

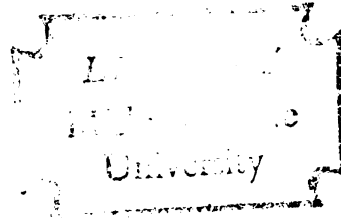
A STUDY TO DETERMINE THE INFLUENCE OF  
SELECTED FACTORS UPON THE EAST LANSING  
HIGH SCHOOL GIRLS PARTICIPATION  
IN SPORTS ACTIVITIES

THESIS FOR THE DEGREE OF M. A.  
MICHIGAN STATE UNIVERSITY

NANCY A. McNAMES  
1967



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By

Nancy Ann Mc Names

AN ABSTRACT

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

MASTER OF ARTS

Department of Health, Physical Education and Recreation

1967

Approved \_\_\_\_\_

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## ABSTRACT

### A STUDY TO DETERMINE THE INFLUENCE OF SELECTED FACTORS UPON THE EAST LANSING HIGH SCHOOL GIRLS PARTICIPATION IN SPORTS ACTIVITIES

by Nancy A. Mc Names

#### Statement of the Problem

This study has a twofold purpose; (1) to determine the relationship of high school girls participation in sports activities with specific background factors (self attitudes, parents' attitudes and activity level, siblings' activity level, peer attitudes, and family sports activity level) and the family's socio-economic level; and (2) to determine the students sports activity interests, attitudes toward physical activity, and the reasons for or against participation at each grade level to be used as a guideline in setting up a curriculum.

#### Procedure

The questionnaire technique was used in this study to secure information from 552 high school girls attending East Lansing High School. Four areas were chosen from which pertinent data would be obtained: (1) background factors, (2) socio-economic level, (3) attitudes, and (4) interests.



2. The two most important reasons for participating in physical activity were fun-enjoyment and exercise-figure improvement. The two reasons for not participating were lack of time particularly related to homework study time.
3. Girls tend to rate their activity level high and in reality it is low when all their activities during the year are computed.

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NANCY A. MC NAMES

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## CHAPTER I

### INTRODUCTION

#### Statement of the Problem

This study has a twofold purpose: (1) to determine the relationship of high school girls participation in sports activities with specific background factors (self attitudes, parents' attitudes and activity level, siblings' activity level, peer attitudes, and family sports activity level) and the family's socio-economic level; and (2) to determine the students sports activity interests, attitudes toward physical activity, and the reasons for or against participation at each grade level to be used as a guideline in setting up a curriculum.

#### Need for the Study

With the swiftly moving social and economic developments of today the American public is constantly brought face to face with the problems of health, successful group relationships, and the constructive use of leisure time. Our current educational philosophy is that the schools need to be concerned with education of the youth of America so that they can more intelligently meet these and other problems. "One of our most important concerns in the school physical education program is that students develop

positive attitudes toward active participation in physical activity, which will lead them to seek further physical activity after leaving the organized school program."<sup>1</sup> Many leaders in our field believe that this purpose will be accomplished more successfully if the students needs and interests are met in a way that is both desirable and stimulating to them.

This study will attempt to determine some of the main factors which influence high school girls' participation in sports activities, to study the interest patterns and attitudes toward physical activities at each grade level, and to help establish guidelines for a curriculum meeting their needs.

### Procedure

During the Fall Term, 1966, a questionnaire was constructed to investigate four areas: background factors, socio-economic level, attitudes, and interests of the girls attending East Lansing High School. This questionnaire was first administered to a random sample of 30 girls at each grade level in order to determine the top ten sports or activities for various questions on the questionnaire.

The questionnaire was reconstructed and then given to all the girls in the high school, including the pilot

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<sup>1</sup> Jack Keogh, "Analysis of general attitudes toward physical education," The Research Quarterly, 33:239-44, (May, 1962).

group, that were present on that day. Five hundred and fifty-two girls answered the questionnaire out of 600 girls.

### Definition of Terms

Background Factors. In this study background factors refers to: the students self attitude, parents attitudes toward girls participation in sports activities and the parents activity level, sibling activity level, peer attitudes toward girls participation in sports activities, and the family sports activity level.

Self Attitude. Throughout this study self attitude refers to the students responses toward several aspects: (1) does physical education provide values for daily living, (2) the importance of physical education in the school program, and (3) should physical education be required for all physically able.

Socio-economic Level. In this study the socio-economic level refers to the fathers occupation level according to the scale by Bergel.<sup>2</sup>

Interests. Throughout this study interests refers to the students responses to: (1) their three favorite sports activities, (2) sports events they attend at the high school, and (3) membership in sports and recreational

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<sup>2</sup>Egon Ernest Bergel. Social Stratification. New York: McGraw-Hill Book Company, Inc., 1962, p. 271.



clubs.

Attitudes. Throughout this study attitudes refers to the subjects responses to: (1) self attitude, (2) if sports is a good way to meet boys, (3) if girls should participate in sports, and (4) the sports activities girls should or should not learn basic skills necessary for participation.

Sports Activity Questionnaire. The questionnaire used in this study consists of four parts: (1) background factors, (2) socio-economic level, (3) attitudes, and (4) interests.

Sports Activity Lists. The page attached to the questionnaire which contains a ~~separate~~ list of boys and girls sports activities to aid in recall.

#### Limitations

This study will be limited to the girls attending East Lansing High School. It will be delimited to the 552 girls present on the day the questionnaire was administered.

This study can only be as accurate as possible when it relies upon the ability of the girls to remember the activities participated in during their high school years, their parents activities, their family activities, and their honest and accurate opinion to all questions. To alleviate part of the situation somewhat, an extensive list of sports and recreational activities for both girls

and boys was provided to each subject as a reference to aid recall.

All the girls in each grade answered the questionnaire at the same time and in the same room which further limits this study.

### Basic Assumptions

The socio-economic level of the fathers occupation along with the activity patterns of the parent and the family all influence the girls sports activity level. Those of the higher socio-economical level will tend to be less active than those of the lower socio-economical level.

The attitudes of girl friends and boy friends play a vital role in influencing the girls participation in sports activity.

Most girls feel that they should participate in sports but they share the feeling that there are definite sports they should not participate in such as: judo, karate, wrestling, weight lifting, skeet shooting, tackle football, and track and field.

The girls tend to decrease greatly in their participation in sports as they grow older. They will continue to participate in individual and dual sports more than team sports.

The girls general attitudes toward the value of physical education tend to correspond to their level of

participation in sports activities.

The sports most frequently participated in are swimming, social dancing, horseback riding, tennis, and snow skiing.

The spectator sports attended by most girls are basketball and football.

## CHAPTER II

### REVIEW OF THE LITERATURE

#### Theoretical Background

Social and economic developments are taking place at such a rapid rate that there are many problems facing Americans today which must be met so that their life will be more enjoyable. Among these problems are health, group relationships, and the wise use of leisure time which the physical education program at the high school level should help the students learn to overcome. Both Broer<sup>1</sup> and Keogh<sup>2</sup> agree that these problems can be met if students objectives are satisfied and their needs and interests met in a way that is both pleasant and stimulating to the students. The first step they feel is understanding the nature of the students attitudes toward physical education which can obviously be determined by the needs and interests as the students themselves see them.

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<sup>1</sup>Marion Broer and Dolly Holland, "Physical education needs and interests of University of Washington women in service classes," The Research Quarterly, 25:387-92, 1954.

<sup>2</sup>Jack Keogh, "Analysis of general attitudes toward physical education," The Research Quarterly, 33:239-44, 1962.

### Interests

Driftmier,<sup>3</sup> working on this assumption that greater and more lasting benefit is derived from a physical education program if the interests of the individual are recognized and considered, administered a questionnaire to 250 high school girls to determine interests in sports and compared the results with their physical traits (stature and motor ability), and I.Q. The following are some of the conclusions obtained from this study:

1. There are marked individual differences in the interests of high school girls in physical education activities.
2. There is not unanimity of interest shown in regard to any one activity.
3. All girls desire some freedom of choice of activities.
4. All girls are interested, for at least short periods, in self-direction of their activities.
5. High school girls have a predominant interest in rhythmic activities.
6. Basketball and tennis with rhythms were the three most popular activities.

Edgren<sup>4</sup> used a check list questionnaire of 66 activities divided into seven different categories, which was administered to junior and senior boys and girls in different area high schools and one group of junior college students, to find the interests and participation of boys

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<sup>3</sup>Erna Driftmier, "Individual differences in interests and physical traits as related to high school girls in physical education," The Research Quarterly, 4:198,220, 1933.

<sup>4</sup>Harry D. Edgren, "The interests and participation of boys and girls in out-of-school recreation activities," The Research Quarterly, 8:56-68, 1937.

and girls in out-of-school recreation activities. Some of the conclusions of this study were:

1. Activities most girls participated in are movies, reading books, conversation, radio, auto riding, social dancing, swimming, going to parties, writing letters, and going to visit friends.
2. The larger number of girls prefer a mixture of individual physical activity, social and passive activities.
3. The girls indicate a definite interest in the physical activities, but participate in the less strenuous ones.

Zimmerman<sup>5</sup> viewed the interests and experience of college women in physical education. The women indicated the activities they had liked or disliked and those which they wished to learn or to continue. It was found that team sports dominated the high school years and that experience in rhythmic activities and individual sports was meager or lacking. The interests of the women were in activities such as tennis, swimming, bowling and golf.

Blummenfeld and Remmers<sup>6</sup> administered an attitude questionnaire on sports to 2,000 students which was representative of the national population of high school students in terms of sex, grade, rural-urban residence, and geographic region to determine the sports in which high school students regularly participated. Some of the conclusions were:

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<sup>5</sup>Helen M. Zimmerman, "Physical activity experience and interests of college women," The Research Quarterly, 25:109-18, 1954.

<sup>6</sup>Warren S. Blumenfeld and H. H. Remmers, "Sports preferences of high school students defined by reported participation," The Research Quarterly, 36:205-6, 1965.



1. As defined by reported participation in and out of school, the most popular participation sport among high school students was swimming.
2. Other highly popular participation sports were basketball, baseball and bowling.
3. Beyond this point in the preference order, relative preference differences between the sexes were apparent.
4. Girls preferences were as follows in rank order: swimming, basketball, baseball, bowling, ice skating, roller skating, horseback riding, tennis, other or none, skiing, football, hockey, golf, track, billiards, and wrestling.

### Attitudes

Carr<sup>7</sup> made a study involving the relationship between success and selected attitudes in high school physical education. The questionnaire technique that was used covered three main areas: social, personal, and activity. Some of the conclusions and suggestions were as follows:

1. The factors affecting success in physical education were: motor abilities, attitudes and intelligence.
2. The author reasoned that since motor ability and intelligence are more or less inherent qualities teachers should be more aware of students' attitudes.
3. She suggests that if undesirable attitudes are obstacles to learning, they should be removed.

Moore<sup>8</sup> used the interview technique and surveyed 179 women at the University of California to determine the actual attitude of college women toward physical activity.

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<sup>7</sup>Martha G. Carr, "Relation between success in physical education and selected attitudes expressed by high school freshmen girls," The Research Quarterly, 16:176-91, 1945.

<sup>8</sup>Beverly Moore, "The attitudes of college women toward physical activity as a means of recreation," The Research Quarterly, 12:720-25, 1941.

Some of the results were as follows:

1. A highly favorable general attitude among these college women toward physical activity.
2. Approximately 50% of the girls participated less than 4 hours a week.
3. The majority of these girls wish to spend more time than they are spending in activity but find it impossible for the following reasons:
  - a. lack of time, for the most part because of time needed for study,
  - b. lack of play companions and outside work,
  - c. commuting, lack of finances and health,
  - d. damage done to appearance by activity, showering, and dressing.
4. The interest and participation of college women are definitely more strongly related to individual sports activities and dancing than to team sports.

Wear<sup>9</sup> made a study to attempt to develop an instrument which would enable one to make a reliable and a valid assessment of the direction and intensity of individual and group attitudes toward physical education as an activity course. A few years later he<sup>10</sup> constructed two scales of attitudes toward physical education that were equivalent and also set up two forms for equating the scales. The purpose of the forms is for use in appraising attitude changes resulting from brief experiences such as listening to a talk on physical education, watching a demonstration, viewing a film, or taking part in some activity.

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<sup>9</sup>Carlos L. Wear, "The evaluation of attitude toward physical education as an activity course," The Research Quarterly, 22:114-26, 1951.

<sup>10</sup>Carlos L. Wear, "The construction of equivalent forms of an attitude scale," The Research Quarterly, 26:113-19, 1955.

Bell and Walters<sup>11</sup> made an attitude toward physical activity survey at the University of Michigan on a total of 857 women, who were surveyed by means of the questionnaire technique. The purpose of this study was to evaluate the women's program in light of student attitudes. The questionnaire was divided into three parts: (1) check list concerning information pertinent to the backgrounds of the students, (2) questions based on the objectives of physical education, and (3) Wear Attitude Scale, designed to measure attitudes toward physical education as an activity course. Some of the conclusions based on the study were as follows:

1. Freshmen who have had physical education in high school have a higher mean attitude toward physical education as an activity course than Freshmen who have had no physical education in high school, and higher than Seniors who have had physical education in high school.
2. There seems to be a positive and significant relationship between the following:
  - a. attitude and the importance of sports and dance as part of their recreation program,
  - b. attitude and the extent to which they enjoy their physical education classes.

Broer and Holland<sup>12</sup> reported the principal objectives which 1,155 freshmen and sophomore women at the University of Washington claimed for their physical education experiences are "to develop skills in various sports," "to learn

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<sup>11</sup>Margaret Bell and Etta C. Walters and staff, "Attitudes of women at the University of Michigan toward physical education," The Research Quarterly, 24:379-91, 1953.

<sup>12</sup>Broer and Holland, op. cit., pp. 387-92.

activities that can be continued outside of school," "to have fun," and "to keep in good health and physical condition." The chief reason advanced by the students for not liking a physical education class was lack of success. They found that spectator interest in football and basketball was sufficient to warrant consideration of adding lectures on these sports as an addition to the physical education program.

Kappes<sup>13</sup> constructed an attitude inventory and by means of the inventory found a significant relationship between estimated skill in specific activities and general attitude toward physical education. This study also found a relationship between estimated skill in specific activities and estimated skill in physical education activities in general.

Keogh<sup>14</sup> responses of 136 men and 130 women to the Wear Physical Education Attitude Inventory (Form A) were analyzed to determine if differences between men and women or size of agreement response were related to items with a common meaning. The results were as follows:

1. Men and women were not different in their stated attitude toward physical education.
2. Subjects endorsed the social, physical, and emotional value of physical education, but they conflicted in their opinions regarding the relative value of a physical education program in the school curriculum.

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<sup>13</sup>Eveline E. Kappes, "Inventory to determine attitudes of college women toward physical education and student services of the physical education department," The Research Quarterly, 25:429-38, 1954.

<sup>14</sup>Keogh, op. cit., pp. 239-44.

Keogh<sup>15</sup> did a follow up study to analyze stated attitude responses and selected descriptive information in relation to the two groups of men and women who demonstrated in his earlier study extreme attitudes toward physical education. From the original group of 266 subjects, 69 men and women were selected whose scores on the Wear Physical Education Attitude Inventory were extremes of high and low. Additional data were obtained through a group interview questionnaire. Some of the conclusions were:

1. There was no male-female difference within the extreme groups.
2. The low groups offered some minimum support for the outcomes of physical education, but they vigorously questioned the relative value of physical education as a school program.
3. There was no evidence to indicate the negative attitudes were related to non-participation.

Nelson and Wessel<sup>16</sup> realizing the importance of attitudes made a study among 200 college women at Michigan State University which had a two fold purpose to investigate: (1) the relationship between strength and attitudes toward physical education, and (2) strength in relation to two groups of women whose stated responses toward physical activity were extremes of high or low. Some of the conclusions were:

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<sup>15</sup> Jack Keogh, "Extreme attitudes toward physical education," The Research Quarterly, 34:27-33, 1963.

<sup>16</sup> Richard Nelson and Janet A. Wessel, "Relationship between strength and attitude toward physical activity among college women," The Research Quarterly, 35:562-69, 1964.

1. The women enrolled in physical education classes expressed favorable attitude toward physical education as an activity course as measured by the Wear Inventory.
2. Years of high school physical education was found to be significantly related to the results of the three questions (high personal judgment of the value of physical activity and active participation as part of personal recreation).

Brumbach and Cross<sup>17</sup> administered the short Form A of the Wear Attitude Inventory to all lower division male students entering the University of Oregon with the purpose to measure the attitude toward physical education. The results indicated that:

1. These students had a rather favorable attitude toward physical education.
2. In comparing various subgroups, the following conclusions were made:
  - a. athletes have better attitudes than non-athletes,
  - b. the more years of physical education a student has had in high school the better his attitude is likely to be,
  - c. students who attended smaller high schools (enrollment under 300) have better attitudes than those from larger schools.

Moyer, Mitchem, and Bell<sup>18</sup> did a study using a Modified Wear Attitude Inventory to determine the attitudes of 444 freshmen and 382 junior women toward the required physical education program at Northern Illinois University and to evaluate the physical education offerings in terms

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<sup>17</sup>Wayne B. Brumbach and John A. Cross, "Attitudes toward physical education of male students entering the University of Oregon," The Research Quarterly, 36:10-16, 1965.

<sup>18</sup>Jean Lou Moyer, John C. Mitchem, and Mary M. Bell, "Women's attitudes toward physical education in the General Education program at Northern Illinois University," The Research Quarterly, 1966, 515-19.



of student needs. Some of the results were:

1. A majority of the subjects indicated a preference for individual sports to team sports in spite of greater high school participation in team sports.
2. There was a similar, highly favorable attitude toward the physical education program shown by both freshmen and juniors.

Vincent<sup>19</sup> administered the Wear Attitude Inventory to 188 college women enrolled in a variety of physical education activities to determine the attitudes of college women toward physical education and to find the relationship between these expressed attitudes and success in a variety of physical education activities. The final grade received for the activity course was used as the success factor. Some of the results were:

1. Attitude toward physical education were generally favorable, with the contributions of physical education to the physiological-physical values being higher than other values examined.
2. There was significant relationship between attitude and success at the .05 level with the higher significance accrued to those students having more favorable attitudes.

#### Other Factors Influencing Participation in Sports

Baker<sup>20</sup> studied 1,150 girls and women between the ages of 15 and 25 using the questionnaire technique, based

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<sup>19</sup> Marilyn F. Vincent, "Attitudes of college women toward physical education and their relationship to success in physical education," The Research Quarterly, March, 1967, 126-31.

<sup>20</sup> Mary C. Baker, "Factors which may influence the participation of girls 15-25 years of age," The Research Quarterly, 11:126-31, 1940.

upon the Thurston method, to study the factors which influence the girls participation in sports. Some of the conclusions were:

1. Environmental influence was discernable in participatory habits.
2. Deviations in bodily weight had no apparent influence on participation in physical education.
3. Girls and women have specific habits of activity. These habits are modified as the girls mature. They tend to become less strenuous and more mechanized with the emphasis on the role of the spectator.
4. Factors which seem to influence this are social and physical in origin.
5. Attitudes concerning participation do not regulate participation so much as they reflect the influence of other causes which do.

Gerland<sup>21</sup> used the questionnaire technique in the study to secure information from 200 students randomly selected from the 1818 who were enrolled in the Foundation of Physical Education Course at Michigan State University. Five areas were chosen from which pertinent data would be obtained: (1) attitudes, (2) physical recreation activities, (3) physical self-concept, (4) environmental background, and (5) student evaluation of the Foundation of Physical Education Course. Some of the conclusions from this study were:

1. The main reasons for participating in physical activities were: "enjoy sports," "better figure," "better health," and "friends participate."
2. The main reasons for parents participating in physical recreation were: "relaxation" and "enjoy sports."

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<sup>21</sup>LaVaughn Rae Gerland, "A Study to Determine the Influence of the Foundations of Physical Education Course upon Concept of Physical Self and Attitudes toward Physical Activity among College Women," (unpublished Master's thesis, Michigan State University, 1960).

3. The main reasons for parents not participating in physical recreation were: "lack of time" and "lack of interest."

Rohrs<sup>22</sup> administered to 200 freshmen women randomly selected from the students enrolled in the fall term Foundations of Physical Education Course at Michigan State University four performance tests to determine each subject's physical performance level, and an activity questionnaire to determine the physical activity background factors, and an evaluation form to determine the subjects reaction to the Foundations Course. Some of the conclusions of the study were:

1. The majority reacted favorably to their high school physical education classes.
2. Less than one-half of the subjects participated in a sports club during any part of their high school years while 70% participated in an intramural program.
3. One-half of the subjects would like to have had a recreational sport included in their high school physical education curriculum.
4. The physical recreation activities in which the subjects participated most often were swimming, dancing, boating and/or canoeing, water skiing, and hiking during the warm months and dancing, ice skating, and bowling during the cool months.

Ruffer<sup>23</sup> studied the extreme physical activity groups of 50 highly active junior and senior high school boys as

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<sup>22</sup>Jan Van Duzer Rohrs, "The Relationship between Selected Physical Activity Background Factors and the Physical Performance and Evaluation Measured Used in the Foundations of Physical Education Course at Michigan State University" (unpublished Master's thesis, Michigan State University, 1962).

<sup>23</sup>William Ruffer, "A study of extreme physical activity groups of young men," The Research Quarterly, 36:183-96, 1965.

compared to 50 physically inactive boys in the same schools and grade. A total of 101 variables were used and the data were collected through questionnaires concerning the subjects' physical activities, a motor performance test, fat measurements, a step test, a High School Personality Questionnaire, school records, and a parental interview.

Some of the conclusions were:

1. Statistically significant differences were found on 31 of the variables in which case the highly active group was either numerically higher or superior.
2. There does not seem to be any major difference between the income level of the activity groups.

Phillips<sup>24</sup> administered a questionnaire and held a personal interview with 84 resident graduate women at Michigan State University in order to survey the past and present participation, and present attitudes toward sports and recreational activities. Some of the conclusions were:

1. Swimming was the most popular family sport.
2. Activities most predominant both in childhood participation and as favorite activities of the girls as graduate students were: badminton, bowling, hiking, ice skating, softball, swimming, and tennis.
3. Most popular spectator sports as viewed with the family were football, basketball, and baseball.

Sloan and Liba<sup>25</sup> did a study on college women to determine the effect of varying degrees of participation

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<sup>24</sup>Coralie Phillips, "A Survey of the Physical Activity Backgrounds and Present Participation in and Attitudes toward Sports and Recreational Activities of Resident Graduate Women Students of Michigan State University" (unpublished Master's thesis, Michigan State University, 1966).

<sup>25</sup>Muriel R. Sloan and Marie R. Liba, "Effects of participation in physical education on achievement in selected characteristics," The Research Quarterly, October, 1966, 411-23.

in physical education on achievement in selected characteristics. One group was assigned to participate in the required program for one year, a second group for two years; a third group was not enrolled in physical education; a fourth group was given the option of election or not election of physical education. The characteristics studied were knowledge, posture, recreational proficiency and some aspects of physical fitness. Some of the results were:

1. At the end of one year, participators differed significantly from non-participators in posture, knowledge, and pull-ups.
2. At the end of two years, those required to participate differed significantly from all other subjects in posture and knowledge.
3. There was some evidence that the two-year group was superior in performance on some aspects of fitness.
4. Participators were judged to be generally more proficient in recreational activities than non-participators who claimed proficiency.

### Summary

The changes in our society have produced machines which require just a push of the button making a persons job less and less strenuous. Along with this there has been an increase in leisure time and from the influence of these factors a trend is developing in which people are participating more and more in physical and recreational activities. As a result of this trend it is important that the high school physical education program help the student develop positive attitudes and interests toward active participation in physical activity, which will lead them to seek physical activities in their leisure time.

The literature reveals that this can only be accomplished when the physical educators realize how important it is to determine the direction and focus of attitudes and motivational factors which inhibit or facilitate active physical participation and learning by the individual or any group. In most of the studies reviewed several scales and questionnaires have been developed and used to determine the attitudes and interests of college women but very few have been done on high school students for a period of several years. The results show that college women would like to have had more recreational activities included in their high school physical education program instead of all the emphasis on team sports and this fact should be considered when setting up the curriculum for high school physical education.

The results of studies on high school girls differ greatly due to the changing of our society since it has been twenty years between these studies. The current study on high school girls just dealt with favorite sports activities in which the girls participate, but the attitudes, background factors, and socio-economic level were not taken into consideration. Since it has been stated that one of the main problems facing the physical education programs is to evaluate all the factors which are important in determining the girls level of participation in physical activity, the findings reveal a need for research in this area if physical education is to continue its role in educating the youth of America for a successful future.

## CHAPTER III

### METHODS

This chapter has been divided into four parts. The first part explains the method of investigation--the questionnaire technique. The second part deals with the selection of the subjects for the pilot and the final group. The third part deals with a discussion of the administration of the questionnaire for both the pilot and the final group. The final section contains the method of statistical analysis.

#### Method of Investigation-- Questionnaire Technique

The questionnaire was designed to investigate four areas: background factors, socio-economic level, attitudes, and interests which all seem to have some influence on the participation of high school girls in sports activities. All the questions in each area were designed for only student responses for this particular study.

The questionnaire was first administered to a pilot group in order to determine: (1) the top ten sports participated in by parents, siblings, the family together, and the subjects, (2) a list of favorite sports of high school girls, (3) a list of sports attended by high school girls, and (4) a list of sports a girl should and should not

participate in. These results were used to make the questionnaire easier for the subjects in the final group to answer. They were able to place a check beside the activity or response instead of having to write in their answer. The only answers they had to write in were when someone participated in an activity that was not listed and a list of activities was provided at the end of the questionnaire.<sup>1</sup>

The eight questions dealing with attitudes were answered by the subjects circling their response to the question. The responses were: "strongly for," "for, but not strongly," "neutral," "against, but not strongly," and "strongly against."

#### Selection of Subjects

The pilot group of thirty subjects in each grade was randomly selected from the girls attending East Lansing High School. A list of homeroom teachers for each grade was obtained along with the number of the girls in each homeroom. To obtain the sample, three homerooms for each grade containing ten girls each were randomly picked from among the list of homerooms. The final group consisted of all the girls (including the pilot group) in each grade present on the day the questionnaire was administered.

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<sup>1</sup>See Appendix A for the complete questionnaire.



Administration of the Questionnaire

The questionnaire was first administered to the pilot group in February, 1967, in the East Lansing High School cafeteria with the freshmen and sophomore girls answering it first and then the junior and senior girls. Each subject was asked to place their name on the questionnaire for taking attendance and it was explained to them that the name would be torn off after the attendance was taken. At that time it was explained to the subjects the exact purpose of the questionnaire and that we were asking for their co-operation in answering the questions as honestly as possible. Along with the questionnaire a list of sports activities was provided for reference and for facilitating recall. The group of girls were given 45 minutes to finish answering the questionnaire.

The final group was administered the revised questionnaire compiled from the results of the pilot group. All the girls (including the pilot group) in the East Lansing High School present on May 5, 1967, answered the questionnaire. Each grade level answered the questionnaire in the cafeteria at separate times and they were given 45 minutes to finish. The purpose of the questionnaire was explained to each group and they were all encouraged to answer all questions as honestly as possible. A sports activity list of both boys and girls sports activities was attached to the questionnaire to aid in recall. No attempt was made to identify the subjects. A number was placed in the

corner of the questionnaire as they were returned as a reference for coding.

### Statistical Method Employed

The major portion of the study was concerned with the relationship between certain factors. Since all of the answers in the questionnaire were only categorical information the Chi Square ( $\chi^2$ ) statistical technique was employed. The probability level of five per cent ( $P = .05$ ) was selected as the level necessary for statistical significance. The statistical formula used to determine Chi Square is shown below:<sup>2</sup>

$$\chi^2 = \sum \frac{(n_{ij} - e_{ij})^2}{e_{ij}}$$

The complete Chi Square ( $\chi^2$ ) may be found in Appendix B for the reader's inspection.<sup>3</sup>

The means of percentages were used for: self attitude, activities girls should and should not participate in, reasons for and against participation in sports, sports events attended at the high school, and girls favorite sports activities according to each grade and to the total group.

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<sup>2</sup>E. Bright Wilson, Jr., An Introduction to Scientific Research (New York: McGraw-Hill Book Company, Inc., 1952), p. 197.

<sup>3</sup>See Appendix B.

## CHAPTER IV

### ANALYSIS OF DATA

This study has a twofold purpose: (1) to determine the relationship of high school girls participation in sports activities with specific background factors (self attitudes, parents' attitudes and activity level, siblings activity level, peer attitudes, and family sports activity level) and the family's socio-economic level; and (2) to determine the students sports activity interests, attitudes toward physical activity, and the reasons for or against participation at each grade level to be used as a guideline in setting up a curriculum.

#### Relationship of Students Activity Level and Specific Background Factors

Specific Background Factors. Tables 1 through 10, pages 27-36 show the relationship of specific background factors to the girls activity level based on rating groups; i.e., strongly for; for, but not strongly; neutral; against, but not strongly; and strongly against for the attitudes; and very active, active, moderately active, mildly active, and inactive for the activity level. Due to the small number in the "very active" and "active" groups these two components have been combined for statistical purposes. The

Table 1. Relationship of the girls activity level with her self attitudes.

Self Attitudes	Very Active and Active	Moderately Active	Mildly Active	Inactive	Total	$\chi^2$
	n	n	n	n		
Strongly, for	13	35	63	40	151	7.14
For, but not strongly	19	45	86	61	211	6.37
Neutral	3	18	46	53	120	6.13
Against, but not strongly	0	2	14	29	45	18.44
Strongly against	0	3	5	16	24	10.21
Total	35	103	214	199	551	
$\chi_j^2$	11.15	8.67	3.22	25.25		48.29

D.F. = 16°

$\chi^2 = 48.306$

P = .005

Table 2. Relationship of the girls activity level with fathers attitude toward girls participation in sports.

Fathers Attitude	Very Active and Active	Moderately Active	Mildly Active	Inactive	Total	$\chi^2$
	n	n	n	n		
Strongly, for	20	41	93	54	208	11.87
For, but not strongly	9	34	66	65	174	.58
Neutral	4	22	48	64	138	7.78
Against, but not strongly	0	1	4	4	9	1.09
Strongly against	2	5	3	12	22	14.07
Total	35	103	214	199	551	
$\chi_j^2$	14.23	2.57	6.30	12.29		35.39
<hr/>						
D.F. = 20 <sup>o</sup>	$\chi^2 = 35.413$		P = .02			

Table 3. Relationship of the girls activity level with mothers attitude toward girls participation in sports.

Mothers Attitude	Very Active and Active	Moderately Active	Mildly Active	Inactive	Total	$\chi^2$
	n	n	n	n		
Strongly, for	16	46	79	50	191	10.06
For, but not strongly	14	31	79	71	195	1.49
Neutral	4	21	41	57	123	6.58
Against, but not strongly	0	2	6	8	16	2.20
Strongly against	1	3	9	13	26	11.61
Total	35	103	214	199	551	
-----						
$\chi^2$	6.82	5.98	5.18	13.96		31.94
-----						
D.F. = 20 <sup>0</sup>	$\chi^2 = 31.973$		P = .05			

Table 4. Relationship of the girls activity level with her parents attitude towards girls participation in sports.

Parents Attitude	Very Active and Active	Moderately Active	Mildly Active	Inactive	Total	$\chi^2$
	n	n	n	n		
Strongly, for	15	35	67	41	158	8.50
For, but not strong- ly	14	42	87	69	212	1.47
Neutral	4	20	46	70	140	12.93
Against, but not strongly	1	3	9	5	18	4.48
Strongly against	1	3	5	14	23	6.33
Total	35	103	214	199	551	
$\chi_j^2$	9.31	3.03	4.38	16.99		33.71
<hr/>						
D.F. = 16°	$\chi^2 = 33.737$		P = .01			

Table 5. Relationship of the girls activity level with her girl friends attitude towards girls participation in sports.

Girl Friends Attitude	Very Active and Active n	Moderately Active n	Mildly Active n	Inactive n	Total	$\chi^2$
Strongly, for	16	29	58	46	149	5.72
For, but not strong- ly	13	48	92	69	222	3.13
Neutral	3	22	56	64	145	7.83
Against, but not strongly	1	0	3	9	13	7.55
Strongly against	2	4	5	11	22	12.98
Total	35	103	214	199	551	
-----						
$\chi_j^2$	16.57	4.68	3.39	12.57		37.21
D.F. = 20°		$\chi^2 = 37.217$		P = .01		



Table 6. Relationship of the girls activity level with her boy friends attitude toward girls participation in sports.

Boy Friends Attitude	Very Active and Active	Moderately Active	Mildly Active	Inactive	Total	$\chi^2$
	n	n	n	n		
Strongly, for	13	30	39	33	115	10.41
For, but not strong- ly	11	40	84	51	186	6.68
Neutral	11	26	73	92	202	9.29
Against, but not strongly	0	1	9	4	14	4.44
Strongly against	0	6	9	19	34	12.02
Total	35	103	214	199	551	
<hr/>						
$\chi^2_j$	7.99	12.57	6.87	15.41		42.84

D.F. = 20°

$\chi^2 = 42.835$

P = .005

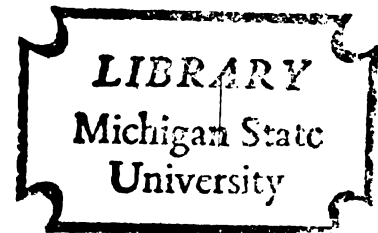


Table 7. Relationship of the girls activity level with fathers activity level.

Fathers Activity Level	Very Active and Active	Moderately Active	Mildly Active	Inactive	Total	$\chi^2$
	n	n	n	n		
Very active and active	10	6	7	2	25	72.29
Moderately active	7	25	16	14	62	24.02
Mildly Active	10	28	61	40	139	3.29
Inactive	8	44	130	143	325	18.17
Total	35	103	214	199	551	
<hr/>						
$\chi^2$	74.89	20.73	5.75	16.40		117.77
<hr/>						
D.F. = 16°		$\chi^2 = 117.751$		P = .005		

Table 8. Relationship of the girls activity level with mothers activity level.

Mothers Activity Level	Very Active and Active	Moderately Active	Mildly Active	Inactive	Total	$\chi^2$
	n	n	n	n		
Very Active and Active	5	2	2	1	10	32.80
Moderately Active	5	17	12	11	45	15.98
Mildly Active	14	28	50	35	127	7.73
Inactive	11	56	150	152	369	12.36
Total	35	103	214	199	551	
-----						
$\chi_j^2$	45.15	11.98	2.95	8.79		68.87
-----						
D.F. = 12°	$\chi^2 = 68.891$			P = .005		

Table 9. Relationship of the girls activity level with siblings activity level.

Siblings Activity Level	Very Active and Active	Moderately Active	Mildly Active	Inactive	Total	$\chi^2$
	n	n	n	n		
Very Active and Active	5	5	2	7	19	26.66
Moderately Active	8	14	19	6	47	18.98
Mildly Active	11	39	62	28	140	18.94
Inactive	11	45	131	158	345	20.36
Total	35	103	214	199	551	
<hr/>						
$\chi_j^2$	33.54	17.27	5.49	28.64	.	84.94
<hr/>						
D.F. = 16°	$\chi^2 = 84.931$			P = .005		

Table 10. Relationship of the girls activity level with the familys activity level.

Familys Activity Level	Very Active and Active	Moderately Active	Mildly Active	Inactive	Total	$\chi^2$
	n	n	n	n		
Very active and active	7	5	1	1	14	114.09
Moderately Active	8	4	4	2	18	47.60
Mildly Active	13	31	38	21	103	21.04
Inactive	7	63	171	175	416	22.17
Total	35	103	214	199	551	
<hr/>						
$\chi^2$	169.06	12.33	5.89	17.62		204.90

D.F. = 16°

$\chi^2 = 204.901$

P = .005

probability level of five per cent ( $P = .05$ ), was selected at the start of the study as the level necessary for statistical significance.

Date in Tables 1 through 10 indicates that there was a significant relationship between the girls activity level and the following background factors:

1. Self Attitudes.
2. Fathers' attitude towards girls participation in sports.
3. Mothers' attitude toward girls participation in sports.
4. Parents' attitude toward girls participation in sports.
5. Girl friends' attitude toward girls participation in sports.
6. Boy friends' attitude toward girls participation in sports.
7. Fathers' activity level.
8. Mothers' activity level.
9. Siblings' activity level.
10. Familys' activity level.

On the basis of the data obtained on specific background factors in this study it was not surprising to find the activities and attitudes of the girls' family and peers revealed a significant relationship.

Relationship of the Girls Activity Level  
and Familys' Socio-economic Level

Familys' Socio-economic Level. Table 11, page 39 shows the relationship between the familys' socio-economic level and the girls' activity level based on rating groups;

Table 11. Relationship of the girls activity level with familys' socio-economic level.

Familys' Socio-economic Level	Very Active and Active	Moderately Active	Mildly Active	Inactive	Total	$\chi^2$
	n	n	n	n		
Upper-Upper	16	46	124	114	300	3.80
Lower-Upper	9	26	34	36	105	6.58
Upper-Middle	0	2	11	6	19	3.60
Lower-Middle	6	15	21	18	60	3.73
Upper-Lower	1	5	9	13	28	1.65
Lower-Lower	1	3	9	4	17	5.79
Unknown (22)						
Total	33	97	208	191	529	
-----						
$\chi_j^2$	11.81	5.92	4.72	2.70		25.15
-----						
D.F. = 20°	$\chi^2 = 25.124$		P = .20			

i.e., upper-upper, lower-upper, upper-middle, lower-middle, upper-lower, lower-lower and unknown; the girls' activity level rating was previously explained.

Data in Table 11 indicate that there was no significant relationship between the girls' activity level and the familys' socio-economic level. The data also reveal that the majority of the "mildly active" and "inactive" girls are in the "upper-upper" and "lower-upper" socio-economic group, which is not surprising for this is one of the basic assumptions of this study.

#### Students Sports Activity Interests

Sports Events Attended at the High School. Table 12, page 40, shows the students responses to the events they attend at the high school. A percentage of 85.84 stated that they enjoy attending football games, 77.31 per cent stated that they enjoy attending basketball games, 43.19 per cent stated track and field events, 41.20 per cent stated swimming meets, and 20.73 stated wrestling. It is interesting to note that these results represent a growing interest in other sports than football and basketball.

Membership in Sports and Recreational Clubs. Table 13, page 40, shows the students' membership in sports and recreational clubs. A percentage of 49.22 belong or did belong to Girl Scouts sometime during their high school years, 33.58 per cent belong or did belong to the Girls' Athletic Association sometime during their high school years, 13.61 per cent



Table 12. Frequency distribution of sports events attended at the high school given in percentages.

Sports Events	9th n=145	10th n=160	11th n=133	12th n=114	Total
Football	88.28	89.38	80.30	84.21	85.84
Basketball	75.17	80.63	76.52	76.32	77.31
Track & Field	44.14	41.88	46.21	40.35	43.19
Swimming	46.21	32.50	48.48	38.60	41.20
Wrestling	22.07	16.35	25.76	19.30	20.73
Gymnastics	22.76	15.63	20.45	10.53	17.60
Baseball	21.38	11.88	15.91	19.30	16.88
Tennis	16.55	15.63	14.39	10.53	14.52
Golf	4.14	0.63	2.27	1.75	2.18

Table 13. Frequency distribution of membership in sports and recreational clubs given in percentages.

Clubs	9th n=145	10th n=160	11th n=133	12th n=114	Total
Girls Scouts	53.79	55.62	48.87	38.59	49.22
G.A.A.	22.07	40.62	31.06	41.23	33.58
Ice Skating	15.86	14.37	11.36	12.38	13.61
Aquettes	6.21	10.00	16.67	13.16	11.25
Ski Club	10.34	8.75	7.58	13.16	9.80
Cheerleading	8.38	4.37	9.85	8.73	7.62
Sea Sprits	7.59	9.37	4.55	5.26	6.90
Y M C A	8.18	3.51	5.10	10.71	6.65
Tennis Club	6.90	1.87	6.06	2.63	4.36
Bowling Club	4.14	3.75	4.55	5.26	4.36
Roller Skating	0.00	1.27	0.00	0.00	0.27

belong or did belong to an Ice Skating Club, and 11.25 per cent belong or did belong to Aquettes (the synchronized swim club at the high school). This indicates a lack of membership in sports and recreational clubs by the East Lansing High School girls.

Three Favorite Sports. Table 14, page 42, shows the students' three favorite sports. A percentage of 69.51 stated swimming as one of their favorite sports, 34.58 per cent stated horseback riding as one of their favorite sports, 32.12 per cent stated tennis as a favorite sport, 38.68 per cent stated water skiing, 22.32 per cent stated gymnastics, and 21.05 per cent stated basketball. It is interesting to note the large gap between swimming and the other sports which indicates a wide range of individual interests and the interest is mainly in individual sports.

#### Students Attitudes toward Physical Activity

How Physically Active During the Day. Figure 1, page 43, shows how the girls rated their activity level during the day. A percentage of 13.79 of 9th graders indicated "very active" as compared to 10.63, 10.61, and 10.53 per cent of the 10th, 11th and 12th graders; 43.13 and 36.55 per cent of the 10th and 9th graders respectively indicated "active" as compared to 28.79 and 22.81 per cent of the 11th and 12th graders, respectively; 36.36 and 34.48 per cent of 11th and 9th graders respectively indicated "moderately active" as compared to 30.70 and 29.38 per cent of the

Table 14. Frequency distribution of girls favorite sports activities given in percentages.

Favorite Sports	9th n=145	10th n=160	11th n=133	12th n=114	Total n=552
Swimming	77.93	70.00	59.09	70.18	69.51
Horseback Riding	30.34	33.13	39.39	37.72	34.85
Tennis	30.34	37.50	31.06	28.07	32.12
Water Skiing	25.52	26.88	33.33	29.82	28.68
Gymnastics	22.07	25.00	23.48	17.54	22.32
Basketball	23.45	25.00	18.18	15.79	21.05
Snow Skiing	11.72	16.25	20.45	18.42	16.52
Touch Football	14.48	11.88	13.64	18.42	14.34
Ice Skating	13.79	11.88	14.39	18.42	14.34

12th and 10th graders respectively; and 28.95 per cent of the 12th graders indicated "mildly active" as compared to 17.42, 13.10, and 12.50 per cent of 11th, 9th, and 10th graders respectively. These results show how girls become less active as they grow older just in a four year span which shouldn't happen for they are too young.

Figure 2, page 44, shows how active these girls are according to the activities and clubs they belong to during the year. Percentages of 45.61, 37.55, 33.12, and 29.57 of the 12th, 10th, 9th and 11th graders respectively fell into the "inactive" category when objectively rated; 45.17, 40.00, 38.79, and 29.91 per cent of the 11th, 9th, 10th, and 12th graders respectively fell into the "mildly active" category; 19.20, 18.70, 18.42, and 17.92 per cent of the 11th, 10th, 12th, and 9th graders respectively fell in the "moderately active" category; 6.15, 5.52, 5.32, and 3.77 per cent of the 12th, 9th, 11th and 10th graders respectively fell into the "active category."

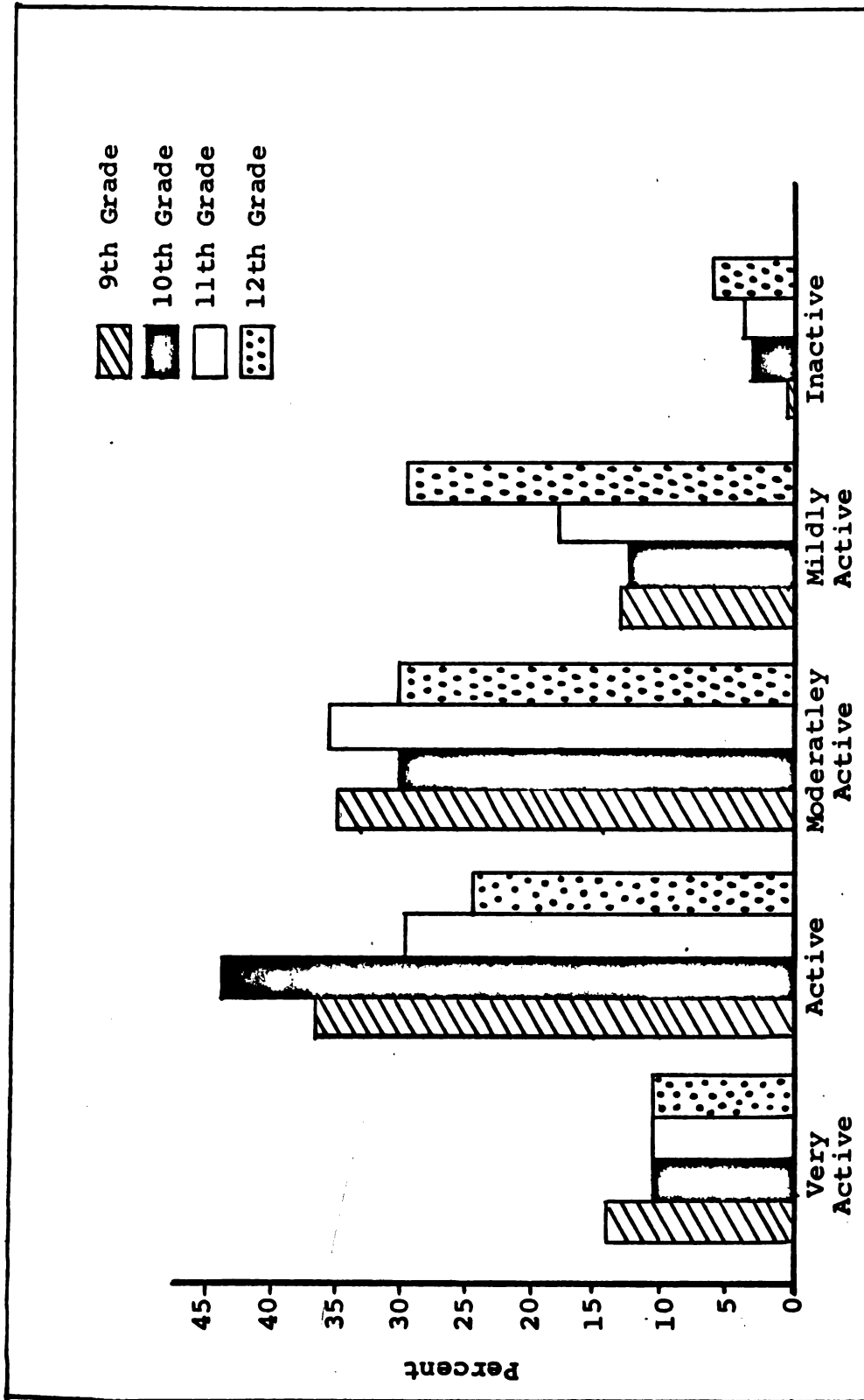


Figure 1. The concept of the level of physical activity during the day as subjectively rated by subjects.

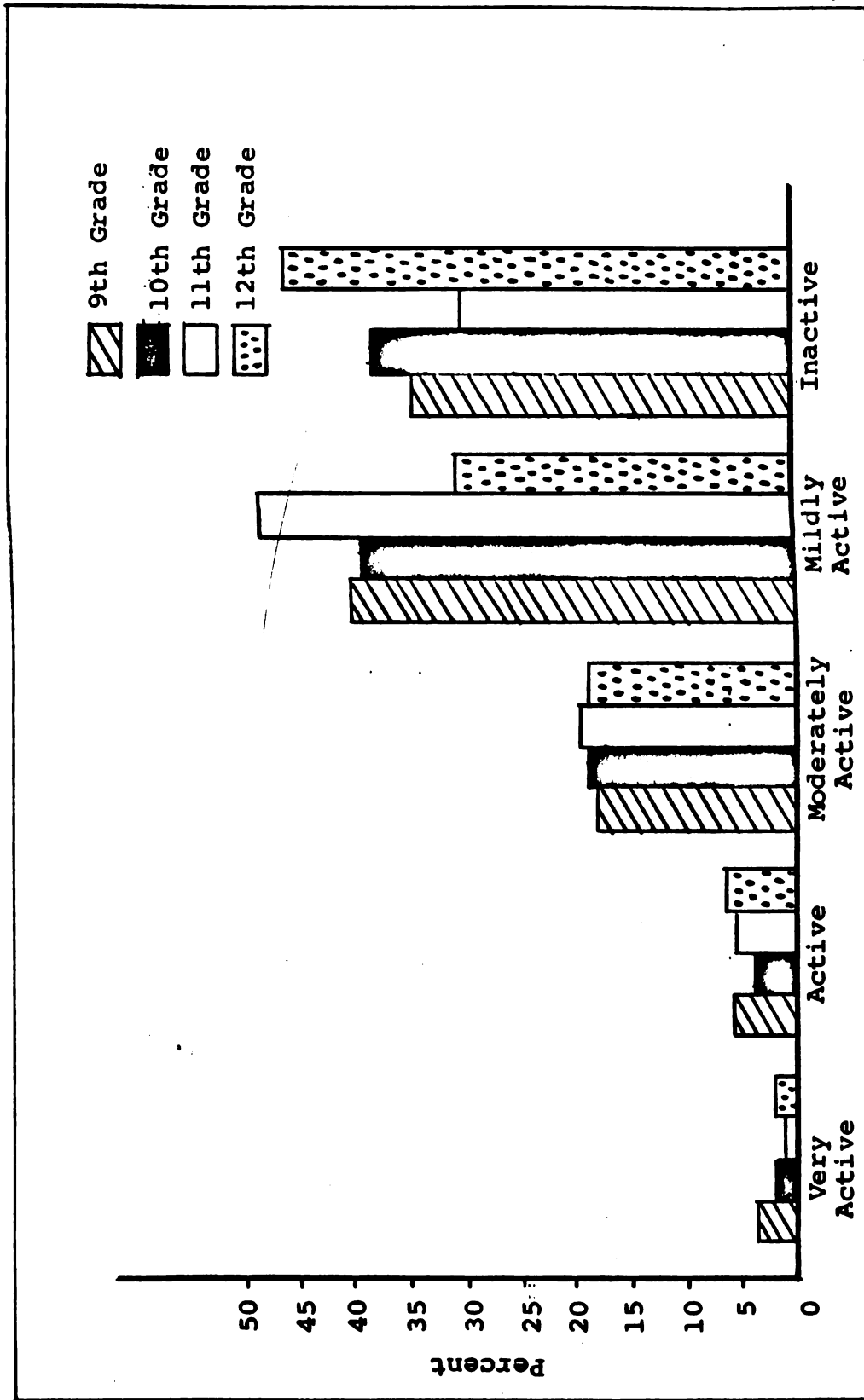


Figure 2. The concept of the level of physical activity as objectively rated from activities participated in during the year by subjects.

The results of these two figures indicate that girls over rate their physical activity during the day which is only normal. The results also confirm the trend of inactivity present as one grows older.

#### Physical Education Providing Value for Everyday

Living. Figure 3, page 46 shows how the girls at each grade rated how they felt toward the question pertaining to physical education providing values which are useful in other parts of daily living. Percentages of 32.41, 33.75, 34.85, and 31.58 of 9th through 12th grade indicated "strongly for", 33.79, 34.38, 22.73, and 28.95 per cent of the 9th through 12th grade indicated "for, but not strongly", and 26.90, 25.63, 31.06, and 31.58 per cent of 9th through 12th grade indicated "neutral" toward this question. The results indicate most girls have a very positive attitude toward physical education which is exactly the way it should appear.

#### Physical Education Required of All Physically Able.

Figure 4, page 47 shows how the girls at each grade rated how they felt toward the question pertaining to physical education being required for all physically able. Percentages of 47.59, 40.63, 36.36, and 31.58 of the 9th through 12th grade indicated "strongly for", 26.90, 35.00, 30.30, and 32.46 per cent of all the 9th through 12th grade indicated "for, but not strongly," and 13.73, 11.22, 18.94, and 19.36 per cent of all the 9th through 12th grade indicated "neutral" toward this question. The results indicate a very high attitude toward physical education as was evident in the other question.

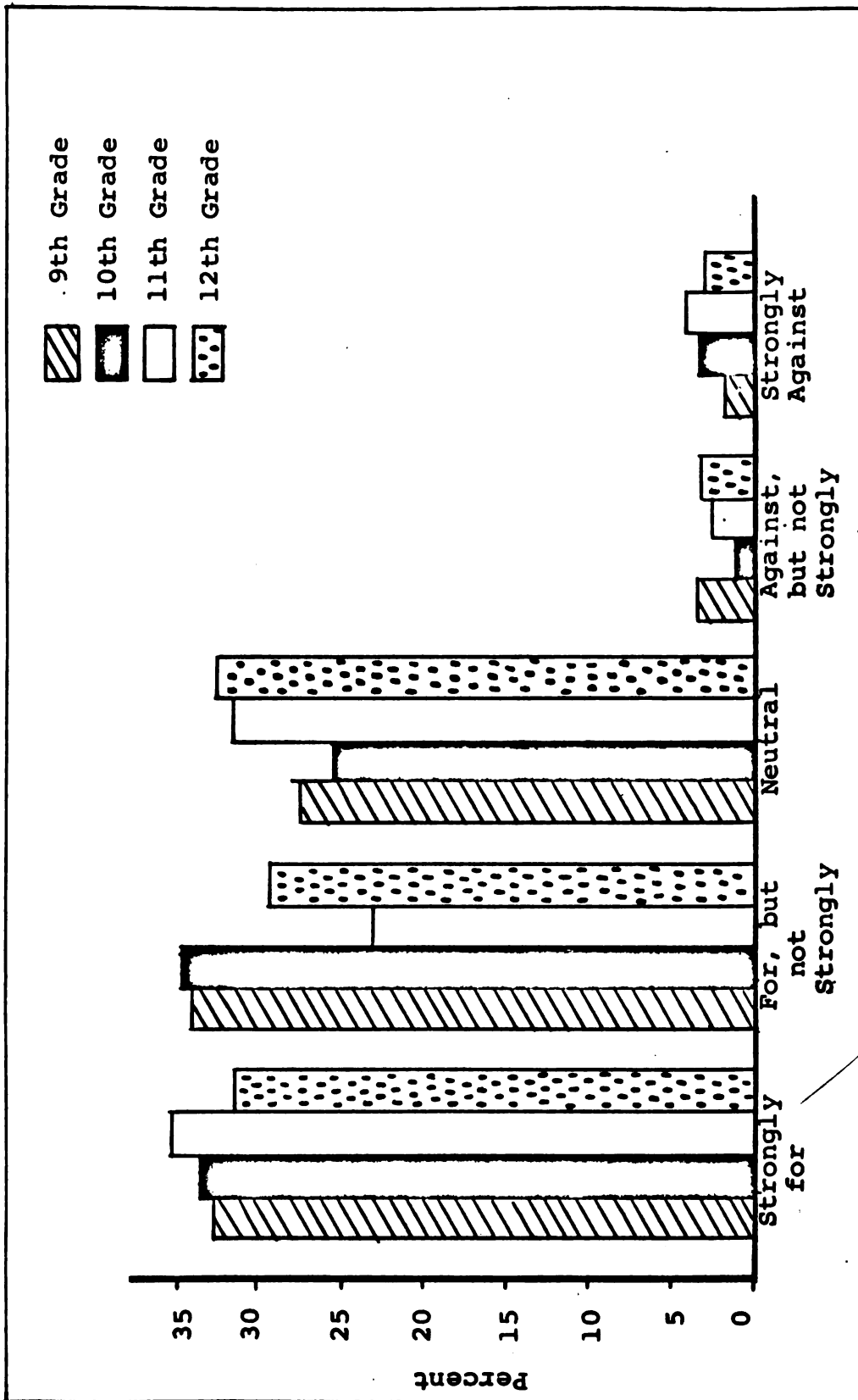


Figure 3. Attitude toward physical education providing values which are useful in other parts of daily living.

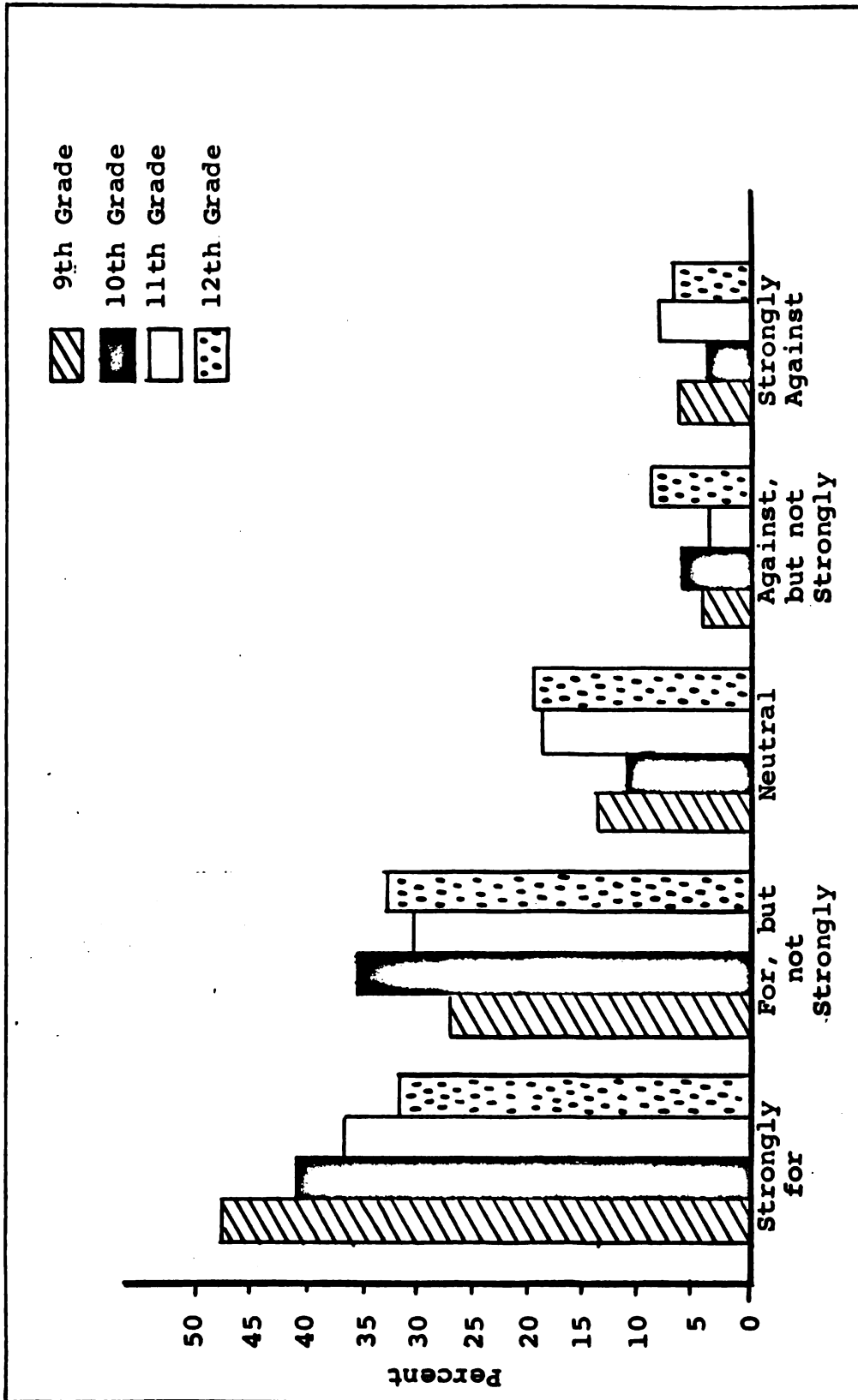


Figure 4. Attitude toward physical education being required for all physically able.



Physical Education an Important Subject. Figure 5, page 49 shows how the girls at each grade rated how they felt toward the question pertaining to physical education as one of the more important subjects in the school program. Percentages of 26.90, 29.38, 22.73, and 22.81 of all the 9th through 12th grade indicated "strongly for," 28.28, 27.50, 24.24, and 27.19 of all the 9th through 12th grade indicated "for, but not strongly," 22.76, 25.63, 27.27, and 26.32 per cent of all the girls indicated "neutral" towards this question. The results indicate that physical education has made progress in the area of its value and importance in the school program, but much has to be done to raise our image still further.

Sports as a Way to Meet Boys. Figure 6, page 50, shows how the girls at each grade level responded toward the question pertaining to sports as a way to meet boys. Percentages of 24.14 and 24.38 of the 9th and 10th graders respectively responded "strongly for" while 15.15 and 14.91 per cent of 11th and 12th graders respectively stated the same response to the question, 22.07 and 22.81 per cent of the 9th and 12th graders respectively responded "for, but not strongly" while 25.63 and 28.79 per cent of 10th and 11th graders respectively gave the same response; and 39.31, 38.75, and 37.88 per cent of 9th, 10th and 11th graders respectively responded "netural" while 50.88 per cent of the 12th graders stated the same response. The results indicate that the majority of the high school

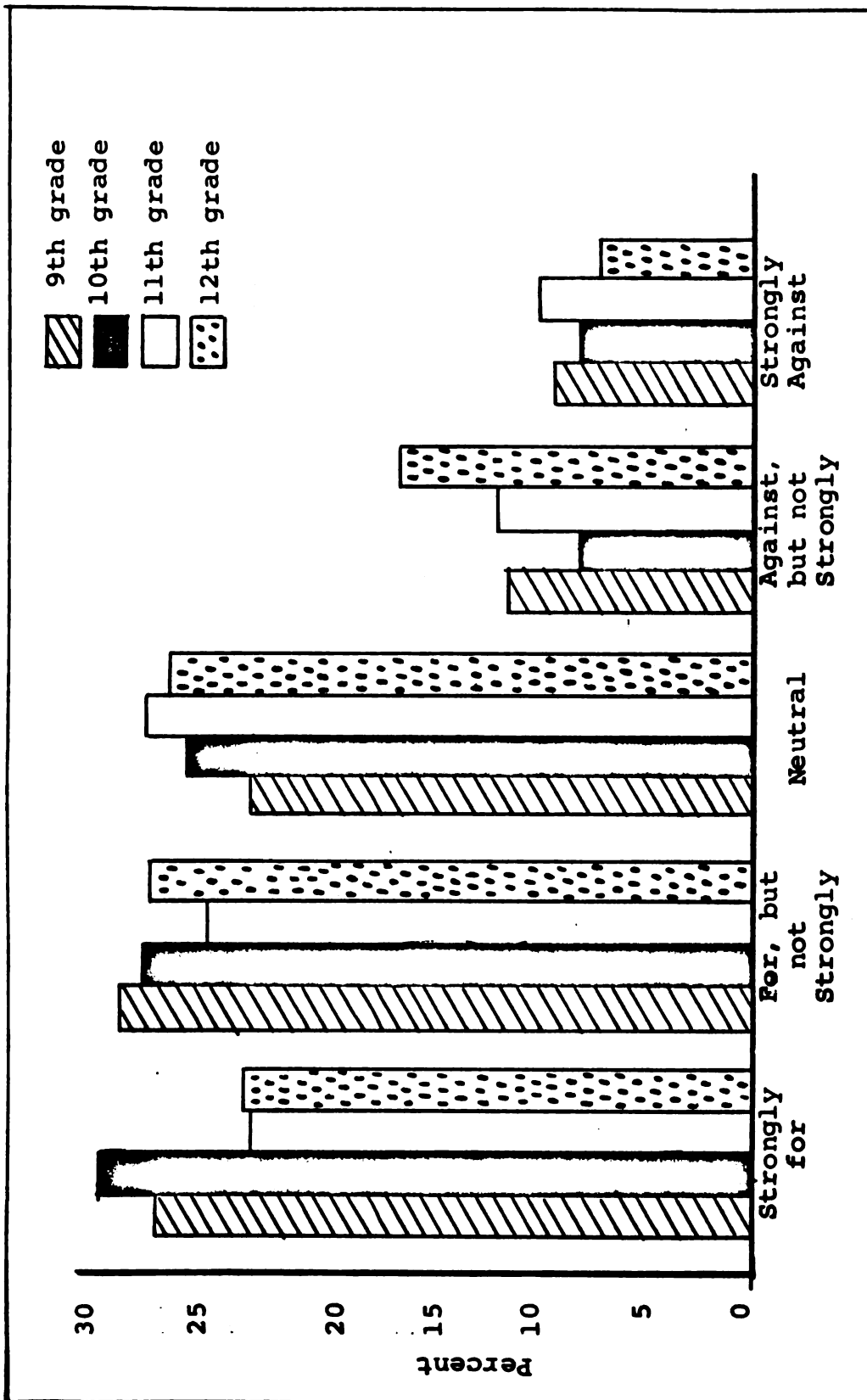


Figure 5. Attitude toward physical education as one of the more important subjects in the school program.

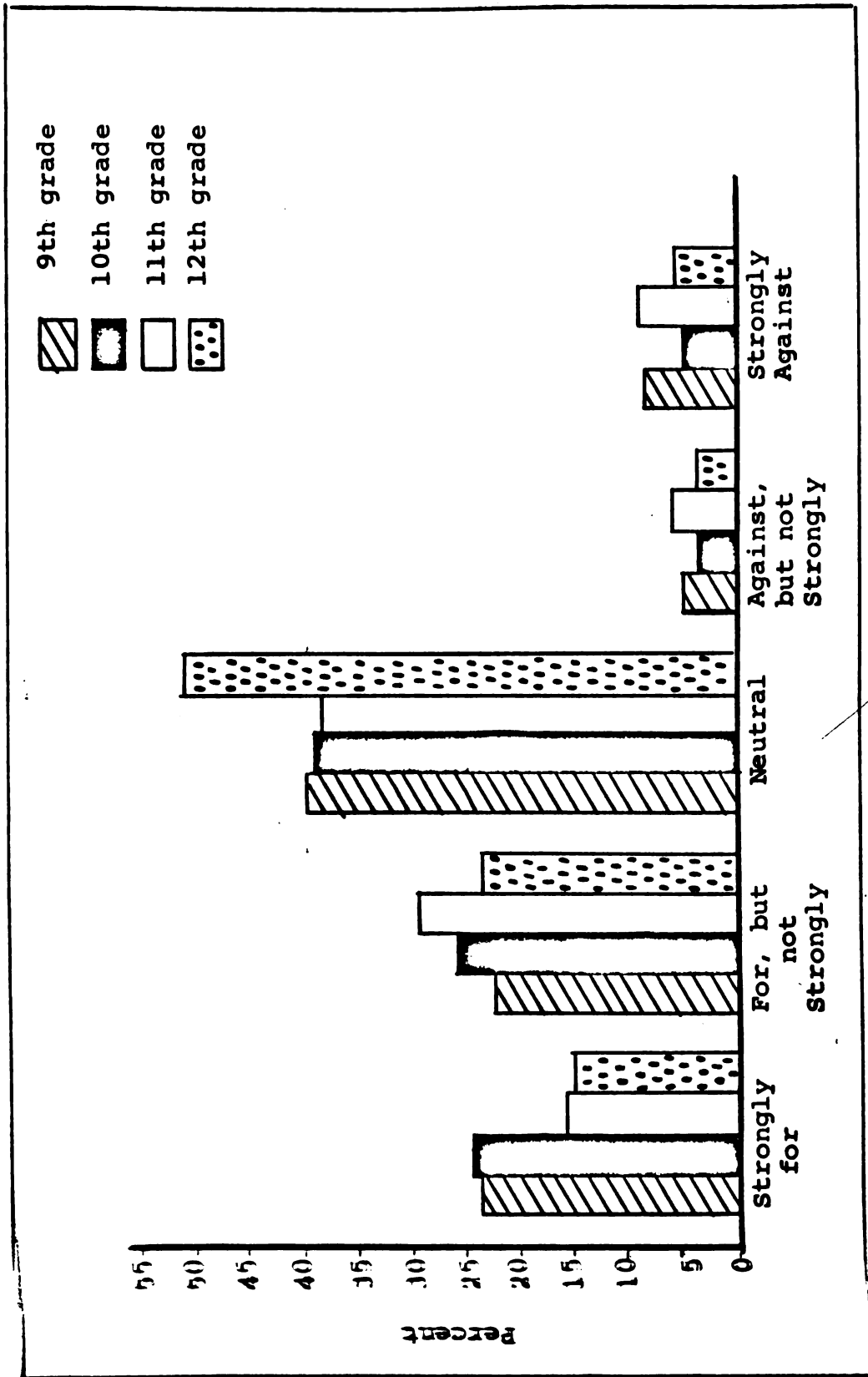


Figure 6. Attitude toward sports as a way to meet boys.

girls have a neutral or positive feeling toward meeting boys while participating in sports.

Should Girls Participate in Sports. Figure 7, page 52, shows how the girls at each grade level responded toward the question pertaining to girls participating in sports. Percentages of 99.31, 98.13, 96.97, and 98.25 of 9th, 10th, 11th, and 12th graders respectively were in favor of girls participating in sports. This indicates a real positive attitude which is exactly as it should be if we expect them to participate in sports after leaving the high school.

Sports Girls Should Participate In. Table 15, page 53, shows how the subjects responded to the list of sports girls should learn skills necessary for participation.

Team Sports. A percentage of 93.05 stated they felt volleyball skills should be learned, 82.38 per cent indicated basketball, 80.50 per cent indicated softball, 76.86 per cent indicated touch football, 74.12 per cent indicated soccer, 67.66 per cent indicated speedball, 62.21 per cent indicated baseball, 60.06 per cent indicated field hockey, and 52.53 per cent indicated football. These results indicate that girls still enjoy participating in team sports especially volleyball, basketball and softball. It also indicates a growing interest in touch football.

Dual Competitive. A percentage of 91.67 felt tennis skills should be learned, 91.44 per cent badminton, 75.00

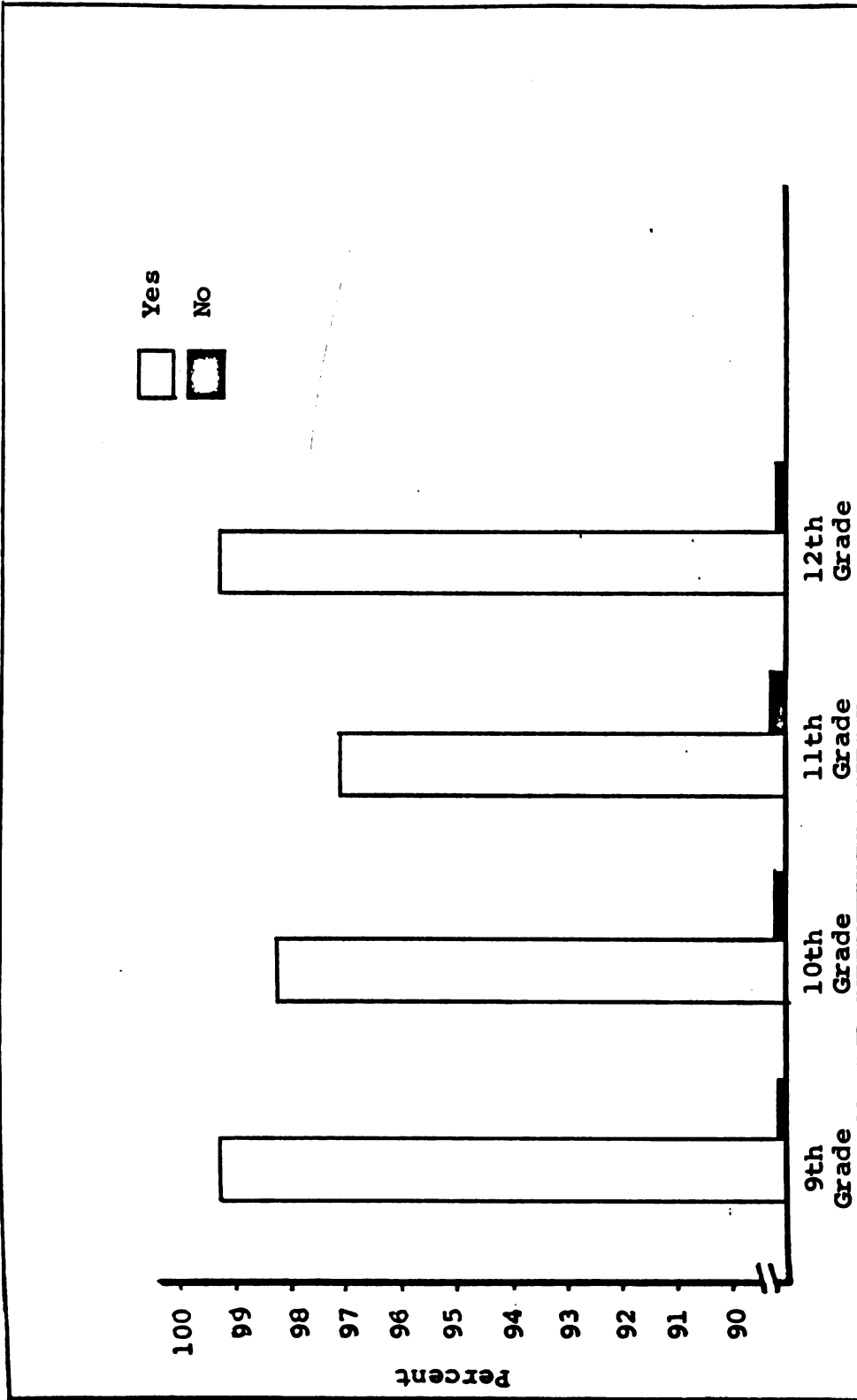


Figure 7. Attitude towards girls participating in physical and recreational sports activities.

Table 15. Frequency distribution of the sports activities girls should participate in given in percentages.

Activity	9th n=145	10th n=160	11th n=133	12th n=144	Total n=552
<b>TEAM SPORTS</b>					
Volleyball	93.62	93.24	91.13	94.29	93.05
Basketball	82.98	84.77	81.60	79.05	82.38
Softball	80.85	80.95	75.00	85.85	80.50
Touch Football	70.00	78.62	79.34	80.77	76.86
Soccer	82.27	79.05	69.67	61.17	74.12
Speedball	70.71	71.33	65.00	61.39	67.66
Baseball	62.41	56.94	62.40	68.87	62.21
Field Hockey	63.31	59.06	68.60	47.12	60.04
Football	53.57	51.72	52.03	52.83	52.53
Ice Hockey	17.27	12.24	14.05	15.84	14.76
<b>DUAL-COMPETITIVE</b>					
Tennis	96.50	98.06	95.16	99.07	97.17
Badminton	93.33	88.00	92.56	92.59	91.44
Judo	72.34	76.82	76.61	74.04	75.00
Karate	63.57	59.18	58.20	50.50	58.43
Fencing	56.20	44.83	55.37	44.66	50.40
Handball	51.09	40.71	30.58	34.62	39.84
Wrestling	14.79	8.78	16.26	14.02	13.27
<b>DUAL RECREATIONAL</b>					
Social Dancing	88.65	91.45	92.06	95.41	91.67
Table Tennis	82.39	86.39	87.10	91.59	86.54
Croquet	80.58	70.83	78.33	88.81	78.88
Tehterball	69.50	66.20	76.67	79.61	72.33
Shuffle Board	61.70	65.28	74.17	77.67	68.90
Bumper Pool	53.03	58.27	61.67	59.80	58.01
Billiards	52.21	56.95	62.10	61.76	57.89
Folk-Country-Square Dancing	55.00	47.92	58.82	66.67	56.18
<b>INDIVIDUAL COMPETITIVE</b>					
Swimming	99.30	98.05	93.60	100.00	97.74
Snow Skiing	95.07	93.20	91.80	92.31	93.20
Water Skiing	95.04	93.15	89.43	95.24	93.20
Ice Skating	95.74	90.00	89.52	97.14	92.88
Bowling	88.57	91.45	93.60	99.08	92.78
Gymnastics	91.49	90.32	93.55	87.96	90.91
Modern Dance	88.49	90.41	88.62	91.26	89.63
Golf	83.10	89.19	88.80	88.79	87.36
Roller Skating	84.06	75.69	76.42	83.50	79.72
Archery	77.34	80.71	80.53	75.27	78.69
Track & Field	64.71	60.81	63.41	60.58	62.43
Weight Lifting	14.08	10.07	10.66	11.11	11.52

Table 15. Continued.

Activity	9th n=145	10th n=160	11th n=133	12th n=114	Total n=552
<b>INDIVIDUAL RECREATIONAL</b>					
Horseback Riding	95.71	94.00	97.60	96.30	95.79
Sailing	98.59	93.38	93.44	96.12	95.37
Home Exercises	92.86	95.33	94.49	96.33	94.68
Bicycling	94.33	88.74	96.06	94.55	93.19
Walking	92.20	89.12	93.60	97.20	92.69
Canoeing	95.07	85.71	92.68	93.46	91.53
Camping	83.10	79.86	89.34	89.42	84.96
Scuba Diving	79.86	75.86	80.33	78.43	78.54
Rowing	74.29	65.75	76.67	77.00	72.92
Power Boating	75.54	71.72	66.67	69.31	71.06
Hiking Cross Country	66.91	58.62	70.00	70.00	65.87
Mountain Clim- ing	55.40	48.32	54.92	43.00	50.78
Fishing	40.71	54.23	37.90	38.38	43.37
Ice Boating	44.20	36.69	33.33	37.62	38.15
Skeet Shooting	35.04	33.33	39.67	40.20	36.73
Hunting	20.71	24.32	22.76	28.71	23.83
Stock Car Racing	14.79	12.84	21.31	24.30	17.73

indicated judo, 58.43 per cent indicated karate, and 50.40 indicated fencing. The results indicate that girls who like to learn self-defense skills.

Dual-Recreational. A percentage of 91.67 felt social dancing skills should be taught, 86.54 per cent indicated table tennis, 78.88 per cent chose croquet, 72.33 per cent chose tetherball, and 68.90 chose shuffle board. The results indicate the girls desire to learn recreational sports that will be useful for recreation later in life.

Individual Competitive. A percentage of 97.79 felt swimming skills should be taught, 93.20 per cent chose

snow skiing and water skiing, 92.88 per cent chose ice skating, 92.78 per cent chose bowling, 90.91 per cent chose gymnastics, 99.63 per cent chose modern dance, 87.36 per cent chose golf, 79.72 per cent chose roller skating, 78.69 per cent chose archery, and 62.43 per cent chose track and field. These results indicate that the girls very interested in individual competitive sports and desire to learn the skills necessary to participate.

Individual Recreational. A percentage of 95.79 felt horseback riding skills should be taught, 95.37 per cent indicated sailing, 94.68 per cent indicated home exercises, 93.19 per cent indicated bicycling, 91.53 per cent indicated canoeing, 84.96 per cent indicated camping, 78.54 per cent indicated scuba diving, 72.92 per cent indicated rowing, and 71.06 per cent indicated power boating. These results indicate a desire to learn skills in sports that are not being taught but should be considered because of carry-over for later life.

Sports Girls Should Not Participate In. Table 16, page 56, shows the subjects' responses to the sports girls should not learn the skills which enable them to participate.

Team Sports. A percentage of 85.24 felt Ice Hockey skills should not be taught and this was expected.

Dual-Competitive. A percentage of 86.73 felt wrestling skills should not be taught and 60.6 per cent felt handball skills should not be taught. These results were expected.



Table 16. Frequency distribution of the sports activities girls should not participate in given in percentages.

Activity	9th n=145	10th n=160	11th n=133	12th n=114	Total n=552
<b>TEAM SPORTS</b>					
Ice Hockey	82.73	87.76	85.95	84.16	85.24
Football	46.43	48.28	47.97	47.17	47.47
Field Hockey	36.69	40.94	31.40	52.88	39.96
Baseball	37.59	43.06	37.60	31.13	37.79
Speedball	29.69	28.67	35.00	38.61	32.34
Soccer	17.73	20.95	30.33	38.83	25.88
Touch Football	30.00	21.38	20.66	19.23	23.14
Softball	19.15	19.05	25.00	14.15	19.50
Basketball	17.02	15.23	18.40	20.95	17.62
Volleyball	6.38	6.76	8.87	5.71	6.95
<b>DUAL-COMPETITIVE</b>					
Wrestling	85.21	91.22	83.74	85.98	86.73
Handball	48.91	59.29	69.42	65.38	60.16
Fencing	43.80	55.17	44.63	55.34	49.60
Karate	36.43	40.82	41.80	49.50	41.57
Judo	27.66	23.18	23.39	25.96	25.00
Badminton	6.67	12.00	7.44	7.41	8.56
Tennis	3.50	1.94	4.84	0.93	2.83
<b>DUAL-RECREATIONAL</b>					
Folk-Country-Square Dancing	45.00	52.08	41.18	33.33	43.82
Billiards	47.79	43.05	37.90	38.24	42.11
Bumper Pool	46.97	41.73	38.33	40.20	41.99
Shuffle Board	38.30	34.72	25.83	22.33	31.10
Tehterball	30.50	33.80	23.33	20.39	27.67
Croquet	19.42	29.17	21.67	11.11	21.12
Table Tennis	17.61	13.61	12.90	8.41	13.46
Social Dancing	11.35	8.55	7.94	4.59	8.33
<b>INDIVIDUAL COMPETITIVE</b>					
Weight Lifting	85.92	89.93	89.34	88.89	88.48
Track & Field	35.29	39.19	36.59	39.42	37.57
Archery	22.66	19.29	19.47	24.73	21.31
Roller Skating	15.94	24.31	23.58	16.50	20.28
Golf	16.90	10.81	11.20	11.21	12.64
Modern Dance	11.51	9.59	11.38	8.74	10.37
Gymnastics	8.51	9.68	6.45	12.04	9.09
Bowling	11.43	8.55	6.40	0.92	7.22
Ice Skating	4.26	10.00	10.48	2.86	7.12
Snow Skiing	4.93	6.80	8.20	7.69	6.80
Water Skiing	4.96	6.85	10.57	4.76	6.80
Swimming	0.70	1.95	6.40	0.00	2.26

Table 16. Continued.

Activity	9th n=145	10th n=160	11th n=133	12th n=114	Total n=552
<b>INDIVIDUAL RECREATIONAL</b>					
Stock Car					
Racing	85.21	87.16	78.69	75.70	82.27
Hunting	79.29	75.68	77.24	71.29	76.77
Skeet Shooting	64.96	66.67	60.33	59.80	63.27
Ice Boating	55.80	63.31	66.67	62.38	61.85
Mountain Climbing	44.60	51.68	45.08	57.00	49.22
Fishing	40.71	54.23	37.90	38.38	43.37
Hiking Cross					
Country	33.09	41.38	30.00	30.00	34.13
Power Boating	24.46	28.28	33.33	30.69	28.94
Rowing	25.71	34.25	23.33	23.00	27.08
Scuba Diving	20.14	24.14	19.67	21.57	21.46
Camping	16.90	20.14	10.66	10.58	15.04
Canoeing	4.93	14.29	7.32	6.54	8.48
Walking	7.80	10.88	6.40	2.80	7.31
Bicycling	5.67	11.26	3.94	5.45	6.81
Home Exercises	7.14	4.67	5.51	3.67	5.32
Sailing	1.41	6.62	6.56	3.88	4.63
Horseback Riding	4.29	6.00	2.40	3.70	4.21

Dual-Recreational. A percentage of 43.82 felt Folk-Country-Square dancing skills should not be taught, 42.11 per cent indicated billiards, and 41.99 per cent indicated bumper pool. These results were expected, especially the Folk-Country-Square dancing with the emphasis the younger generation places on social dancing.

Individual Competitive. A percentage of 88.48 felt weight-lifting skills should not be taught and this was expected, 37.57 per cent felt track and field skills should not be taught and this was expected to be much higher because these girls do not enjoy masculine sports.

Individual Recreational. A percentage of 82.27 felt stock car racing skills should not be taught, 76.77 per cent indicated hunting, 63.27 per cent indicated skeet shooting, 61.85 per cent indicated ice boating, 49.22 per cent indicated mountain climbing, and 43.37 per cent indicated fishing. These results were also expected due to their masculine emphasis.

### Student Reasons For and Against Participation In Sports

Reasons for Participation in Sports. Table 17, page 59, shows the students' reasons for participating in sports activities. A percentage of 44.10 chose "fun and enjoyment" as their first reason for participating in sports, 28.68 per cent chose "for exercise" as their first reason for participating in sports, and 10.89 per cent chose "improve my figure" as their first reason for participating in sports. A percentage of 23.77 chose "for exercise" as their second reason for participating in sports and 20.33 per cent chose "improve my figure" as a second reason. A percentage of 23.59 chose "fun and enjoyment" as their third reason for participating in sports, 14.52 per cent chose "improve my figure" for the third reason, and 12.52 per cent chose "for exercise" for the third reason. These results indicate most girls participate in sports for fun and enjoyment but they realize the contribution physical activity and exercise has toward the maintenance of a good figure.

Table 17. Frequency distribution of reasons for participating in sports activities given in percentages.

Reason	9th n=145	10th n=160	11th n=133	12th n=114	Total n=552
<u>1st Choice</u>					
Fun & enjoyment	48.28	42.50	46.21	38.60	44.10
For exercise	24.83	27.50	30.30	33.33	28.68
Improve my figure	8.28	16.25	5.30	13.16	10.89
No reason	4.83	5.63	6.66	4.39	5.26
Improve my health	2.76	2.50	6.06	3.51	3.63
Meet others	5.52	1.25	3.03	0.88	2.72
Improve my posture	2.07	3.13	3.03	1.75	2.54
Something to do during leisure	1.38	0.63	0.00	2.63	1.09
Other reasons	1.38	0.63	0.00	0.00	0.54
Forced by parents	0.00	0.00	0.00	0.88	0.18
Encouraged by my parents	0.69	0.00	0.00	0.00	0.18
Develop new skills	0.00	0.00	0.00	0.88	0.18
<u>2nd Choice</u>					
For exercise	20.00	24.38	24.24	27.19	23.77
Improve my figure	24.83	17.50	21.97	16.67	20.33
Improve my health	8.28	10.63	12.12	10.53	10.34
Fun and enjoyment	11.03	11.88	6.06	12.28	10.34
Develop new skills	11.03	9.38	9.85	8.77	9.80
No reason	7.59	9.38	8.33	7.89	8.35
Something to do in leisure time	8.97	6.25	12.12	6.14	8.35
Meet others	4.83	7.50	3.03	6.14	5.44
Encouraged by parents	3.45	0.63	0.76	2.63	1.81
Other reasons	0.00	1.88	0.00	0.88	0.73
Improve my posture	0.00	0.00	1.52	0.88	0.54
Forced by parents	0.00	0.63	0.00	0.00	0.18
<u>3rd Choice</u>					
Fun and enjoyment	19.31	26.88	22.73	25.44	23.59
Improve my figure	12.41	14.38	11.36	21.05	14.52
For exercise	13.10	14.38	12.88	8.77	12.52
No reason	11.03	11.25	10.61	9.65	10.71
Develop new skills	12.41	13.75	7.58	4.39	9.98
Something to do in leisure	6.90	5.00	12.12	11.40	8.53
Improve my health	10.34	5.00	6.82	8.77	7.62
Meet others	4.83	5.63	9.85	7.02	6.72
Other reasons	7.59	2.50	3.03	1.75	3.81
Encouraged by parents	1.38	1.25	1.52	1.75	1.45
Improve my posture	0.69	0.00	1.52	0.00	0.54
Forced by parents	0.00	0.00	0.00	0.00	0.00

Reasons Against Participating in Sports. Table 18, page 61, shows the students' reasons for not participating in sports activities. A percentage of 66.97 chose "no reason" for their first and second reasons against participating, because they do participate; 9.98 per cent chose "lack of time" for their first and second reason against participating in sports; 9.62 per cent chose "study interferes" as their first reason against participating in sports, and 5.44 per cent chose "lack of knowledge and skills" as their second reason for not participating. A percentage of 72.96 chose "no reason" for their third reason against participating in sports, and 5.99 per cent chose "lack of interested companions" or "just too lazy" as their third reason against participating in sports. The results indicate that the majority of girls do participate in sports and that the main reason the girls do not participate is that their studies interfere which indicates the great stress placed on the high school students for good grades, because of the socio-economic level of this community.

Table 18. Frequency distribution of reasons for not participating in sports activities given in percentages.

Reason	9th n=145	10th n=160	11th n=133	12th n=114	Total n=552
<u>1st Choice</u>					
No reason	82.76	80.63	53.79	42.98	66.97
Lack of time	3.45	5.00	13.64	21.05	9.98
Study interferes	5.52	3.13	15.91	16.67	9.62
Lack of interest	4.14	6.25	6.06	4.39	3.27
Just too lazy	0.69	2.50	4.55	7.02	3.45
Lack of knowledge and skill	0.00	3.13	6.06	4.39	3.27
Lack of interested companions	2.07	1.88	3.03	3.51	2.58
Transportation problems	4.14	1.88	0.76	1.75	2.18
Health reasons	0.00	1.25	1.52	1.75	1.09
Other reasons	1.38	0.63	0.00	0.00	0.54
<u>2nd Choice</u>					
No reason	82.76	80.63	53.79	42.98	66.97
Lack of time	3.45	5.00	13.64	21.05	9.98
Lack of knowledge and skill	2.07	5.63	6.06	8.77	5.44
Lack of interested companions	3.45	1.25	5.30	7.02	3.99
Study interferes	2.07	1.25	3.79	9.65	3.81
Lack of interest	1.38	1.25	8.33	2.63	3.27
Transportation problems	3.45	2.50	3.79	1.75	2.90
Just too lazy	0.69	1.25	5.30	5.26	2.90
Health reasons	0.00	1.25	0.00	0.88	0.54
Other reasons	0.69	0.00	0.00	0.00	0.18
<u>3rd Choice</u>					
No reason	86.90	86.25	60.61	50.88	72.96
Lack of interested companions	1.38	2.50	9.09	13.16	5.99
Just too lazy	4.14	4.38	6.06	10.53	5.99
Lack of time	1.38	1.25	5.30	5.26	3.09
Study interferes	0.69	0.00	4.55	7.89	2.90
Lack of knowledge and skill	0.69	2.50	2.27	2.02	2.90
Transportation problems	1.38	0.63	6.06	0.88	2.18
Other reasons	1.38	0.63	5.30	1.75	2.18
Health reasons	0.00	1.25	0.00	0.88	0.54

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

This study was primarily concerned with the factors that influence high school girls participation in sports which should be considered when building a curriculum for high school girls which will meet their needs and interests.

The purpose of this study was twofold: (1) to determine the relationship of high school girls participation in sports activities with specific background factors (self attitudes, parents' attitudes and activity level, siblings' activity level, peer attitudes, and family sports activity level) and the familys' socio-economic level; and (2) to determine the students sports activity interests, attitudes toward physical activity, and the reasons for or against participation at each grade level to be used as a guideline in setting up a curriculum.

#### Conclusions

##### Relationship of Activity Level and Certain Factors:

1. A significant positive relationship was found between the girls' activity level and the specific background factors; i.e., self attitudes, parents'

attitudes, parents' activity level, siblings' activity level, peer attitudes, and the family sports activity level.

2. No significant relationship was found between the girls' activity level and the familys' socio-economic level.

#### Sports Activity Interests:

1. A large percentage of the students enjoy attending football and basketball games at the high school. A smaller percentage of the students enjoy attending swimming, track, and wrestling.
2. A very small percentage of the high school girls belong to a sports or recreational club. Girl Scouts and G.A.A. were the only clubs with a fairly high percentage.
3. A large percentage of the girls indicated that swimming was one of their three favorite sports. A smaller percentage of the girls indicated horse-back riding, tennis, water skiing, gymnastics, and basketball as one of their three favorite sports.

#### Attitudes - Physical Activity and Physical Education:

1. A greater percentage of the students rated their physical activity level active than mildly active. A greater percentage of the students were rated in the inactive group when their activity level was computed from the activities and clubs they participate in during the year.



2. A greater percentage of the students rated physical education above average for providing values for everyday living than those who rated it below average.
3. A greater percentage of the students rated above average that physical education should be required of all physically able than those rating it below.
4. A greater percentage of the students rated above average that physical education is one of the more important subjects in the school program than those who rated it below average.
5. A greater percentage of the students rated average or above average for sports as a way to meet boys.
6. Almost all the students felt that girls should participate in sports.
7. A large percentage of the students indicated that the following team sports should be taught: volleyball, basketball, softball, touch football, speedball, baseball, and field hockey.
8. A large percentage of the students indicated that the following dual competitive sports should be taught: tennis, badminton, judo, karate, and fencing.
9. A large percentage of the students indicated that the following dual recreational sports should be taught: social dancing, table tennis, croquet, tetherball, and shuffle board.
10. A large percentage of the students indicated that the following individual competitive sports should be

taught: swimming, snow skiing, water skiing, ice skating, bowling, gymnastics, modern dance, golf, roller skating, archery, and track and field.

11. A large percentage of the students indicated that the following individual recreational sports should be taught: horseback riding, sailing, canoeing, camping, scuba diving, and rowing.
12. A small percentage of the students indicated that folk-country-square dancing should not be taught in the high school.
13. A large percentage of the students indicated that they participate in sports for fun and enjoyment or exercise for improvement of figure.
14. A large percentage of the students who do not participate in sports indicated lack of time particularly related to homework study time as their main reason.

#### Recommendations

1. All physical education departments should have some method of finding out the interests and needs of their students and then use these results as a guideline in setting up a curriculum with the students.
2. It is recommended that the high school physical education programs include a wide variety of sports which include individual, dual, and team sports and place particular emphasis on recreational activities.

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**APPENDICES**

## **APPENDIX A**

### **Questionnaire**

## SPORTS ACTIVITY QUESTIONNAIRE

Grade \_\_\_\_\_ Age \_\_\_\_\_ (years &amp; months)

## 1. Physical Education taken in:

Freshmen \_\_\_\_\_ Sophomore \_\_\_\_\_ Junior \_\_\_\_\_ Senior \_\_\_\_\_

## 2. If you attended another high school before coming to E.L.H.S. was physical education a required course? Yes \_\_\_\_\_ No \_\_\_\_\_

a. How many years of physical education did you take?  
\_\_\_\_\_ years.3. a. Fathers occupation \_\_\_\_\_  
Approx. number of hours spent at work \_\_\_\_\_ per week.b. Mothers occupation \_\_\_\_\_  
Job: part time \_\_\_\_\_ full time \_\_\_\_\_

## c. How many brothers and sisters do you have?

1. Brothers \_\_\_\_\_ 2. Sisters \_\_\_\_\_  
Ages \_\_\_\_\_ Ages \_\_\_\_\_

## 4. What sports activities have different members of your family participated in?

Put an "X" in the appropriate column indicating what sport they participate in and what part of the year and how often. Add any sport not listed and check the appropriate columns.

SPORTS	FALL		WINTER		SPRING		SUMMER	
	ONCE A week	2 OR 3 A week	4 OR more A week	ONCE A week	2 OR 3 A week	4 OR more A week	ONCE A week	2 OR 3 A week
a. Father:								
1. Badminton								
2. Bowling								
3. Camping								
4. Fishing								
5. Golf								
6. Home Conditioning Exercises								
7. Hunting								
8. Recreational Walking								
9. Social Dancing								
10. Swimming								
11. Others:								



SPORTS		FALL		WINTER		SPRING		SUMMER	
		ONCE A week	2 OR 3 times A week	ONCE A week	2 OR 3 times A week	ONCE A week	2 OR 3 times A week	ONCE A week	2 OR 3 times A week
0.	Mother:								
	1. Badminton								
	2. Bicycling								
	3. Bowling								
	4. Camping								
	5. Fishing								
	6. Golf								
	7. Home Conditioning Exercises								
	8. Social Dancing								
	9. Swimming								
	10. Walking (recreational)								
	11. Others:								
1.	Brothers:								
	1. Basketball								
	2. Bicycling								
	3. Bowling								
	4. Camping								
	5. Fishing								
	6. Golf								
	7. Football								
	8. Handball								
	9. Softball								
	10. Swimming								
	11. Others:								
2.	Sisters:								
	1. Badminton								
	2. Bicycling								
	3. Camping								
	4. Gymnastics								
	5. Home Conditioning Exercises								
	6. Ice Skating								
	7. Snow Skiing								
	8. Social Dancing								
	9. Swimming								
	10. Tennis								
	11. Others:								

What sports activities do you watch as a family on T.V. or attend together?

Put an "X" in the appropriate column indicating the sport watched together and what part of the year and how often. Add any sports not listed and check the appropriate columns.

SPORTS	FALL			WINTER			SPRING			SUMMER		
	ONCE A week	2 OR 3 times A week	4 OR more A week	ONCE A week	2 OR 3 times A week	4 OR more A week	ONCE A week	2 OR 3 times A week	4 OR more A week	ONCE A week	2 OR 3 times A week	4 OR more A week
1. Baseball												
2. Basketball												
3. Bowling												
4. Football												
5. Golf												
6. Gymnastics												
7. Ice Skating												
8. Snow Skiing												
9. Swimming												
10. Wrestling												
11. Others:												

6. What sports activities do you and your family participate in together?

Put an "X" in the appropriate column indicating the sport participate in together and what part of the year and how often. Add any sports not listed and check the appropriate columns.

SPORTS	FALL				WINTER				SPRING				SUMMER			
	once A week	2 or 3 times A week	4 or more A week	ONCE A week	2 or 3 times A week	4 or more A week	ONCE A week	2 or 3 times A week	4 or more A week	ONCE A week	2 or 3 times A week	4 or more A week	ONCE A week	2 or 3 times A week	4 or more A week	
1. Badminton																
2. Boating																
3. Bowling																
4. Camping																
5. Fishing																
6. Golf																
7. Snow Skiing																
8. Swimming																
9. Tennis																
10. Walking (recrea.)																
11. Others:																

7. Does your family belong to a country club or a recreational club? Yes          No         . If yes, check which kind or list what one your family belongs too.

- 1. Lansing Country Club
- 2. Lansing Skii Club
- 3. Tennis Club
- 4. Walnut Hills Country Club
- 5. Faculty Club at M.S.U.

6. Others:

-4-

8. Check the sports club (s) recreational and athletic to which you belong, too or did belong, too outside or within school.

CLUB	Do	Did	No. Years	Club	Do	Did	No. Yrs
1. G.A.A.				8. Ice Skating			
2. Quettes				9. Roller Skating			
3. Sea Sprites				10. Girl Scouts			
4. Ski Club				11. YWCA			
5. Tennis Club				12. Others:			
6. Bowling							
7. Cheerleader							

9. What activities do you participate in outside of your club activities?

Put an "X" in the appropriate column indicating the sport participated in and what part of the year and how often. Add any sport not listed and check the appropriate columns.

SPORTS	FALL				WINTER				SPRING				SUMMER			
	ONCE A WEEK	2 OR 3 WEEK	4 OR MORE A WEEK		ONCE A WEEK	2 OR 3 TIMES A WEEK	4 OR MORE A WEEK		ONCE A WEEK	2 OR 3 TIMES A WEEK	4 OR MORE A WEEK		ONCE A WEEK	2 OR 3 TIMES A WEEK	4 OR MORE A WEEK	
1. Bicycling																
2. Bowling																
3. Home Exercises																
4. Horseback Riding																
5. Ice Skating																
6. Social Dancing																
7. Swimming																
8. Tennis																
9. Walking (recrea.)																
10. Water Skiing																
11. Others:																

10. Do you feel a girl should participate in physical and recreational sports activities? Yes \_\_\_\_\_ No. \_\_\_\_\_

a. If yes, check your three favorite sports activities.

- \_\_\_\_\_ 1. Basketball  
 \_\_\_\_\_ 2. Touch Football  
 \_\_\_\_\_ 3. Gymnastics  
 \_\_\_\_\_ 4. Horseback Riding  
 \_\_\_\_\_ 5. Ice Skating  
 \_\_\_\_\_ 6. Snow Skiing  
 \_\_\_\_\_ 7. Swimming

- \_\_\_\_\_ 8. Tennis  
 \_\_\_\_\_ 9. Volleyball  
 \_\_\_\_\_ 10. Water Skiing  
 \_\_\_\_\_ 11. Others:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

-5-

11. Do you enjoy attending sports events at the high school?  
 Yes \_\_\_\_\_ No \_\_\_\_\_

a. If Yes, please check the ones you attend.

- |                     |                          |
|---------------------|--------------------------|
| _____ 1. Baseball   | _____ 7. Tennis          |
| _____ 2. Basketball | _____ 8. Track and Field |
| _____ 3. Football   | _____ 9. Wrestling       |
| _____ 4. Golf       | _____ 10. Others: _____  |
| _____ 5. Gymnastics | _____                    |
| _____ 6. Swimming   | _____                    |

12. Rank, by number, the 3 most important reasons for the following:

a. Why I do participate in sports activities:

- |                             |   |
|-----------------------------|---|
| _____ a. for exercise       | _____ g. forced by my parents                   |
| _____ b. improve my health  | _____ h. encouraged by my parents               |
| _____ c. improve my figure  | _____ i. something to do during my leisure time |
| _____ d. improve my posture | _____ j. fun and enjoyment                      |
| _____ e. develop new skills | _____ k. other reasons                          |
| _____ f. meet others        |   |

b. Why I do not participate in sports activities:

- |                                      |  |
|--------------------------------------|--|
| _____ a. study interferes            | _____ f. lack of interested companions |
| _____ b. lack of interest            | _____ g. health reasons                |
| _____ c. lack of time                | _____ h. just too lazy                 |
| _____ d. lack of knowledge and skill | _____ i. other reasons                 |
| _____ e. transportation problem      |  |

13. Check the sports activities you feel a girl should acquire the skills to participate in and those you feel a girl should not participate in. (S. = should, SN= should not.)

	S.	SN.		S.	SN.
1. Archery			29. Modern Dance		
2. Badminton			30. Mountain Climbing		
3. Baseball			31. Power Boating		
4. Basketball			32. Roller Skating		
5. Bicycling			33. Rowing		
6. Billiards			34. Sailing		
7. Bowling			35. Scuba Diving		
8. Bumper Pool			36. Shuffle Board		
9. Camping			37. Skeet Shooting		
10. Canoeing			38. Snow Skiing		
11. Croquet			39. Soccer		
12. Fencing			40. Social Dancing		
13. Field Hockey			41. Softball		
14. Fishing			42. Stock Car Racing		
15. Folk-Country-Square Dancing			43. Speedball		
16. Football			44. Swimming		
17. Golf			45. Table Tennis		
18. Gymnastics			46. Tennis		
19. Handball			47. Tetherball		
20. Hiking Cross Country			48. Touch Football		
21. Home Exercises			49. Track & Field		
22. Hockey (ice)			50. Volleyball		
23. Horseback Riding			51. Walking		
24. Hunting			52. Water Skiing		
25. Ice Boating			53. Weight Lifting		
26. Ice Skating			54. Wrestling		
27. Judo			55. Others: _____		
28. Karate					

-6-

Place a circle around your response to the following questions.

14. How physically active are you each day? Include leisure time and during school hours.

very active    active    moderately active    mildly active    inactive

15. Physical education classes provide values which are useful in other parts of daily living.

strongly for    for, but not strongly    neutral    against, but not strongly    strongly against

16. Physical education should be required of all who are physically able to participate.

strongly for    for, but not strongly    neutral    against, but not strongly    strongly against

17. Physical education is one of the more important subjects in the school program.

strongly for    for, but not strongly    neutral    against, but not strongly    strongly against

18. Sports are a good way to meet boys.

strongly for    for, but not strongly    neutral    against, but not strongly    strongly against

19. Fathers attitude towards girls participation in sports.

strongly for    for, but not strongly    neutral    against, but not strongly    strongly against

20. Mothers attitude towards girls participation in sports.

strongly for    for, but not strongly    neutral    against, but not strongly    strongly against

21. Girls friends attitude toward girls participation in sports.

strongly for    for, but not strongly    neutral    against, but not strongly    strongly against

22. Boys friends attitude toward girls participation in sports.

strongly for    for, but not strongly    neutral    against but not strongly    strongly against

1  
1  
1  
1  
1  
1  
1  
:  
:  
:

## GIRLS SPORTS ACTIVITIES

- |                                   |                            |
|-----------------------------------|----------------------------|
| 1. Archery (target or field)      | 27. Judo                   |
| 2. Badminton                      | 28.                        |
| 3.                                | 29. Modern Dance           |
| 4. Basketball                     | 30. Mountain Climbing      |
| 5. Bicycling (other than to work) | 31. Power Boating          |
| 6. Billiards or Pool              | 32. Roller Skating         |
| 7. Bowling                        | 33. Rowing                 |
| 8. Bumper Pool                    | 34. Sailing                |
| 9. Camping                        | 35. Scuba Diving           |
| 10. Canoeing                      | 36. Shuffle Board          |
| 11. Croquet                       | 37.                        |
| 12. Fencing                       | 38. Snow Skiing            |
| 13. Field Hockey                  | 39. Soccer                 |
| 14. Fishing                       | 40. Social Dancing         |
| 15. Folk-Country-Square Dancing   | 41. Softball               |
| 16.                               | 42. Speedball              |
| 17. Golf                          | 43.                        |
| 18. Gymnastics                    | 44. Swimming               |
| 19.                               | 45. Table Tennis           |
| 20. Hiking Cross Country          | 46. Tennis                 |
| 21. Home Conditioning Exercises   | 47. Tetherball             |
| 22.                               | 48. Touch Football         |
| 23. Horseback Riding              | 49. Track and Field        |
| 24. Hunting                       | 50. Volleyball             |
| 25.                               | 51. Walking (recreational) |
| 26. Ice Skating                   | 52. Water Skiing           |

## BOYS SPORTS ACTIVITIES

- |                                   |                            |
|-----------------------------------|----------------------------|
| 1. Archery (target or field)      | 28. Karate                 |
| 2. Badminton                      | 29. Modern Dance           |
| 3. Baseball                       | 30. Mountain Climbing      |
| 4. Basketball                     | 31. Power Boating          |
| 5. Bicycling (other than to work) | 32. Roller Skating         |
| 6. Billiards or Pool              | 33. Rowing                 |
| 7. Bowling                        | 34. Sailing                |
| 8. Bumper Pool                    | 35. Scuba Diving           |
| 9. Camping                        | 36. Shuffle Board          |
| 10. Canoeing                      | 37. Skeet and/or Trap .    |
| 11. Croquet                       | Shooting                   |
| 12. Fencing                       | 38. Snow Skiing            |
| 13.                               | 39. Soccer                 |
| 14. Fishing                       | 40. Social Dancing         |
| 15. Folk-Country-Square Dancing   | 41. Softball               |
| 16. Football                      | 42. Speedball              |
| 17. Golf                          | 43. Stock Car Racing       |
| 18. Gymnastics                    | 44. Swimming               |
| 19. Handball                      | 45. Table Tennis           |
| 20. Hiking Cross Country          | 46. Tennis                 |
| 21. Home Conditioning Exercises   | 47. Tetherball             |
| 22. Hockey (Ice)                  | 48. Touch Football         |
| 23. Horseback Riding              | 49. Track and Field        |
| 24. Hunting                       | 50. Volleyball             |
| 25. Ice Boating                   | 51. Walking (recreational) |
| 26. Ice Skating                   | 52. Water Skiing           |
| 27. Judo                          | 53. Weight Lifting         |

## **APPENDIX B**

### **Distribution of Chi Square**



## APPENDIX B

### DISTRIBUTION OF CHI SQUARE

(Degrees Used in This Study)

Degrees of freedom	Probability			
	.05	.02	.01	.005
12	21.03	24.05	26.22	28.30
16	26.30	29.63	32.00	34.27
20	31.41	35.02	37.57	40.00

E. Bright Wilson Jr. An Introduction to Scientific Research. New York: McGraw-Hill Book Company, Inc., 1952. p. 199.



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