

THE ATTITUDES OF HIGHLAND PARK HIGH SCHOOL MALE
PHYSICAL EDUCATION STUDENTS TOWARD PHYSICAL EDUCATION

by

Robert Allen Hays

B.S., Kansas State University, 1964

3735

A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Physical Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1970

Approved by:


Major Professor

ACKNOWLEDGMENTS

I wish to express my deep appreciation to Associate Professor Raymond A. Wauthier, to Professor T. M. Evans of the Department of Physical Education at Kansas State University, and to Dr. Joe Sarthory of the College of Education at Kansas State University, for their personal and professional guidance throughout this study. I am also grateful for the cooperation and assistance from the boys' physical education instructors and their students from Highland Park High School of Topeka, Kansas, and to the encouragement and assistance I received from my wife Jacqueline.

LD
2668
R4
1970
H38
C.2

TABLE OF CONTENTS

	PAGE
ACKNOWLEDGMENTS	ii
LIST OF TABLES.	iv
INTRODUCTION.	1
PURPOSE OF STUDY.	2
METHOD OF STUDY	3
REVIEW OF RELATED LITERATURE.	6
RESULTS AND DISCUSSION.	13
SUMMARY	41
CONCLUSIONS	47
IMPLICATIONS.	48
BIBLIOGRAPHY.	50
APPENDIX.	53

LIST OF TABLES

TABLE	PAGE
I. Distribution of Inventory Scores by Ten-Point Intervals	15
II. Means and Mean Item Responses to the Four Categories of the Wear Attitude Inventory by Total Scores of Responding Subjects . . .	16
III. A Comparison of Social Class Structures In Present Study with Havighurst's View of Social Class Structure.	18
IV. Distribution of Bivariate Frequency Scores For Each Social Class by Attitude Inventory Scores	19
V. Means and Mean Item Responses To the Four Categories of the Wear Attitude Inventory by Social Class.	21
VI. Distribution of Bivariate Frequency Scores For Favorite Activity Items by Social Class	24
VII. Distribution of Bivariate Frequency Scores For Athletic Team Participation by Social Class	27
VIII. Distribution of Bivariate Frequency Scores For Student's View of Personal Fitness by Social Class	29

IX.	Distribution of Bivariate Frequency Scores For Student's View of Importance of Physical Activity by Social Class	31
X.	Distribution of Bivariate Frequency Scores For Student's View of Instructor's Competence by Social Class.	33
XI.	Distribution of Bivariate Frequency Scores For Student's View of Available Equipment by Social Class	35
XII.	Distribution of Bivariate Frequency Scores For Student's View of Available Equipment by Attitude Inventory Scores.	37
XIII.	Distribution of Bivariate Frequency Scores For Student's View of Class Size by Social Class.	39
XIV.	Distribution of Bivariate Frequency Scores For Student's View of Class Size by Attitude Inventory Scores	40

INTRODUCTION

Attitude is defined by Allport (1) as a "mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related." Rokeach (6), defines attitude as a "relatively enduring organization of interrelated beliefs that describe, elevate, and advocate action with respect to an object or situation, with each belief having cognitive, affective, and behavioral components." In addition to these definitions, attitudes are generally regarded as emotionalized feelings that are characterized by a quality of intensity ranging in all degrees from "strongly for" to "strongly against". Studies have established that attitudes serve as the motivating media to condition a student's orientation to learning and to influence the use of skills and knowledge which have been learned. While attitudes are recognized as influencing learning by determining an individual's willingness to learn, the definitions also establish that attitudes are organized through experience.

The objectives of a good physical education program are somewhat broader than effecting a favorable attitude toward physical education. However, favorable attitudes are one of several desirable outcomes of a good program of physical education.

PURPOSE OF STUDY

The purpose of this report was to determine the attitudes of male physical education students at Highland Park High School, Topeka, Kansas toward physical education. Evidence was sought to explain favorable or unfavorable attitudes toward physical education. An attempt was made to discover whether or not social class is related to certain attitudes toward and dimensions of the physical education program. Attitudes toward physical education were measured by the Wear Attitude Inventory and the factors considered were the number of years a student had taken high school physical education, whether the student enjoyed team activities or individual activities, how the student perceived his instructor, what the student felt about the equipment available for physical education, and how the student felt about the effect of class size on his enjoyment of physical education.

It was hoped that the results of this study might be of help to physical educators and supervisors in understanding student attitudes toward physical education and possible reasons for favorable or unfavorable attitudes.

It was also hoped that results from this study might indicate revisions in curriculum for students of different social classes, and the physical educators might become more aware of the effect of the classroom environment on student attitudes.

Since student attitudes are a concern among physical

educators, the author hoped to gain a better understanding of student attitudes through this study.

METHOD OF STUDY

To determine the attitudes of male students at Highland Park High School toward physical education, the Wear Physical Education Attitude Inventory, short form A, was used. The reliability of form A of the Wear Inventory, calculated by the use of the split-halves technique and the Spearman-Brown formula, is .94. It is a carefully prepared instrument of 30 items to which a respondent is asked to consider physical education from the standpoint of its place in the curriculum. The inventory shows the relative strength of the respondent's attitude by using a five-scale forced choice response. Each statement in the inventory is related to one of the four general objectives of physical education which include the social, the mental-emotional, the physiological, and the general contributions.

This study was developed from information gathered from 174 male students enrolled in physical education at Highland Park High School of Topeka, Kansas. Four classes were randomly selected and administered the Wear Attitude Inventory and a general information questionnaire. The questions which comprised the information questionnaire were written by the author. These questions attempted to find information that could be used to classify the students into social classes, to find out if students preferred team activities or indi-

vidual activities, to see if students participated in individual or team sports or both team and individual sports, to determine each student's view of his personal fitness as compared to other students the same age, to find out the importance of physical activity to each student compared to other parts of his life, to get each student's view of his instructors competence, to find out how each student felt about the equipment and facilities available for physical education, and to determine the effect of class size on each student's enjoyment of physical education.

Information was gathered from several sources to form an index which was used to classify the respondents into social classes. The occupation and education level of the subject's parents were the two factors that the index was based on. The primary sources were Havighurst (5), Corwin (4), and Brembeck (2). From those references, the author classified the upper-class family as one in which both parents were college graduates and the family status was inherited from a tradition of family wealth. The father was a prominent business owner, or belonged to a high status profession such as architecture, medicine, or law. The members of this class also lived in an exclusive suburban neighborhood.

The upper-middle class family was classified by both parents being college graduates and the father or mother holding a professional or executive position. For example, an industrial or corporation manager, a lawyer, a doctor, or a dentist. Members of this class climbed to the upper-middle

class from lower status.

Members of the working class or lower-middle class were described as being white collar workers, small businessmen, foremen, skilled workers, technical workers, and holding shopkeeping and sales positions. The education level was a high school education or possibly one or two years of college.

The upper-lower class was characterized by neither parent being a high school graduate, and the occupation of the father or mother being a blue collar worker or holding a semi-skilled or unskilled position. Members of this class are laborers who belong to unions and are subject to frequent lay-offs.

The lower-lower class families were classified by one or both parents not attending high school. The families who belong to the lower-lower class are unskilled laborers who are only periodically employed, and may be on welfare.

Prior to administering the inventory and questionnaire at Highland Park High School, a field test using the prepared inventory and questionnaire was administered to ten randomly selected students at Manhattan High School. The purpose of the field test was to determine if the questions were easily understood and to test the method of administering the inventory and questionnaire.

The inventory and questionnaire were administered by this writer and assisted by the instructor of each individual class. The students were given the purpose of the investigation, and instructed how to mark the Attitude Inventory and

fill out the information questionnaire. The students were told to react to each statement exactly as they felt, and were reminded that this was not a test but an effort to find out the student's feelings toward physical education. It was also made clear that student's names would not be connected to the questionnaire and that it would in no way affect the student's grade.

The administering of the inventory and questionnaire took approximately twenty minutes after which the students were thanked for their cooperation in the study.

REVIEW OF RELATED LITERATURE

The material presented in this section was selected in order to present a brief review of some of the studies that have been conducted on attitudes of students toward physical education. Also, material is discussed pertaining to social class structure and attitudes of social classes toward education.

In 1951, Wear (13) reported a 40-item inventory which was deemed capable of making a reliable and valid assessment of direction and intensity of individual and group attitudes toward physical education. This inventory was believed to give an objective assessment of attitudes toward physical education. With the establishment of norms, the scores become meaningful interpretations of the attitudes of an individual or a group.

Wear (12) then constructed two forms of the Physical

Education Attitude Scale, form A and form B, which have been shown to be statistically reliable. Scores on the forms correlated highly with other measures of attitude and differentiated at high levels of confidence between certain groups of subjects. The product-moment correlation between scores on the two forms is .96. The mean of the scores on form A is 114.59, with a standard deviation of 17.24. The form B has a mean of 114.45, with a standard deviation of 17.67. On the basis of this evidence, it is believed that equivalent forms may be used in making an objective assessment of shifts of attitude, if any, as a result of certain short-term or long-term planned experiences. For example, information can be gathered as to whether or not attitudes change, and how much, as a result of a reading assignment, seeing a film, listening to a talk, watching some activity, or participating in some activity. It might be interesting to know what happened to attitudes as a result of participation in a semester of physical education having certain content or having certain methods of instruction employed.

Keogh (10) undertook a study using the Wear Inventory and his results indicated that men and women were not different in their stated attitudes toward physical education and that they supported equally the social, emotional, and physical values or outcomes of physical education; however, they were critical of the relative value of physical education as a school subject. The equal support of the social,

emotional, and physical values of physical education suggests the "halo effect" response set. This means that if specific outcomes, such as fun or social pleasure, are accepted by a student, he will likely generalize this acceptance to include all values related to physical education.

Keogh (9) conducted a follow-up study to examine responses and characteristics of men and women whose stated attitudes toward physical education were extremely high or low. It was a continuation of the investigation in which the responses of 266 men and women to prepared statements were analyzed in terms of the general values which the statements were said to represent. Results of this study showed that the groups with high attitude scores could be characterized as physically active with high personal judgements of their physical skills and of the relative importance of physical activity in their lives. The groups with low attitude scores were very active physically but were very critical of their high school physical education programs and made less favorable personal judgements. The validity of the Wear Inventory as a measure of attitude toward physical education was supported by the data related to the groups of high and low subjects. They were consistently positive or negative in terms of responses to prepared statements, comments on high school physical education experiences, and self-ratings.

-- There was a surprising lack of difference between high and low groups on participation in physical activity. The

self-ratings of the low subjects did not indicate that physical activity was important to them but the low subjects did have some involvement in physical activity. This fact was contrary to the writer's expectations regarding the relationship of attitude and participation.

The results were compared with the findings from the original study to determine if the response patterns of subjects were similar in both studies. These comparisons showed the responses of both male and female students followed a similar response pattern.

Another study using the Wear Attitude Inventory was made by Brumbach and Cross (7) who used the short form A to measure attitudes of lower division male students at the University of Oregon. This investigation revealed that two-thirds of the students scored between 107 and 133 on the inventory scale. Therefore, it was assumed that the "attitude" objective in physical education programs of high schools in Oregon was being accomplished satisfactorily. In fact, the mean score from this study was significantly higher than the means reported by Wear for Iowa State University students, and by Keogh for his group from U.C.L.A. No specific reason was given as to why this group of students scored so high, but there were two possible explanations. One was that the students were influenced by the nation-wide emphasis on improving youth fitness. A second was that the sample contained a high number of high school athletes.

It was also found that the more years of physical ed-

ucation a high school student has, the better his attitude toward physical education is likely to be.

Students who attended small high schools had better attitudes toward physical education than did students from larger schools. Class size was assumed to have been smaller in the small schools which would seem to account for this difference in attitude.

A study by Campbell (8) at the University of Texas involved 199 college males who completed the Wear Physical Education Attitude Inventory. The subjects were classified according to the size of high school attended, the college of matriculation, and the physical education class in which they were currently enrolled. The mean score for the group of 199 subjects was 115.40 with a standard deviation of 14.09.

Contrary to the results reported by Brumbach and Cross, no significant difference in mean attitude scores was found in the data when considered by size of the high school the subjects had attended.

The nature of academic interest as indicated by the college of matriculation did not provide a significant variation in mean attitude scores toward physical education.

No significant differences in attitude responses were observed between groups of students as classified by physical education activities. These results suggested that each physical education activity contributed equally to attitudes -- regarding physical education.

No statistically significant difference in attitudes

was found between the subgroup means within the classification of subjects when the analysis of variance procedure for multiple groups was applied to the items in the physiological, the mental-emotional, the social, or the general category.

However, when the mean item response of the inventory statements was analyzed by categories, a significant variation was found. The significant variation in response was obtained between the scores of the physiological and social items and the scores of the mental-emotional and general items of the Wear Inventory.

Social class differences in relation to the students attitudes toward physical education was of prime interest to this author in the preparation of this report. The following material was found relevant to the author's interest.

Social class differences are broader in nature and more inclusive than socioeconomic differences. Social classes are based on factors of social participation, with members of a given social class feeling "at home" and on an equal basis with members of the same class, but with the absence of such feelings between members of different classes. At the same time, members of the same class share a common culture or a common way of life - including not only similarities in the amount of income and type of job, but also in such matters as etiquette, dress, speech, attitudes toward education, civic responsibility, and religious participation (5).

There are many ways of life associated with social class, and there are many ways to divide the population into

social classes or ways of life. Fine distinctions can be made of social classes when grouped as "upper", "upper-middle", "lower-middle", "upper-lower", and "lower-lower" (2).

It is true that socioeconomic factors are highly correlated with social class placement. Although there are many individual exceptions, upper-class people are generally the most wealthy and the lower-class people the least wealthy; upper-status people are engaged in different occupations than lower-status people; upper and middle class people have more education than do lower-class people (5).

Research studies have shown that the two best indexes of social class are amount of education and the occupation of the parents. These studies also indicate that individuals with different occupations have different expectations for the school. The professional people, most of whom are in the upper classes, expect their children to gain aesthetic appreciation, emotional stability, creativity, and the intellectual skills from their high school education. The unskilled laborers or lower-class people expect their children to obtain physical development through physical activities, consumer skills, vocational preparation and home and family living (14).

Differences in expectations were also found among groups of people with differing amounts of education. The groups of people with more schooling placed a significantly higher value on all the intellectual expectations than did the individuals with less than a high school education. The aesthetic dimension, possession of knowledge, desire to learn, creation

of knowledge, the communication of knowledge and emotional stability all increased in priority as the level of education increased. Conversely, the importance of patriotism, physical fitness, moral standards, consumer education, and specialized vocational training as expectations for the schools decreased significantly as the educational level of the people increased (15).

After reviewing the literature on the measurement of attitudes in physical education, one can see that attitudes of students can be related to a number of different sources. In relating a student's attitude toward physical education to his social class, it must be kept in mind that attitudes, when suitably activated, result in some preferred responses toward the attitude object of a situation, or toward others who take a position with respect to the attitude object or situation, or toward the maintenance or preservation of the attitude itself. Since an attitude object must always be encountered within some situation about which people also have an attitude, a minimum condition for social behavior is the activation of at least two interacting attitudes, one concerning the attitude object and the other concerning the situation.

RESULTS AND DISCUSSION

Of the 174 subjects involved in the study, 124 or 70.1 percent were sophomores in high school and were taking physical education to meet a requirement; 47 or 28.2 percent were

juniors and were taking physical education as an elective. Only 3 or 1.8 percent were seniors. Seniors are not allowed to take physical education at the present time due to a lack of facilities. The seniors in this study were transfer students who were required to take physical education because they had not taken physical education at their previous school.

An analysis of the Wear Attitude Inventory successfully completed by the 174 students revealed a mean score of 117.39 with a standard deviation of 14.62. The scores ranged from 65 to 145. The total distribution of inventory scores was divided into ten-point intervals and is presented in Table I on page 15.

In order to interpret these scores, one must understand that Wear used the scoring method described by Likert (11). With this method the poorest possible score would be 30, while a student with a highly favorable attitude could score 150 points, the maximum. In between is the completely neutral position which would result in a score of 90. If one had a favorable reaction (rather than a highly favorable reaction) to each of the 30 statements, this would yield a score of 120. On the contrary, an unfavorable reaction (rather than a highly unfavorable reaction) would result in a score of 60.

Since 91 percent of the students in this study scored above 100, it appears that the subjects had favorable attitudes toward physical education. The range of scores and the mean of this study compared very favorable with those reported by Brumbach and Cross (7); however, the mean score

TABLE I
DISTRIBUTION OF INVENTORY SCORES BY TEN-POINT INTERVALS

Scores	Number of Students	Percent
140-149	3	1.7%
130-139	30	17.2%
120-129	49	28.2%
110-119	58	33.3%
100-109	18	10.3%
90-99	7	3.9%
80-89	5	2.8%
70-79	2	1.1%
60-69	2	1.1%

was higher than that which was reported by Wear and by Keogh. The results also suggest that one program objective - producing cognitive attitudes toward physical education has been satisfactorily accomplished.

The total mean and mean item scores for each of the four categories by the 174 responding subjects is presented in Table II below.

TABLE II
MEANS AND MEAN ITEM RESPONSES TO THE FOUR CATEGORIES
OF THE WEAR ATTITUDE INVENTORY BY TOTAL SCORES
OF RESPONDING SUBJECTS

Subject Responses	Categories of the Wear Inventory							
	Physical 6 items		Emotional 7 items		Social 7 items		General 10 items	
	M**	MIR*	M**	MIR*	M**	MIR*	M**	MIR*
174 Subjects	25.30	4.22	25.74	3.68	27.19	3.88	39.16	3.92

**Mean

*Mean item response

The subjects reported a mean score of 25.30 and a mean item score of 4.22 on the six physiological items. The respondents reported a mean score of 25.74 and a mean item score of 3.68 on the seven items related to the emotional benefits received from physical education. The subjects reported a mean score of 27.19 and a mean item score of 3.88 on the items related to social aspects of physical education. On the general questions, the students responded with a mean score of 39.16 and mean item score of 3.92. These scores

compared favorably with the results reported by Campbell (8).

The comparisons made in Table III on page 18 show the relationship of Havighurst's (5) study to the social class structure of the respondent group in this study. This was mentioned only as descriptive information for the reader to gain a better understanding of the social class background of the students who participated in this study and possibly of the Highland Park school district.

Of the 174 students who completed the questionnaire, there were none who were in the upper-class. Havighurst said the upper-class made up 1-3 percent of the average middle-sized community. The upper-middle class was represented by 10.9 percent of the subjects which compared favorably to Havighurst's reported 7-12 percent. The lower-middle class was the largest representative group with 42 percent of the subjects belonging to that social class. The figure was somewhat higher than Havighurst's reported 20-35 percent. The upper-lower class comprised 40.8 percent of the respondents, which related closely to Havighurst's 25-40 percent, and the lower-lower class consisted of 6.3 percent of the subjects which was lower than Havighurst's 15-25 percent.

The total distribution of bivariate frequency scores for each social class is shown with the attitude score as the primary variable in Table IV on page 19.

The intervals shown in Table IV were collapsed into groups of 120-150, 90-119, and 60-89, and the social classes were grouped into middle class and lower class which made

TABLE III

A COMPARISON OF SOCIAL CLASS STRUCTURES IN PRESENT STUDY
WITH HAVIGHURST'S VIEW OF SOCIAL CLASS STRUCTURE

Social Class	Present Study	Havighurst's Study
Upper-Middle	10.9%	7-12%
Lower-Middle	42%	20-35%
Upper-Lower	40.8%	25-40%
Lower-Lower	6.3%	15-25%

TABLE IV
DISTRIBUTION OF BIVARIATE FREQUENCY SCORES
FOR EACH SOCIAL CLASS BY ATTITUDE
INVENTORY SCORES

Interval	N	U	U. M.	L. M.	U. L.	L. L.
140-149	3	0%	33.3%	33.3%	33.3%	0%
130-139	30	0%	13.3%	46.7%	40.0%	0%
120-129	49	0%	16.3%	38.8%	40.8%	4.1%
110-119	58	0%	6.9%	46.6%	41.4%	5.2%
100-109	18	0%	5.6%	33.3%	44.4%	16.7%
90-99	7	0%	0%	28.6%	42.9%	28.6%
80-89	5	0%	20.0%	20.0%	40.0%	20.0%
70-79	2	0%	0%	100.0%	0%	0%
60-69	2	0%	0%	0%	100.0%	0%

the differences in attitude much more evident in each social class. The 120-150 group showed a mean of 30.3 percent of the students were in the middle class and a mean of 19.7 percent were in the lower class. The 90-119 group showed a mean of 20.2 percent of the students to be in the middle class and a mean of 29.9 percent of the students to be in the lower class. The 60-89 group showed a mean of 23.4 percent of the students were in the middle class and a mean of 26.7 percent of the students were in the lower class.

These results seemed to indicate that the middle class students had a more favorable attitude than the lower class students. The students with neutral or unfavorable attitude scores were largely in the lower social class. A possible reason for these differences might be found in Table X on page 33 where results show that the lower class students tended to rate the instructor lower than the upper class students.

The mean and mean item score for each of the four categories as determined for each of the social classes is shown in Table V on page 21. The results show that the upper-middle class respondents had the highest mean item score in all four categories. As reported in Table II, the mean item score for the physical items was 4.22. The upper-middle class had a mean item score of 4.26 on the physical items, and lower-lower class had a low mean item score of 3.97 on questions relating to physical aspects of physical education. Scores on the items dealing with the emotional objectives of

TABLE V
MEANS AND MEAN ITEM RESPONSES TO THE FOUR CATEGORIES
OF THE WEAR ATTITUDE INVENTORY BY SOCIAL CLASS

Social Class Groups	Categories of the Wear Inventory							
	Physical 6 items		Emotional 7 items		Social 7 items		General 10 items	
	M**	MIR*	M**	MIR*	M**	MIR*	M**	MIR*
Upper	0	0	0	0	0	0	0	0
Upper Middle	25.56	4.26	27.40	3.91	28.32	4.05	41.40	4.14
Lower Middle	25.17	4.20	26.18	3.74	27.11	3.87	39.55	3.96
Upper Lower	25.32	4.22	26.13	3.73	26.82	3.83	38.91	3.89
Lower Lower	23.87	3.97	23.64	3.38	24.71	3.53	37.18	3.72

**Mean

*Mean item response

physical education ranged from a mean item response of 3.91 by the upper-middle class to a low score of 3.38 by the lower-lower class. The same trend seemed to run true with the social items and the general items with the upper-middle class having the top score and the lower-lower class having the low mean item score.

The author does not have sufficient evidence to verify the significance of the differences in mean item score responses, but the trend seems to indicate that the upper-middle class students had better attitudes toward physical education than did the other social classes and the lower-lower class had the poorest attitude. These results would support the findings in Table IV which also pointed out that the upper class students tended to have better attitudes toward physical education than lower class students. As mentioned before, a possible reason for these differences might be different attitudes of instructors toward students from different social classes might, in turn, have affected the student's attitude toward physical education.

The general questionnaire completed by the students may give some further light to the present findings. The author selected the questions which seemed to be of most value to this study and constructed a bivariate frequency table for each question with social class being the primary variable in five of the questions and the attitude inventory score in two of the questions.

Question 1. I would like you to check your favorite

activity in physical education.

(1) Touch Football____, (2) Basketball____, (3) Soccer____, (4) Speedball____, (5) Wrestling____, (6) Gymnastics____, (7) Tennis____, (8) Golf____, (9) Track____, (10) Handball____, (11) Swimming_____.

The activities were classified into four groups, none, individual, team, and both team and individual. Of the total group response, 1.6 percent of the group had no favorite activity, 21.3 percent preferred individual activities, 52 percent liked team activities, and 25.3 percent preferred both individual and team activities.

The results indicated that the largest percentage of students enjoyed team activities more than any other type of activity.

The distribution of bivariate frequency scores for favorite activity items by social class is shown in Table VI on page 24. The results indicate that 42.1 percent of the upper-middle class students preferred both team and individual activities, 49.3 percent of the lower-middle class enjoyed team activities, 60.6 percent of the upper-lower class preferred team activities, and 54.6 percent of the lower-lower class liked team activities.

The author felt the results might show that the upper-lower and lower-lower classes would indicate a stronger feeling toward individual activities than team activities. Havighurst (5) described the lower-class child as one who had many problems in school, and was often labeled the problem child of the school. The child of the lower-class was described as

TABLE VI
DISTRIBUTION OF BIVARIATE FREQUENCY SCORES FOR
FAVORITE ACTIVITY ITEMS BY SOCIAL CLASS

Social Class	N	None	Individual	Team	Both
Upper	0	0%	0%	0%	0%
Upper-Middle	19	0%	26.3%	31.6%	42.1%
Lower-Middle	73	1.4%	27.4%	49.3%	21.9%
Upper-Lower	71	0%	15.5%	60.6%	23.9%
Lower-Lower	11	9.1%	9.1%	54.6%	27.8%

independent. One might gather then that students of the lower-class would enjoy individual activities more than team activities.

This study seems to disprove this theory at least in this situation. This could be due to a change in the area of athletics. This area is becoming a means of great social mobility. Any student who is good in athletics, especially team sports such as football, basketball and baseball, has an opportunity for a college scholarship and/ or a pro contract. The amounts of money involved in pro contracts and the education obtained by the individual while attending college under the scholarship could be a big factor in raising a person's social class. Another reason might be that peer group influence is much stronger among lower-class students, and upper and middle classes are more individualistic and not so group oriented.

Question 2. What athletic sport or sports do you participate in?

(1) None____, (2) Football____, (3) Basketball____, (4) Track____, (5) Swimming____, (6) Golf____, (7) Tennis____, (8) Gymnastics____, (9) Wrestling____, (10) Cross Country____, (11) Other_____.

The sports were classified in the same manner as the physical education activities, none, individual, team, and both team and individual. Of the total group, 33.9 percent of the students participated in no athletic sport, 19.5 percent participated in individual sports, 16.7 percent participated in team sports, and 29.9 percent participated in both

individual and team sports.

Table VII on page 27 shows the distribution of bivariate frequency scores for athletic team participation. The figures show that the largest percentage of the upper-middle class did not participate in any sport, with 42.1 percent indicating this response, but 31.6 percent of the students who did participate took part in both individual and team sports. Of the remaining students, the largest percentage participated in individual sports. The lower-middle class was fairly evenly distributed with nearly one-fourth of the group in each category. Team sports showed the least percentage of participation with a 20.5 percent response. Thirty-eight percent of the upper-lower class did not participate in any sport and of the students who did participate, 31 percent took part in both individual and team sports. Lower class respondents showed 36.4 percent did not participate in any sport and of the subjects who did take part, 36.4 percent participated in both individual and team sports. Of the remaining students, the greatest number participated in individual sports.

In this table there was no indication that social class had any effect upon the student's participation in athletics. The findings showed that of the students who participated in athletics, the largest percentage of students in each social class participated in both individual and team sports.

The large percentage of students who did not participate in any sport may have been due to the stiff competition to make a team where only the highly skilled athlete can par-

TABLE VII
DISTRIBUTION OF BIVARIATE FREQUENCY SCORES FOR
ATHLETIC TEAM PARTICIPATION
BY SOCIAL CLASS

Social Class	N	None	Individual	Team	Both
Upper	0	0%	0%	0%	0%
Upper-Middle	19	42.1%	21.1%	5.3%	31.6%
Lower-Middle	73	27.4%	24.7%	20.5%	27.4%
Upper-Lower	71	38.0%	14.0%	16.9%	31.0%
Lower-Lower	11	36.4%	18.2%	9.1%	36.4%

ticipate.

Question 3. How would you compare your personal physical fitness to the fitness of other students your same age? (1) low, (2) fair, (3) average, (4) good, (5) excellent.

Group results showed 2.3 percent felt themselves to be low in physical fitness, 9.8 percent fair, 43 percent average, 35.6 percent good and 9 percent excellent. The largest percentage of students felt their fitness was average to good compared to the rest of the students of the same age.

Table VIII on page 29 shows the distribution of bivariate frequency scores for student's view of personal fitness. The table indicated that social class differences showed some relationship to student's perceptions of personal fitness. The upper-middle class students did not see themselves as being either low or fair in personal fitness but 42.1 percent felt they were average and 47.4 percent thought their fitness was good. None of the lower-middle class rated themselves low, and 41.1 percent felt their fitness was good. Over half of the upper-lower class rated their fitness as average compared to other students their own age, and respondents in the lower-class were more evenly distributed among each of the responses.

One might gather that on the whole, the upper classes had a higher perception of themselves, in terms of physical fitness, than did students from the lower classes.

Question 4. How do you feel about the personal importance of physical activity compared to other parts of your

TABLE VIII
 DISTRIBUTION OF BIVARIATE FREQUENCY SCORES FOR
 STUDENT'S VIEW OF PERSONAL FITNESS
 BY SOCIAL CLASS

Social Class	N	Low	Fair	Average	Good	Excellent
Upper	0	0%	0%	0%	0%	0%
Upper-Middle	19	0%	0%	42.1%	47.4%	10.5%
Lower-Middle	73	0%	12.3%	38.4%	41.1%	8.2%
Upper-Lower	71	4.2%	7.0%	52.1%	29.6%	7.0%
Lower-Lower	11	9.1%	27.3%	18.2%	18.2%	27.3%

life? (1) unimportant, (2) slightly important, (3) important, (4) very important, (5) most important.

The group results showed that 2.8 percent felt physical activity was unimportant, 7.5 percent rated physical activity as slightly important, 39.1 percent thought it was important to be physically active, 37.4 percent help physical activity to be very important and 12.6 percent thought physical activity was the most important part of their life.

One might relate those results to the attitude inventory which determined that the students had a good attitude toward physical education and therefore felt physical education was important to them. The present emphasis being placed on physical fitness might also be a reason for the students feeling physical activity was important to them.

The analysis of this question by social class is shown in Table IX on page 31. Results of this table show that 52.6 percent of the respondents in the upper-middle class felt that physical activity was very important, 76.4 percent of the lower-middle class rated physical activity as important or very important, 74.7 percent of the upper-lower class thought physical activity was either important or very important, and none of the lower-lower class felt physical activity was either unimportant or most important.

These data suggest that the social classes do not differ greatly as to their view of the importance of physical activity. Other studies have found that lower class families valued the physical aspects more than the upper class family. This

TABLE IX
 DISTRIBUTION OF BIVARIATE FREQUENCY SCORES
 FOR STUDENT'S VIEW OF IMPORTANCE
 OF PHYSICAL ACTIVITY
 BY SOCIAL CLASS

Social Class	N	U. Imp.	S. Imp.	Imp.	V. Imp.	M. Imp.
Upper	0	0%	0%	0%	0%	0%
Upper-Middle	19	0%	0%	42.1%	52.6%	5.3%
Lower-Middle	72	2.8%	8.3%	38.9%	37.5%	12.5%
Upper-Lower	71	4.2%	4.2%	40.9%	33.8%	16.9%
Lower-Lower	11	0%	36.4%	27.3%	36.4%	0%

change may be due to a renewed interest in physical education due to the President's physical fitness program and the emphasis being placed on life-time sports and carry-over activities in the physical education programs.

Question 5. How would you grade your instructor in physical education? (1) poor, (2) fair, (3) average, (4) good, (5) excellent.

It was hoped this question might indicate the students' feelings toward the instructor's ability to make physical education meaningful to students from different social class backgrounds. Of the total group, 47.7 percent of the students rated their instructor as good while the rest of the students were fairly evenly divided among the remaining responses.

Table X on page 33 shows the distribution of bivariate frequency scores for the student's view of his instructor's competence, by social class. When the social class differences were observed regarding the competence of the instructor it was found that 47.4 percent of the upper-middle class thought their instructor was good, 48.6 percent of the lower-middle class rated the instructor good and 63.6 percent of the lower-lower class felt the instructor was good. Also, a larger percentage of the lower-lower class felt the instructor was poor than in any of the other social classes who were more evenly distributed among poor, fair, average, and excellent. This might be a reason why lower class students didn't value physical activity to the extent expected.

It would appear that the physical education instructors

TABLE X
DISTRIBUTION OF BIVARIATE FREQUENCY SCORES
FOR STUDENT'S VIEW OF INSTRUCTOR'S
COMPETENCE BY SOCIAL CLASS

Social Class	N	Poor	Fair	Average	Good	Excellent
Upper	0	0%	0%	0%	0%	0%
Upper-Middle	19	5.3%	15.8%	15.8%	47.4%	15.8%
Lower-Middle	72	16.7%	6.9%	12.5%	48.6%	15.3%
Upper-Lower	71	15.5%	8.5%	18.3%	45.1%	12.7%
Lower-Lower	11	27.3%	0%	9.1%	63.6%	0%

at Highland Park were observed as being good by the largest percentage of students from all social classes.

Question 6. How do you feel about the equipment available for physical education? (1) poor, (2) fair, (3) average, (4) good, (5) excellent.

It was hoped that this question might bring out social class differences in student perceptions of the school's equipment and facilities for physical education:

The group response showed that 17.8 percent of the students thought the equipment was poor or fair, 21.8 percent rated the equipment average, 48.8 percent felt the equipment was good, and 10.9 percent thought the equipment was excellent.

These results seemed to show that the largest percentage of students felt the equipment to be at least average to excellent.

The distribution of bivariate frequency scores for the student's view of available equipment by social class is shown on page 35 in Table XI. When viewed by social class, subjects indicated that 63.1 percent of the upper-middle class felt the equipment available was good to excellent, 63.9 percent of the lower-middle class students rated the equipment as good to excellent, 59.2 percent of the respondents in the upper-lower class felt that the equipment was good to excellent, and 36.4 percent of the lower-lower class rated the equipment average, while another 36.4 percent rated the equipment as good or excellent.

TABLE XI
DISTRIBUTION OF BIVARIATE FREQUENCY SCORES
FOR STUDENT'S VIEW OF AVAILABLE EQUIPMENT
BY SOCIAL CLASS

Social Class	N	Poor	Fair	Average	Good	Excellent
Upper	0	0%	0%	0%	0%	0%
Upper-Middle	19	5.3%	15.8%	15.8%	52.6%	10.5%
Lower-Middle	72	13.9%	6.9%	15.3%	54.2%	9.7%
Upper-Lower	71	2.8%	9.9%	28.2%	47.9%	11.3%
Lower-Lower	11	9.1%	18.2%	36.4%	18.2%	18.2%

Results would indicate that all social classes felt the equipment and facilities at Highland Park were good to excellent except the lower-lower class which rated the equipment as average.

To further analyze the influence of equipment and facilities another bivariate frequency table was made relating judgements of the quality of equipment and facilities to the attitude inventory scores. These results are shown in Table XII on page 37.

By collapsing the intervals into groups of 120-150, 90-119, and 60-89 the results showed some differences. The 120-150 group had a 59 percent mean response to good, and a mean of 2.5 percent of this group felt the equipment was poor. The 90-119 group responded with a 40 percent mean response to good and a 12.1 percent mean response to poor. The 60-89 group showed a 25 percent mean response to good and a 50 percent mean response to poor. These results indicated that the student's attitudes toward physical education were determined largely by the equipment and facilities.

Question 7. What effect does the size of your physical education class have on your enjoyment of the class? (1) none at all, (2) a little, (3) some, (4) quite a bit, (5) very much.

The total group response showed that 17.8 percent of the students felt class size had no effect on their enjoyment of the class, 14.4 percent thought it had a little effect, 24.7 percent thought it had some effect, 21.3 percent thought it effected their enjoyment quite a bit, and 21.3 percent of

TABLE XII
DISTRIBUTION OF BIVARIATE FREQUENCY SCORES
FOR STUDENT'S VIEW OF AVAILABLE EQUIPMENT
BY ATTITUDE INVENTORY SCORES

Interval	N	Poor	Fair	Average	Good	Excellent
140-149	3	0%	33.3%	0%	66.7%	0%
130-139	30	3.3%	0%	23.3%	66.7%	6.7%
120-129	49	4.1%	10.2%	20.4%	44.9%	20.4%
110-119	58	5.2%	8.6%	25.9%	55.2%	5.2%
100-109	18	16.7%	11.1%	33.3%	22.2%	16.7%
90-99	7	14.3%	42.9%	0%	42.9%	0%
80-89	4	50.0%	25.0%	0%	25.0%	0%
70-79	2	50.0%	0%	0%	50.0%	0%
60-69	2	50.0%	0%	0%	0%	50.0%

the students felt that class size affected their enjoyment very much.

The largest percentage of students, 67.3 percent, felt that class size affected their enjoyment by indicating a some to very much response.

The distribution of bivariate frequency scores for the student's view of class size by social class is shown in Table XIII on page 39. An attempt was made to determine if there were any noticable differences among the social classes as far as class size and its effect on student enjoyment of physical education. The results showed that there were no differences among the social classes on their responses to the effects of class size. This finding suggested a look at student attitude score and class size so a bivariate frequency table was constructed with the attitude inventory scores as the primary variable.

Table XIV on page 40 shows the distribution of bivariate frequency scores for student's view of class size by attitude inventory scores. When the respondents were arranged by attitude scores in relation to their response to the question, the results showed that the students with an attitude score of 120-150 responded with a mean of 12.9 percent no effect, a mean of 21 percent little effect, and a mean of 15 percent very much effect. The students with attitude scores from 90-119 responded with a mean of 15.4 percent no effect, a mean of 8.9 percent little effect, a mean of 29 percent some effect, a mean of 17.1 percent a lot of effect, and a mean

TABLE XIII
 DISTRIBUTION OF BIVARIATE FREQUENCY SCORES
 FOR STUDENT'S VIEW OF CLASS SIZE
 BY SOCIAL CLASS

Social Class	N	None	Little	Some	A Lot	Very Much
Upper	0	0%	0%	0%	0%	0%
Upper-Middle	19	23.3%	10.5%	26.3%	26.3%	10.5%
Lower-Middle	72	13.9%	20.8%	26.4%	16.7%	22.2%
Upper-Lower	71	18.3%	11.3%	22.5%	25.4%	22.5%
Lower-Lower	11	27.3%	0%	27.3%	18.2%	27.3%

TABLE XIV
 DISTRIBUTION OF BIVARIATE FREQUENCY SCORES
 FOR STUDENT'S VIEW OF CLASS SIZE
 BY ATTITUDE INVENTORY SCORES

Interval	N	None	Little	Some	A Lot	Very Much
140-149	3	0%	33.3%	33.3%	33.3%	0%
130-139	30	26.7%	16.7%	13.3%	13.3%	30.0%
120-129	49	12.2%	14.3%	28.6%	28.6%	16.3%
110-119	58	20.7%	15.5%	28.9%	25.9%	12.1%
100-109	18	11.1%	11.1%	33.3%	11.1%	33.3%
90-99	7	14.3%	0%	28.6%	14.3%	42.9%
80-89	4	50.0%	0%	25.0%	0%	25.0%
70-79	2	0%	50.0%	0%	0%	50.0%
60-69	2	0%	0%	0%	0%	100.0%

of 29.4 percent very much effect. The students with attitude scores from 60-89 responded with a mean of 17 percent no effect, a mean of 17 percent little effect, a mean of 8 percent some effect, a mean of 0 percent a lot of effect, and a mean of 58 percent very much effect.

The results of this table showed that the students with the highest attitude scores believed class size to have less effect on their enjoyment of class than students who had lower attitude scores. One might assume that class size did have some effect on attitudes of some students and could have been one of the major reasons for the lower attitude scores.

SUMMARY

Attitudes of male students toward physical education at Highland Park High School were measured by the Wear Physical Education Attitude Inventory. The students who completed the Wear Inventory showed a mean score of 117.39 and a standard deviation of 14.62. The scores ranged from one low score of 65 to one high score of 145. Since 91 percent of the students in this study scored above 100 points it might suggest that the students had a very favorable attitude toward physical education. The range of scores and mean of this study compared favorably with Brumback and Cross's (7), study on attitudes in physical education and the mean score was higher than several other studies done on attitudes toward physical education.

The total mean and mean item scores for each of the four categories of the Wear Inventory showed that the 174 responding subjects scored a high mean item score of 4.22 on the items related to the physical aspects of physical education. The students scored a mean item response of 3.92 on the general questions relating to physical education and 3.88 mean item response to the items relating to the social aspects of physical education. The students responded with a low mean item score of 3.68 on the questions dealing with the emotional aspects. It would seem that the students were most favorable to the physical objectives of physical education but also gave indication that they have a good attitude toward the other objectives of physical education.

A social analysis of the sample suggested that the group could be divided into four different social classes. Most cities the size of Topeka have five social classes; upper, upper-middle, lower-middle, upper-lower and lower-lower, but the Highland Park district is located in an area which isn't occupied by upper-class people who by definition live in the more exclusive suburban areas which are predominately located on the west side of Topeka. The Highland Park district could be divided into the upper-middle, lower-middle, upper-lower, and lower-lower social classes. The upper-middle class comprised 10.9 percent of the students, the lower-middle class 42 percent, the upper-lower 40.8 percent, and the lower-lower 6.3 percent. Aside from the upper-class these figures related closely to Havighurst's (5) reported figures for a city the

size of Topeka. This group of students would seem to be fairly representative of the four social classes.

When the attitude inventories were analyzed by social class, it was discovered that the upper-middle class students had a higher mean item score on every category than any other social class. The scores seemed to run from highest to lowest by social class in almost every category.

These results would seem to indicate that the upper-middle class students had better attitudes toward physical education than any of the other three social classes, and that the lower-lower class had the poorest attitude toward physical education.

The general questionnaire was analyzed using bivariate frequency tables with bivariate frequency scores for each of the variables. The first question dealt with the respondents choosing their favorite activity or activities in physical education. The activities were grouped into individual, team, both team and individual, and none for the students who didn't have a favorite activity. The author felt the results might show that the upper-lower and lower classes would indicate a stronger feeling toward individual activities than team activities, but the results seemed to disprove this theory at least in this situation. A possible reason might be that today's popular team sports of football, basketball, and baseball are a means of further education and social class mobility for many lower class students who want to work hard enough to become good.

When the subjects were asked to check the sport or sports they participated in there was a large percentage who did not participate in any sport. Of the students who did participate, the largest percentage participated in both team and individual sports. The author did not find any indication that social class had any effect upon the student's participation in athletics. The fact that approximately 30 percent of the students in each social class took part in both team and individual sports might speak well for the all around athletic program offered in Topeka. The reason for the approximately 38 percent of each class not participating in any sport might be answered by the fact that high school athletics are a highly competitive activities and only the higher skilled athletes usually participate.

As a group, 43 percent of the subjects viewed themselves as average in physical fitness, 35.6 percent thought their fitness was good, 9 percent considered themselves excellent in fitness. When the question was analyzed by social class, some differences were noted. The upper-middle class students did not see themselves as being either low or fair in personal fitness but 89.5 percent thought they were either average or good in fitness. None of the lower-middle class rated themselves low and 41.1 percent felt their fitness was good. Over half of the upper-lower class rated their fitness as average compared to other students their own age, and respondents in the lower-lower class were more evenly distributed among each of the responses.

These results seemed to indicate that on the whole, the upper classes had a higher perception of their personal fitness than did the lower classes.

The students indicated the importance of physical activity by showing an 89.1 percent group response to important, very important and most important. These results further reflect the scores on the Attitude Inventory which determined that the students had a good attitude toward physical education.

There was no evidence of differences among social classes as to their view of the importance of physical activity. Other studies have found that the lower class families valued the physical aspects of education more than upper class families. This change may be due to a renewed interest in physical education due to the President's physical fitness program and the emphasis being placed on life-time sports and carry-over activities in the physical education programs.

The students were asked to grade their instructor and 47.7 percent of the respondents rated their instructor as good while the rest of the students were fairly evenly divided among the remaining responses.

When the responses were divided by social class, it appeared that the largest percentage of all social classes rated their instructor as being good. However, the lower-lower class did have the highest percentage of any class who rated the instructor as poor.

Equipment and facilities were thought to have some bearing on student attitudes. Group results showed the largest percentage of students felt the equipment to be at least average to excellent. Results of equipment and facility analysis by social class showed that all social classes felt the equipment and facilities at Highland Park were good to excellent except that the lower-lower class tended to rate the equipment more average.

It was felt that an analysis by attitude inventory scores on this question might reveal more significant information in relation to student attitudes toward equipment and facilities. By collapsing the attitude intervals into intervals of 30, results showed some differences. The group with scores of 120-150, the most favorable attitudes, felt the equipment was good, with 59 percent of the subjects giving this response. However, only 2.5 percent of this group felt the equipment was poor. The neutral group with scores from 90-119 also had a high of 40 percent rating the equipment good, but 12.1 percent of this group rated the equipment and facilities poor. The group with a more unfavorable attitude, 60-89, also had a 50 percent response to poor facilities and 25 percent of this group rated the equipment good.

This indicated that equipment and facilities did have an effect on student attitudes and the students with more favorable attitudes tended to rate the equipment higher than students with more unfavorable attitudes.

The final question dealt with student attitudes toward

class size and how it affected their enjoyment of physical education. Group results showed that 67.3 percent of the students felt that class size affected their enjoyment by indicating a some to very much response. Results by social class showed very little differences among the social classes on their responses to the effects of class size on their enjoyment of physical education. When the respondents were arranged by attitude scores in relation to their response to the question, the results showed that the students with the highest attitude scores believed class size to have less effect on their enjoyment of the class than students who had lower attitude scores. One might assume then that class size did have some effect on attitudes of some students and could have been one of the major reasons for the lower attitude scores.

CONCLUSIONS

Within the limits of the procedure and subjects used in this study, the following conclusions seemed to be justified.

1. The Wear Physical Education Attitude Inventory is a reliable and valid means for determining attitudes toward physical education.
2. The attainment of attitudes according to expressed objectives of physical education can be measured by the Wear Physical Education Attitude Inventory.
3. The majority of students who participated in the

study had a favorable attitude toward physical education, students from the upper-middle class had the best attitudes toward physical education and students from the lower-lower class had the poorest attitudes.

4. Student's social class does not effect student's participation in athletics.

5. The upper-class students have a higher perception of their personal fitness than students from lower classes.

6. Students from each social class viewed physical activity as an important part of their lives.

7. Equipment and facilities have an effect on all student attitudes, with upper social class students rating equipment and facilities higher than lower social class students.

8. Class size has an effect upon students attitudes toward physical education but no differences among social classes were evident.

9. Students from the lower-lower social class tended to rate the instructor lower than students from the other social classes.

IMPLICATIONS

From the conclusions drawn earlier the following implications for physical education programs for schools like Highland Park were derived.

1. Results of this study seemed to imply that teachers should have an understanding of the social strata of their

school and how it affects the student's attitudes.

2. In the physical education program, the equipment and facilities play a large role in the attitude of students. This study indicates that the better equipped a school is for physical education the better the attitudes of the students toward physical education.

3. Results of this study also had some implications for teachers and supervisors to strive for workable class sizes in physical education.

4. Conclusions drawn from this study imply that teachers of physical education may use an instrument to measure attitudes of students toward their program. This might be used as a means of feedback from the students to enable the teacher to revise the program to meet the needs of the students.

BIBLIOGRAPHY

BIBLIOGRAPHY

BOOKS

1. Allport, G. W. Attitudes, A Handbook of Social Psychology. Worcester, Mass.: Clark University Press, 1935.
2. Brembeck, Cole S. Social Foundations of Education, A Cross-Cultural Approach. New York, London, Sydney: John Wiley and Sons Incorporated, 1966.
3. Brookover, Wilbur B., Gottlieb, David. A Sociology of Education. New York: American Book Company, 1964.
4. Corwin, Ronald. A Sociology of Education. New York: Appleton-Century-Crofts, Division of Meridith Publishing Company, 1965.
5. Havighurst, Robert J., Neugarten, Bernice. Society in Education. Boston: Allen and Bacon and Company, 1962.
6. Rokeach, Milton. Beliefs, Attitudes, and Values. San Francisco: Jossey and Bass Incorporated, 1968.

PERIODICALS

7. Brumbach, Wayne B., Cross, John A. "Attitudes Toward Physical Education of Male Students Entering the University of Oregon," The Research Quarterly, XXXVI (March, 1965), 10-16.
8. Campbell, Donald E. "Student Attitudes Toward Physical Education," The Research Quarterly, XXXIX (October, 1968), 456-462.
9. Keogh, Jack. "Extreme Attitudes Toward Physical Education," The Research Quarterly, XXXIV (March, 1963), 27-33.
10. Keogh, Jack. "An Analysis of General Attitudes Toward Physical Education," The Research Quarterly, XXXII (Sept., 1962), 239-244.
11. Likert, R. A. "A Technique For The Measurement of Attitudes," Arch. Psychology, XXII (Jan., 1932), 5-43.
12. Wear, Carlos L. "Construction of Equivalent Forms of An Attitude Scale," The Research Quarterly, XXVI (March, 1955), 113-119.

13. Wear, Carlos L. "The Evaluation of Attitudes Toward Physical Education As An Activity Course," The Research Quarterly, XXII (May, 1951), 114-126.

DOCTORAL DISSERTATIONS

14. Slagle, Allen T. "The Task of The Public School as Perceived by Occupation and Age Sub-Publics," Unpublished Doctor's dissertation, University of Chicago, 1959.
15. Seager, Roger C. "The Task of The Public School as Perceived by Proximity Sub-Publics," Unpublished Doctor's dissertation, University of Chicago, 1959.

APPENDIX

PHYSICAL EDUCATION ATTITUDE INVENTORY

Directions - Please Read Carefully: Below you will find some statements about physical education. I would like to know how you feel about each statement. You are asked to consider physical education only from the standpoint of its place as an activity taught during a regular class period. No reference is intended in any statement to interscholastic or intramural athletics. People differ widely in the way they feel about each statement. There are no right or wrong answers.

You have been provided with answer blanks under each question for recording your reaction to each statement. (a) Read each statement carefully, (b) Place an "X" in the square which is under the word or words which best expresses your feeling about the statement. After reading a statement you will know at once, in most cases, whether you agree or disagree with the statement. If you agree, then decide whether to place an "X" under "agree" or "strongly agree". If you disagree, then decide whether to place an "X" under "disagree" or "strongly disagree". In case you are undecided (or neutral) concerning your feeling about the statement, then place an "X" under "undecided". Try to avoid placing an "X" under "undecided" in very many instances.

Whenever possible, let your own personal experience determine your answer. Work rapidly, do not spend much time on any statement. This is not a test, but is simply a survey to determine how people feel about physical education. Your answers will in no way affect your grade in any course. In fact, I am not interested in connecting any person with any paper - so please answer each statement as you actually feel about it. Be sure to answer every statement.

1. There should not be over two one-hour periods per week devoted to physical education in schools.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
==	==	==	==	==

2. Physical education activities provide no opportunities for learning to control the emotions.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
==	==	==	==	==

3. Physical education is one of the more important subjects in helping to establish and maintain desirable social standards.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
=====	=====	=====	=====	=====

4. Vigorous physical activity works off harmful emotional tensions.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
=====	=====	=====	=====	=====

5. I would take physical education only if it were required.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
=====	=====	=====	=====	=====

6. Participation in physical education makes no contribution to the development of poise.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
=====	=====	=====	=====	=====

7. Because physical skills loom large in importance in youth, it is essential that a person be helped to acquire and improve such skills.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
=====	=====	=====	=====	=====

8. Calisthenics taken regularly are good for one's general health.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
=====	=====	=====	=====	=====

9. Skill in active games or sports is not necessary for leading the fullest kind of life.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
=====	=====	=====	=====	=====

10. Physical education does more harm physically than it does good.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
=====	=====	=====	=====	=====

11. Associating with others in some physical education activity is fun.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
=====	=====	=====	=====	=====

12. Physical education classes provide situations for the formulation of attitudes which will make one a better citizen.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
=====	=====	=====	=====	=====

13. Physical education situations are among the poorest for making friends.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
=====	=====	=====	=====	=====

14. There is not enough value coming from physical education to justify the time consumed.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
=====	=====	=====	=====	=====

15. Physical education skills make worthwhile contributions to the enrichment of living.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
=====	=====	=====	=====	=====

16. People get all the physical exercise they need in just taking care of their daily work.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
=====	=====	=====	=====	=====

17. All who are physically able will profit from an hour of physical education each day.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
=====	=====	=====	=====	=====

18. Physical education makes a valuable contribution toward building up an adequate reserve of strength and endurance for everyday living.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
=====	=====	=====	=====	=====

19. Physical education tears down sociability by encouraging people to attempt to surpass each other in many of the activities.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
=====	=====	=====	=====	=====

20. Participation in physical education activities makes for a more wholesome outlook on life.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
=====	=====	=====	=====	=====

21. Physical education adds nothing to the improvement of social behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
==	==	==	==	==

22. Physical education class activities will help to relieve and relax physical tensions.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
==	==	==	==	==

23. Participation in physical education activities helps a person to maintain a healthful emotional life.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
==	==	==	==	==

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

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
==	==	==	==	==

25. There is little value in physical education as far as physical well-being is concerned.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
==	==	==	==	==

26. Physical education should be included in the program of every school.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
==	==	==	==	==

27. Skills learned in a physical education class do not benefit a person.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
==	==	==	==	==

28. Physical education provides situations for developing desirable character qualities.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
==	==	==	==	==

29. Physical education makes for more enjoyable living.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
==	==	==	==	==

30. Physical education has no place in modern education.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
==	==	==	==	==

INFORMATION QUESTIONNAIRE

1. What is your grade classification? 1. So., 2. Jr., 3. Sr.
2. What is your father's occupation? _____
3. What is your mother's occupation? _____
4. Father's Education - (1) attended high school, (2) completed high school, (3) attended college, (4) completed college.
5. Mother's Education - (1) attended high school, (2) completed high school, (3) attended college, (4) completed college.
6. How many years of high school physical education have you had including this year? 1, 2, 3.
7. Did you take physical education this year as an elective or to meet a requirement? (1) elective, (2) requirement.
8. I would like you to check your favorite activity in physical education. (1) Touch Football____, (2) Basketball____, (3) Soccer____, (4) Speedball____, (5) Wrestling____, (6) Gymnastics____, (7) Golf____, (8) Tennis____, (9) Track____, (10) Handball____, (11) Swimming____.
9. What is your favorite subject? _____
10. What athletic sport or sports do you participate in? (1) None____, (2) Football____, (3) Basketball____, (4) Track____, (5) Swimming____, (6) Golf____, (7) Tennis____, (8) Gymnastics____, (9) Wrestling____, (10) Cross Country____, (11) Other _____.
11. How would you compare your personal physical fitness to the fitness of other students your same age? (1) low, (2) fair, (3) average, (4) good, (5) excellent.
12. How do you feel about the personal importance of physical activity compared to other parts of your life? (1) unimportant, (2) slightly important, (3) important, (4) very important, (5) most important.
13. How would you grade your instructor in physical education? (1) poor, (2) fair, (3) average, (4) good, (5) excellent.
14. How do you feel about the equipment available for physical education? (1) poor, (2) fair, (3) average, (4) good, (5) excellent.

15. What effect does the size of your physical education class have on your enjoyment of the class? (1) none at all, (2) a little, (3) some, (4) quite a bit, (5) very much.

ABSTRACT

THE ATTITUDES OF HIGHLAND PARK HIGH SCHOOL MALE
PHYSICAL EDUCATION STUDENTS TOWARD PHYSICAL EDUCATION

by

Robert Allen Hays

B.S., Kansas State University, 1964

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Physical Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1970

The purpose of this report was to determine the attitudes of male physical education students at Highland Park High School toward physical education. Facts were sought to find reasons for favorable or unfavorable attitudes toward physical education. The Wear Attitude Inventory was used to determine the attitudes of the students, and a general information questionnaire was also given in order to classify students by social class and find out information related to their physical education program.

It was hoped that the results of this study might be of help to physical educators and supervisors in understanding student attitudes, and that they might become more aware of the effect of classroom environment on student attitudes. Results from this study might indicate revisions in teaching methods and curriculum for students from different social classes.

This study was developed from information gathered from 174 male students enrolled in physical education at Highland Park High School of Topeka, Kansas. The inventory and questionnaire were administered by this writer and assisted by the instructor of each individual class.

Related literature was reviewed which included other studies that have been conducted on attitudes of students toward physical education. Also, material was read and discussed pertaining to social class structure and attitudes of social classes toward education.

Seventy percent of the students taking part in the study

were sophomores taking physical education to meet a requirement, 28 percent were juniors taking physical education as an elective, and approximately 2 percent were seniors who were required to take physical education because they had not met the requirement before.

An analysis of the results from the Wear Inventory showed that 91 percent of the students had a score of 100 points or better which would indicate that the subjects on the whole had a favorable attitude toward physical education.

The subjects reported a mean item score of 4.22 on the questions dealing with the physical aspects of physical education, which was the highest of any of the sub-scales in the instrument.

The students were classified into four social classes using an index derived by the author from several sources. The classes were upper-middle, which was composed of 10.9 percent of the students, lower-middle, which was composed of 42 percent of the students, upper-lower, which comprised 40.8 percent of the students and lower-lower in which 6.3 percent of the students were classified.

When attitude scores were classified by social class the trend seemed to indicate that the upper-middle class students had better attitudes toward physical education than did the other social classes and the lower-lower class had the poorest attitude.

The largest percentage of students enjoyed team activities, and when analyzed by social class the results showed that all

social classes seemed to enjoy team activities in physical education.

The author did not find any indication that social class had any effect upon student participation in athletics. The facts showed that of the students who participated in athletics, the largest percentage of students in each social class participated in both individual and team sports.

A high percentage of the students felt their fitness was average to good compared to the rest of the students their same age. Social class differences showed some indications of different perceptions of personal fitness. On the whole, the upper classes had a higher perception of themselves than did students from the lower classes.

Students in this study also indicated that physical activity was important to them, and no major differences among social classes as to their view of the importance of physical activity was evident.

The respondents as a group tended to grade their instructors as good, and by social class the largest percentage of students from all social classes rated the instructors good. However, a larger percentage of the lower-lower class felt the instructor was poor, than in any of the other social classes.

The equipment and facilities were rated at least average to excellent by most of the students. By social classes the students in every class but the lower-lower class felt the equipment was good to excellent. The lower-lower class

tended to rate the equipment and facilities more average. This question was also analyzed by the attitude score and it was found that the students with a higher attitude score tended to rate the equipment higher than students with a lower attitude score.

Sixty-seven percent of the students felt that class size affected their enjoyment of physical education some to very much. No difference was found between social classes as far as effects of class size, but when analyzed by attitude score the results showed that the students with the higher attitude scores believed class size to have less effect on their enjoyment of the class than students who had lower attitude scores.