, is the only institution which receives all children over a prolonged period. It has the challenging opportunity and obligation to supplement and contribute to this education and in some instances to offset the unfavorable teachings the child has picked up from various sources. The school has definite responsibilities for the total education of the child, and this includes the important phase of his living--his sex and family interest.<sup>8</sup>

Although as was stated previously, the best place to teach basic understandings of sexuality is in the home. But when the home fails to supply these needs of the child then the next best place is the school. The big boost for sexuality education came in 1964 when the National Educational Association and the American Medical Association jointly endorsed the principle that health education--including full information on sex and "family life"-- should be offered in kindergarten and progress through high school.<sup>9</sup>

---

<sup>8</sup>Helen Manley, "Sex Education- Where, When and How Should It Be Taught?", Journal of Health, Physical Education, and Recreation (March 1964), p. 22.

<sup>9</sup>U.S. News & World Report, "Why the Furor Over Sex Education?", August 4, 1969, pp. 44-46.

In New York City this program of sexuality education from kindergarten through high school is being practiced and there has been little or no difficulty in presenting this program as stated by an official of the city's board of education.

A major effort was made to get co-operation from community groups, health organizations and clergy. All got together on the program and there has been no major outburst against it.<sup>10</sup>

Another great advocate and leader in the field of sexuality education is Dr. Mary S. Calderone. She supports the NEA and AMA's decision about sexuality education as she states:

Sex is not something you do, but something you are. To me, there is no controversial subject in sex. Anything that exists is here, and therefore we must explore it, understand it, and learn as much as we can about it.<sup>11</sup>

Dr. Calderone, who is also the executive director of the Sex Information and Education Council of the United States known as SIECUS, states that:

When speaking sex education at the high school level, she should like to emphasize the critical importance from every point of view of this age group. From the therapeutic point of view it provides the golden opportunity to make up for previous deficiencies and to heal or correct such damage as may have been inflicted on the individual by distorted attitudes or traumatic experiences, either from society as a whole or from individuals.<sup>12</sup>

---

<sup>10</sup>Ibid, p. 46.

<sup>11</sup>Ibid, p. 46.

<sup>12</sup>Mary S. Calderone, "The Development of Healthy Sexuality--One Goal For Health Education", The National Convention of AAHPER in Chicago, Illinois, March, 1966.

The Public Health Committee of the New York Academy of Medicine has emphasized in its report on the great gap in health education disclosed by the School Health Education Study that the role of the health educator is twofold.<sup>13</sup> The statement in the School Health Education Study is:

Adolescents have received little authentic, useful and practical information about sex. What little.... that has been available to them has consisted mainly of de-personalized accounts of the physiology of sex and a combination of exhortation and admonition..... This gap in sex education is not just on the biological side. Probably no previous generation of adolescents has had such an enormous wealth of scientific information made available to them, yet probably none has been left so ignorantly and undisciplined in ethical essentials.<sup>14</sup>

It is this authors contention that this really supports the obligation for health educators to master and to begin to present the basic factual material that has to do with human reproduction and human sexual behavior.

If the school is going to shoulder the majority of the responsibility of sexuality education, then it must become an entire school responsibility. The teacher will play a very important part in the success of the program. Gruenberg and Kaukonen give these qualifications for a sex education teacher:

1. The teacher must have a balanced attitude toward life. This requirement would exclude all those who have morbid interests in sex or abnormal psychology, or whose outlook in general

---

<sup>13</sup> Committee on Public Health, New York Academy of Medicine, "Health Education: Its Present Status", Nov., 1965

<sup>14</sup> Sliepcevich, M., "School Health Education Study"; School Health Education Study, Washington, D.C., 1961-1963.



is pessimistic.

2. The teacher must have poise and judgement.
3. The teacher must have an active sympathy with the problems and feelings of young people.
4. The teacher must be a person of character and principle. His personality must win the respect of boys and girls, since sex education is essentially a phase of character training and is taught indirectly, by inspiration or by imitation on the part of students, rather than by mere imparting of information.

If a unit of sexuality education were to be taught in school, then one such as Helen Manley suggested may be one of the better ones:

#### JUNIOR HIGH SCHOOL

1. Growth (the causes and many changes in growth).
2. The physiology of reproduction for male & female.
3. Growth and birth of a baby.
4. Inheritance.
5. Boy-girl relations (dating and it's responsibilities).
6. Venereal diseases.
7. Family relations.
8. Responsibilities of being grown up.

#### SENIOR HIGH SCHOOL

1. The family--histories and types.
2. Adolescence--it's meanings, responsibilities, boy-girl relations, and dating.
3. Selecting a mate--qualifications.
4. Preparing for marriage.
5. Understanding the process of reproduction.
6. Promiscuity--dangers and ethics; illegitimacy, prostitution, venereal disease.

---

<sup>15</sup>Benjamin C. Gruenberg and J.L. Kaukonen, High Schools and Sex Education (Washington D.C., United States Public Health Service, 1940)



7. Population explosion and probable answers to it.
8. Ideal of life.<sup>16</sup>

The author finally would like to quote Dr. Mary S. Calderone as she states:

It will take more, infinitely more, than one course in reproductional biology, no matter how broad, to bring our teenagers back into contact with us. It will take a great many men and women leveling with them about these many fundamental aspects of human relationships, but especially the understanding and management of sexuality by man, for man. Health educators must be counted on to do more than merely convey a few biological facts. They must bestir themselves within their communities to increase the contacts between all segments and ages within the communities, to help adolescents achieve communication about things that really matter, that are really true.<sup>17</sup>

---

<sup>16</sup>Manley, op. cit., p. 22

<sup>17</sup>Calderone, op. cit.

## CHAPTER IV

### REPORT OF THE STUDY

The author attempted, by means of this study to show that sex education should play an important role in the school curriculum for the benefit of the individual student.

#### I. SELECTION OF STUDENTS

The students for this study were all members of two health 126 classes at Austin Peay State University in the Spring of 1970. The selection was random in nature in that the author had no prior knowledge of who would be taking the test and that these persons tested selected the courses of their own free will.

## CHAPTER V

### PROCEDURE

#### I. THE TEST

The Sex Knowledge Inventory Test, Form Y, published by the Family Life Publications, Inc., Durham, North Carolina, consisted of 100 questions which were divided into three sections. One section dealt only with anatomy and the second section dealt with a combination of anatomy and vocabulary of terms. The third section dealt only with vocabulary. The test was administered within a fifty minute time period.

#### II. TREATMENT OF THE TEST

The test which was administered was given by the author. The test consisted of 100 questions concerning sex knowledge vocabulary and anatomy. Instructions were read from the test booklet at the beginning of each testing session by the author.

The author also monitored the test and graded all of the tests. The entire test was administered during regular class meetings. The students taking the test had no instruction in sex education prior to the test.

## CHAPTER VI

### ANALYSIS OF DATA

An attempt will be made to record the findings of the test by figuring T-Scores and computing them to percentages for comparison. The formula for the T-Scores is the following one:

$$\text{T-Scores} = 50 + \frac{10 (X - M)}{S}$$

#### I. THE SEX KNOWLEDGE INVENTORY Form Y, Vocabulary and Anatomy by Family Life Publications, ----(Test #1)

SCORE	PERCENTILE	SCORE	PERCENTILE
93.....	100	53.....	37
92.....	99	52.....	35
91.....	99	51.....	33
90.....	99	50.....	31
89.....	99	49.....	29
88.....	99	48.....	27
87.....	99	47.....	25
86.....	98	46.....	23
85.....	97	45.....	22
65.....	60	25.....	4
64.....	59	24.....	3
63.....	56	23.....	3
62.....	54	22.....	2
61.....	52	21.....	2
60.....	50	20.....	2
59.....	47	19.....	1
58.....	45	18.....	1
57.....	45	17.....	1
56.....	44	16.....	1
55.....	43	15.....	1
54.....	40	14.....	0



The boys have done better in parts one and two of this test. Their median score is 2 points higher than the girls' on part one, and 5 points higher on part two. The medians are the same for both sexes on part 3- Vocabulary. These sex differences may be due to some advantage to the male subject in the way Form Y is constructed, or the boys studied here simply may have a greater knowledge of sex anatomy than the girls. The final answers to the questions raised by these results will have to wait for further research.

Users of Form Y may be interested also in the fact that slightly over 25% of both these boys and girls earned better scores on opposite than on own sex anatomy. And, a large majority of these were well above the 50th percentile levels in total score. This means that many of the better informed of these high school seniors often knew more about the anatomy of the opposite sex than about their own sex parts. The Kuder-Richardson coefficients of reliability for this test is .92.

These norms were derived from a study of tests administered by high school teachers of family life courses in six states; California, Indiana, Iowa, Ohio, Pennsylvania, and North Carolina. The tests were given during the last three months of their senior year.

## II. EXPERIMENTAL TEST (Test #2)

SCORE	PERCENTILE	SCORE	PERCENTILE
87.....	99	60.....	38
82.....	97	59.....	34
81.....	96	58.....	31
80.....	95	55.....	21
79.....	94	54.....	18
78.....	93	53.....	16
75.....	88	50.....	10
74.....	86	49.....	8
73.....	84	47.....	5
72.....	81	45.....	4
70.....	76	42.....	2
69.....	72	40.....	1
68.....	69	36.....	(.35)
67.....	65	33.....	(.13)
65.....	58	32.....	(.09)
64.....	54	31.....	(.07)
62.....	46	26.....	(.011)

The range for this test was from 26-87. The Mean score was 63. The Standard Deviation was 10.

This test through the use of T-Scores has been made comparable to the Family Life Test. T-Scores were computed and changed to percentages to make this comparison. It is found that the range of the scores very nearly are the same in (Test #1) The Family Life Test, and the test done by the author (Test #2).

The scores were further divided for comparison into male and female scores. It is found through this comparison that even though the male students scored the highest, both sexes had the same amount of scores above and below the mean. (Chart on following page)

MALE SCORES			FEMALE SCORES		
RAW	T-SCORE	PERCENTILE	RAW	T-SCORE	PERCENTILE
87.....	74.....	.99	82.....	69.....	.97
82.....	69.....	.97	81.....	68.....	.96
80.....	67.....	.95	79.....	66.....	.94
75.....	62.....	.88	78.....	65.....	.93
74.....	61.....	.86	74.....	61.....	.86
73.....	60.....	.84	73.....	60.....	.84
70.....	57.....	.76	72.....	59.....	.81
69.....	56.....	.72	70.....	57.....	.76
68.....	55.....	.69	69.....	56.....	.72
68.....	55.....	.69	65.....	52.....	.58
67.....	54.....	.65	65.....	52.....	.58
64.....	51.....	.54	65.....	52.....	.58
64.....	51.....	.54	65.....	52.....	.58
59.....	46.....	.34	62.....	49.....	.46
47.....	34.....	.5	60.....	47.....	.38
47.....	34.....	.5	59.....	46.....	.34
45.....	32.....	.4	59.....	46.....	.34
42.....	29.....	.2	58.....	45.....	.31
40.....	27.....	.1	55.....	42.....	.21
36.....	23.....	(.35)	54.....	41.....	.18
36.....	23.....	(.35)	53.....	40.....	.16
33.....	20.....	(.13)	53.....	40.....	.16
32.....	19.....	(.09)	50.....	37.....	.10
31.....	18.....	(.07)	49.....	36.....	.8
26.....	13.....	(.01)	47.....	34.....	.5

The Experimental Test was divided into three parts; Part 1--Sex Anatomy, Part 2--Sex Vocabulary, and Part 3 also Sex Vocabulary.

Part 1 was subdivided into male and female sections.

As subjects were compared it was found that:

1. In the male section both men's and women's average scores are the same at 69%.
2. In the female section the average scores were 69% for the women and 62% for the men. This indicates that the women know more about their own sex structures than the men.

In Part 2 the females had an average of 58%. This again indicates that the women tested knew more about the sex structures than did the men tested, because the men only scored an average of 54% on this part.

On the last part, Part 3, the women outscored the men on the averages of 62% for the women and 54% for the men. This also indicates a marked increase in the knowledge of sex vocabulary for the women in this study. The following charts relate to the explanations given above.

#### MALE SCORES

RAW	PART 1			PART 2	PART 3
	Total	Male	Female		
87	17	8	9	32	38
82	15	8	7	31	36
80	15	6	9	29	36
75	13	7	6	27	35
74	12	5	8	27	35
73	11	6	5	27	35
70	11	6	5	26	33
69	9	4	5	23	36
67	8	6	2	24	35
64	8	5	3	27	29
64	14	6	8	21	28
59	8	3	5	24	27
47	5	2	3	21	21
47	9	5	4	13	25
45	7	5	2	9	29
42	5	4	1	13	26
40	3	0	3	11	26
36	5	3	2	10	21
36	4	3	1	12	20
33	5	3	2	7	21
32	5	4	1	13	14
31	6	3	3	24	1
26	1	1	0	8	17



## FEMALE SCORES

RAW	PART 1			PART 2	PART 3
	Total	Male	Female		
82	16	8	8		
81	13	6	7	29	37
79	11	7	4	29	39
78	12	3	9	32	36
74	13	6	7	28	38
73	7	2	5	27	34
72	13	5	8	29	37
70	14	7	7	21	38
69	9	3	6	17	39
65	6	3	3	28	32
65	12	5	7	26	32
65	9	3	6	21	32
65	12	4	8	22	34
62	4	2	2	18	35
60	7	3	4	22	36
59	7	3	4	20	33
59	8	3	5	23	29
58	8	5	3	19	32
55	7	2	5	14	36
54	9	5	4	11	37
53	4	3	1	15	30
53	9	6	3	15	34
50	3	2	1	16	28
49	6	4	2	19	28
47	7	6	1	13	30
				18	22

## CHAPTER VII

### SUMMARY AND CONCLUSION

The Sex Knowledge Inventory test, Form Y, which was given to Austin Peay State University students was administered in the same manner, or as nearly as possible to tests given in other areas of the country. As compared to the national norms by percentages, the range of the scores very nearly correlates in each study. The female students at Austin Peay State University seem to have a better knowledge as far as the area of Sex Vocabulary is concerned. This fact is not entirely in agreement with the study which was done by Family Life Publications. An answer to this difference may be the fact that the study was limited to only fifty people at Austin Peay State University, whereas the Family Life Study involved over 390 students throughout the country.

In the preceding chapter the facts show that the females outscored the males in every part of the test except on the male anatomy, where both scores were equal. The results also pointed out that even though a male student scored the highest test score and a male student scored the lowest test score, over 50% of both male and female students had test scores above the mean.

## BIBLIOGRAPHY

## A. BOOKS

- Baker, J. N. Sex Education In High Schools. New York: Emerson Books, Inc., 1963.
- Bauer, W.W. Moving Into Manhood. New York: Doubleday and Company, Inc., 1963.
- Bonner, Ralph and S. Benner. Sex and the Teenager. New York: MacFadden Bartell Corporation, 1964.
- Call, Alice L. Toward Adulthood. Philadelphia: J.B. Lippincott Company, 1964.
- Chesser, E. and Z. Dawes. The Practice of Sex Education. New York: Rey Publishers, 1964.
- Gesell, A. F. and L.B. Ames. Youth, The Years From Ten To Sixteen. New York: Harper and Row, 1956.
- Gruenberg, Benjamin C. and J.L. Kaukonen. High Schools And Sex Education. Washington, D.C.: United States Public Health Service, 1940.
- Harnett, Aurthur L. and John H. Shaw. Effective School Health Education. New York: Appleton-Century-Crofts, Inc., 1959.
- Kirkendall, Lester A. Sex Education As Human Relations. New York: Inor Publishing Company, Inc., 1950.
- Turner, C.E., C. Morley Sellery, and S.L. Smith. School Health and Health Education. New York: C.V. Mosby Company, 1957.

## B. UNPUBLISHED MATERIAL

- Calderone, Mary S. "The Development of Healthy Sexuality-- One Goal for Health Education." (Address given at The National Convention of the American Association for Health, Physical Education, and Recreation in Chicago, Illinois on March 21, 1966.

## C. PAMPHLET

- Committee on Public Health. "Health Education: Its Present Status". New York: New York Academy of Medicine, 1965.

Sliepcevich, M. "School Health Education Study". Washington, D.C.: School Health Education Study, 1961-1963.

#### D. PERIODICALS

Barefield, Sam S. "Journey in Search of a Self". Christian Adventure. June, July, August, 1967, 5-22.

Calderwood, Deryck. "Adolescents' Views on Sex Education." Marriage and the Family. XXVII, 1965.

Harnett, Aurthur L. "How We Do It--A Program of Sex Education in High Schools in Israel." The Journal of School Health. 513-515.

Hoyman, Howard S. "Basic Issues In School Sex Education." The Journal of School Health, XXIII, January, 1953.

Kilander, Federick H. "Family Life Education." School Health Education. 1962.

Manley, Helen. "Sex Education: Where, When, and How Should It Be Taught?" Journal of Health, Physical Education, and Recreation. March, 1964.

U.S. News & World Report. "Why The Furor Over Sex Education". August, 1969.