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AND THOSE ATTITUDES OF PHYSICAL EDUCATION MAJORS AND THOSE ATTITUDES OF THEIR RESPECTIVE PARENTS TOWARD PHYSICAL FDUCATION

Ву

Catherine DeVrye

B.P.E. University of Calgary, 1971

Presented in partial fulfillment of the requirements for the degree of

Master of Science

UNIVERSITY OF MONTANA

1972

Approved by:

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Thanks John Dayries for your advice.

At times it didn't seem so nice,

For it interfered with my own plans

But now I'm glad "it was in your hands."

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On my master's committee.

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Also, Karen and Ellie--for your "friendly touch."

Although I seldom ever express it,

Thanks for your love Mom and Dad;

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This - - thesis is now out of the way!!

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CHAPTER I

INTRODUCTION

For many years, physical educators have expressed a concern regarding attitudes toward physical education. However, the majority of studies done in this area have dealt only with the attitudes of students in the school and university systems and little research has been conducted dealing with attitudes held by non-student subgroups of the population.

Swain (L3) believes that attitudes towards occupations in our society are strong and consistent. Therefore, there is presumably a set attitude concerning physical education. Swain also states that young people are influenced in their choice of a career by the opinions of the adult world. This may have been more evident in the past, as it appears that children have more freedom in today's world, and males in particular appear to anticipate greater freedom of choice than females in instances involving parental consent to a decision (hl). In addition, most children wish to attain a higher status than their father in job selection (40). A survey, conducted in 1967, by Pounds and Hawkins (33), found that only 47 percent of the parents questioned would encourage their sons into a teaching career, and 73 percent would encourage their daughters. One wonders if the mentioned percentages would differ if "physical education" had been substituted for "teaching." A positive variance in the educational expectations of the student occurs in relationship to the frequency of parental encouragement,

suggesting that parental approval is necessary to further a university education. If it is discovered that parents have negative attitudes toward physical education, and there is a consensus that this is hampering some students from entering the field, adequate measures could be devised to alleviate the situation.

The school has accepted some responsibility for the development of student attitudes toward a variety of subjects. The general, persistent attitude formed underlies the specific motives of the students' actions later in life. The utilitarian value of such generalized attitude investigations can prove advantageous in determining changes in societal attitudes toward physical education. Keogh (22) states that a primary goal of educational programs is to develop self-motivated graduates, and it is therefore an important concern that students develop positive attitudes toward physical education. By employing an attitude inventory, administrators and teachers may become conscious of the students' existing attitudes, and the feasibility of attempting to modify these attitudes through curriculum revision, to facilitate the accomplishment of physical education objectives. As pointed out by Wessel and Helson (50), the importance of attitudes can not be overlooked by those interested in encouraging active participation in physical activity throughout life.

CONCERT OF AN ATTITUDE

Many definitions of "attitude" have been formulated. Webster (49) simply describes it as "one's disposition". To Kenyon (21), an attitude signifies "a latent or non-observable, complex, but relatively stable behavioral disposition reflecting both direction and intensity

of feeling toward a particular object; concrete or abstract." Thurstone (14) titles an attitude as "the sum total of a man's inclinations and feeling, prejudices or bias; preconceived ideas, fears, threats and convictions about any specific topic." McDonald's (26) definition is "a predisposition to action; a state of readiness to act as follows: in a particular way; what a person thinks or feels about a certain subject; a generalized state of the individual; an orientation process which enables a person to interact selectively with his environment." He elaborates that attitudes imply a subject-object orientation and are related to objects, people, places, events and abstract ideas contained within the environment of the individual. They have direction and we usually prefer one thing to another. Because of the intensity factor which characterizes attitudes, people may feel more or less strongly toward a certain subject, but these feelings are marked by relative stability and consistency.

The majority of social psychologists feel that attitudes are not innate; but acquired. One startling experience can influence an individual's attitude for the rest of his life while other attitudes are built up over a long period of time. They are formed in relation to one's group values and norms and may be influenced and changed (27). If attitudes are to be changed, the individual must have new experiences relevant to the desired attitude change. This can be done through the presentation of facts, but direct involvement has proved to be more effective.

Observed behavior is the basis for any inference about attitude, but it must be remembered that the observed behavior is not the attitude

itself. Although corollaries may be gleaned from verbal and non-verbal behavior, most measurements of attitudes have been done through the observation of verbal behavior. Psychologists, who study attitudes, have constructed scales in basically four ways. In the most frequently used, the individual can respond to a statement by strongly agreeing, strongly disagreeing, or expressing an opinion of varying intensity between the two extremes. Other methods include scales where the individual either totally agrees or disagrees, or rates himself along a continuum. Open-ended questions may also be used, but they have tended to be difficult to assess.

THE PROBLEM

The problem of this investigation was threefold:

- 1. To compare the attitude relationships and differences between junior and senior physical education majors and their parents toward physical education.
- 2. To investigate possible variables which may affect parental attitudes toward physical education. These variables included age of the parent, educational level of the parent, past and present sport experience of the parent, number of children in the family, and size of community, of which the parent was a resident.
- 3. To determine if parents were satisfied with the occupational choice of their offspring and would have recommended that they choose such a vocation.

Limitations

1. The Wear Attitude Inventory (Form A) was the only instrument

used to assess attitude toward physical education. It was originally designed to be administered to students; not parents. However, no revisions were made.

- 2. The size of community was designated as that area where the parent is currently a resident, but the parents' attitudes may have been formed in a community where they had previously resided.
- 3. Parents may have had different conceptions of the meaning of "sporting activity" on the personal information sheets.
- 4. The question on the personal information sheet, asking if parents would recommend physical education as an occupational choice for their offspring, was misinterpreted by many, and parents expressed that their child's choice was his or her own and what he or she personally wanted to be, and the parents did not feel that it was their position to interfere with this liberty.

Delimitations

- 1. It was not possible to include all the parents of junior and senior physical education majors, due to circumstances such as death, divorce, incorrect mailing addresses, or lack of cooperation on the part of the student or parent.
- 2. It was taken for granted that peoples' attitudes would be the same, regardless of the exact time they filled in the questionnaire. However, attitudes may vary slightly from day to day.
- 3. All the students involved were attending the University of Montana and their attitudes could have possibly varied had they been attending another institution.

Definitions

The following terms and their definitions were used in this study:

- 1. Attitude: "what a person thinks or feels about a certain subject" (26).
 - 2. Opinion: "a verbal expression of attitude" (44).
- 3. Juniors and seniors: those male and female students attending the University of Montana, who have already accumulated a minimum of ninety credits and have not yet completed the requirements for the degree.
- 4. Physical education major: those junior or senior students who have declared physical education as their major on their registration forms.

CHAPTER II

REVIEW OF LITERATURE

ATTITUDE MEASUREMENT IN PHYSICAL EDUCATION

Early Work

Thurstone and Chave (144) were pioneers in attitude research as early as 1929. Individuals and groups of people were arbitrarily asked to express their opinions about the church and these were edited into a list of 130 favorable, neutral and negative statements. The individual's attitude toward the church was then evaluated by asking the subject to check only those statements which he would be willing to accept, and then tallying the responses. The technique, which they employed for this purpose, was later adapted by other researchers, such as Wear (147), to measure attitudes toward varied subject matter.

In 1932, Likert (25) contrived an attitude inventory, asking individuals to rate a variety of statements concerning their attitudes toward imperialism, internationalism, economic order and the Negro problem. The subject was instructed to respond to every statement by indicating whether he strongly approved, approved, was neutral, disapproved, or strongly disapproved. Likert assigned a value of five points to the response that was indicative of the most positive attitude toward the subject and one point to the response showing the least favorable attitude. If statements were worded in a negative fashion, strong approval of such a statement would only result in a score of one, and strong disapproval in a score of five. The total number of points were

tallied and individual's attitudes were appraised in relation to a mean score, with those scoring highest being assumed to have the most favorable attitude toward the particular subject. Likert's technique has also been copied and adapted by other researchers, interested in assessing attitude toward physical education. Kappes (20) developed a supposedly reliable and valid inventory to determine attitudes of college women toward physical education and reported a relationship between the estimated skill level in an activity and the degree to which it was viewed as enjoyable. Cutler (14) concluded an existence of favorable attitudes of male students toward physical education in selected junior colleges in California. Also on the basis of the Likert technique, Edgington (16) devised a scale and found it to be a reliable and valid means to measure attitudes of high school freshmen boys toward physical education; which incidentally were positive in Similar research by Mista (27) investigated the attitudes of college women toward their high school physical education program and found that more positive attitudes existed in cases where the girls had participated in extracurricular physical activities, earned athletic letters, lived on farms, came from small high school graduating classes, planned to become teachers, rated themselves above average in physical skills, and enjoyed high school physical education. Also employing the Likert technique, Alden (1) attempted to analyze the factors in the required physical education program that were least attractive to the college girl; the most prevalent factor being the inconvenience of dressing and undressing. Baker (4) concluded that attitudes concerning women's participation in physical education did not regulate participation so much as they reflected the influence of other causes which did,

such as lack of time.

Attitudes of College Women Toward Physical Education

Surprisingly enough, much of the early work done in physical education attitude research, was conducted by women in regard to female physical education programs. In 1930, Graybeal (18) deduced that students who participated in a required program of physical education demonstrated more positive attitudes toward physical education than those who had not been subjected to such a program. Bullock and Alden (8) also investigated some of the factors determining the attitudes of freshmen women toward required physical education and found that the majority of the subjects tested enjoyed physical education in high school and university. Of those who did not enjoy such a program in their university training, 66 percent were forced to take a certain course because of scheduling difficulties. Vincent (45) also reviewed attitudes of college women toward physical education, revealing a general consensus of positive attitudes, and a relationship between such attitudes and success in the subject. Moore (28) undertook a similar study in regard to the attitude of college women toward physical activity, especially of the individual nature, during recreational However, recreational time was reported, by the subjects, as being limited. Plummer (34) aimed to detect influences on the attitudes of college women in physical education. Results indicated that physical appearance, physical education background, finances, competition of other activities, and the physical plant affected attitudes and interests toward physical education.

Attitudes of High School Girls Toward Physical Education

On the high school level, Anderson (3) prepared a questionnaire as a result of interviews with diverse skill levels of physical education students, tabulated the most popular and unpopular activities, and found that competition played an important role in the physical activity pattern of the high school girl. Carr (12) discovered a positive relationship between success in physical education and selected attitudes expressed by entering freshmen high school girls.

Attitudes of College Men Toward Physical Education

In 1933, Smith (42) formulated a questionnaire study in regard to the attitude of male students toward the required physical education program and found that 91 percent believed that they had benefitted from university physical education, while 62 percent expressed the opinion that it would have been better to have a physical education course offered as an elective. This was to be one of the first in a series of similar studies to be conducted at universities throughout the United States. Wiedamann and Alder's (51) findings indicated that participation in physical education service courses positively affected attitudes toward physical education, and freedom of choice in activities was a major contributor to the improvement of attitude. Richardson (36) utilized a revised Thurstone scale to measure attitudes of college students toward physical fitness and exercise and found the scale to provide a logical means of appraising attitudes of college students prior to and after instruction.

Other Assessments of Attitude Toward Physical Education

Kenyon (21) devised six scales for assessment of attitudes

toward physical activity and found the social, health-fitness, vertigo, ascetic and aesthetic scales to be reliable and valid, and the cathartic one not so. Alderman (2) later used these same scales as a sociopsychological assessment of attitude toward physical activity in championship athletes, and summarized that the mean performance of a group could be maximized if all trials were administered on the same day. O'Bryan and O'Bryan (32) attempted to describe and compare attitudes held by differential subgroups of the population by probing opinions held by high school students, university physical education majors, and non-physical education graduate students, university academic staff and junior and senior high school teachers. Within the limits of the sample, it was stated that there seemed to be no great cause for physical educators to feel that they were unfavorably regarded.

THE WEAR ATTITUDE INVENTORY

<u>Origin</u>

Since the development of the Wear Attitude Inventory, in 1951, it has been used frequently in physical education as a means to assess attitude. It was originally constructed in the following manner:

Graduate and undergraduate physical education students were asked to suggest both favorable and unfavorable statements that reflected their own feelings, and opinions they had heard others express toward physical education. Through these, and an examination of periodicals, Wear formed a core of 289 different statements. This selection was revised, and the statements were eliminated on the basis of Wang's (46) suggested criteria for the formation of

attitude statements. One hundred and twenty statements comprised the inventory. Eventually, a Short Form, 40-statement inventory was selected by eliminating statements whose indices of discrimination were below a certain arbitrarily selected point, and eliminating those statements which seemed to tap approximately the same aspect of attitude. These were presented to subjects in the same manner described by Likert (25). Subjects were asked to respond to each statement by selecting one of five choices: strongly agree, agree, undecided, disagree, strongly disagree. Approximately half of the statements were worded positively and the remainder in a negative fashion to counteract any suggestive effect that all positive or all negative statements might have. The reliability and validity of the inventory was stated to be statistically satisfactory; the split halves reliability of the Short Form being .93, and the correlations between Short Form scores and graphic self ratings equalling .80.

In 1955, Wear proceeded to develop two equivalent forms of a physical education attitude scale, designed to determine if there is any shift in a subject's response to the same statement in "before" and "after" situations. In order to help eliminate any influence, through suggestion of the first response upon a subsequent response, the use of an equivalent, but not identical, set of statements was contrived. Consequently, Wear produced a Form A and a Form B attitude inventory, each consisting of thirty statements. These were shown by the split halves technique and the Speaman-Brown formula to be statistically reliable; Form A

with a reliability of .94 and Form B with a reliability of .96.

The product-moment correlation between scores on the two forms was .96.

Wear Attitude Inventory Related to Attitudes of College Students

The Wear Attitude Inventory has frequently been used successfully, either in the original or a slightly revised form, to measure the attitude of university students toward physical education. Bell and Walters (5) assessed the attitude of women at the University of Michigan. Results showed more participation in physical activity by freshmen than seniors, and a higher degree of engagement in individual sports by all. Other, almost identical, studies have been conducted at institutions of higher learning throughout the country. cludes research completed by Broer (6), Murray (31), and Moyer et al. (29); all of whom reported favorable attitudes toward physical education as expressed by college students. In a similar investigation, Brumbach and Cross (7) found that athletes scored higher on the Wear Attitude Inventory and, consequently, were assumed to hold more positive attitudes toward physical education. They also concluded that a small high school and more numerous years of physical education training would yield more positive feelings toward physical education, when a student had reached college. Keogh (22) attempted to determine if students differed in their attitudes toward general benefits and values of physical education, and if men and women differed in this respect. No distinction between the sexes was unfolded. A year later, he selected students who had scores extremely high or low on the previously administered Wear Attitude Inventory, and again found no male-female differentiations,

and no evidence to indicate that negative attitudes were related to non-participation.

Campbell (9) found the Wear Attitude Inventory to be reliable and valid within the confines of his study on the attitudes of college men toward physical education, indicating an overall favorable impression. He then applied the inventory to junior high school boys and found it to also be an adequate instrument to measure attitudes at this level.

Besides the generalized assessment of attitudes of students toward physical education, inquiry has attempted to probe some of the different variables affecting such sentiments. Lemen (24) found that college women preferred individual, rather than team, sports in their leisure time, and once again positive correlations were obtained between the degree to which subjects enjoyed their high school physical education program and their present attitudes toward physical education. In another study by Campbell (11), no relation was found between fitness scores and scores on the Wear Attitude Inventory. Further investigation of attitude in relation to fitness and conditioning includes that conducted by Wessel and Nelson (50), in which they showed a positive correlation between the strength of college women and their attitudes toward physical education. Young (52) examined different socioeconomic groups and found no difference between them with reference to attitudes toward physical education. Chambers (13) reviewed the relationship of verbalized attitudes regarding physical education to actual participation in physical activities, and also found the Wear Attitude Inventory to be a reliable test of attitudes.

SUMMARY

From the review of the related literature, it appears that no research has been directed toward the assessment of parental attitudes toward physical education. More specifically, no evidence could be found regarding the attitudes held by parents of physical education majors, although diverse studies have been conducted to assess student sentiment.

CHAPTER III

METHODS AND PROCEDURES

Selection of Subjects

The study included all University of Montana junior and senior physical education majors attending the 1972 Winter Quarter, whose parents were both living together. This particular group of students was selected because it was felt that they had made a committment to the physical education profession in establishing their major. parents of all such majors were also incorporated in the study. A list of all physical education majors was obtained from the files in the Department of Physical Education. Through the files of the Registrar's Office were secured the phone numbers of the students, the mailing addresses of the parents and information as to whether or not both parents were living together in the same household. In order to eliminate excess variables, the student was not included in the study if either of the parents had died or were separated. Some of the students, listed as physical education majors in the files, had recently changed majors, graduated, or dropped out of school. Such students were also omitted from the investigation. A total of 54 students and, subsequently, 108 parents met the criteria mentioned. Of this number, 1,2 completed sets of responses were received, for a 78 percent return. There was a total of 42 mothers, 42 fathers, 27 male physical education majors and 15 female physical education majors.

Selection of Instrument

As previously mentioned, the Wear Attitude Inventory (Form A) was shown by the split halves technique and the Spearman Brown formula to be statistically reliable at the .94 level, in Wear's original validation study. Numerous other investigators (6, 7, 9, 10, 11, 23, 24, 30, 47) used the Wear Attitude Inventory to assess attitudes toward physical education and also reported it to be a reliable and valid instrument. For this reason, it was selected for use in the current investigation.

Development of Questionnaire

The writer's curiosity, arising from experience with her own parents, formed the initial basis for the development of the questions posed. Following a review of the literature, a questionnaire was devised to investigate possible variables that might affect parental attitudes. Through a continuing process of consultation with certain members of the thesis committee, twelve questions were finally selected for further consideration. The precise justification for asking the specific questions is explained in Chapter IV, following each separate question.

Procedure

The Wear Attitude Inventory and the personal questionnaire were coded for computer program cards. On April 5, 1972, a form letter, explaining the study, was sent to all the parents, accompanied by two Wear Attitude Inventories (one for each parent), two personal information sheets, and a stamped self-addressed envelope. All the materials were coded in the following manner:

Example: 001M mother #1 001F father #1

001S son #1 OR 001D daughter #1

However, clarification was made that all data would be kept confidential. Following a two-week span of the initial mailing of the forms to the parents, handwritten reminder letters were sent to those parents who had not yet returned the information. After a further ten-day lapse, telephone calls were placed to those parents residing in Montana.

The physical education students were contacted by telephone, and individual appointments were made for them to fill out the forms. This was done so the student could get to know the researcher, on a more personalized basis, and an appeal was made to the student to write and ask his parents to respond to the questionnaire.

Discussion, summary, conclusions and recommendations were made according to the data. Thank you notes and abstract summaries were sent to all parents who responded.

Test and Measurement Procedure

obtained by use of a COBOL computer program. A one-way analysis of variance was used to determine any difference in the Wear scores on each of the variables. If the null hypothesis was rejected at the .05 level, the Schoffé test was administered at the .1 level to determine where any difference might be present. A Pearson product-moment correlation was instrumented to determine any relationship between scores of students and parents on the Wear Attitude Inventory. The formulas appear in the Appendix.

CHAPTER IV

RESULTS AND DISCUSSION

As previously mentioned, the Wear Attitude Inventory (Form A) has proved in the past to effectively measure attitudes toward physical education. Wear's original validation study yielded a mean score of 114.59. In comparison, the mean score for the entire group of physical education majors and parents in this particular study was 124.23; the scores ranging from 85-147. Only one individual (a male physical education major) scored below 90. This seems to imply that there is no magnanimous need for physical educators to worry that their profession is viewed unfavorably by those entering the field and their respective parents, if the attitudes expressed on the Wear Attitude Inventory (Form A) are an adequate indication of the public image of physical education.

The remaining data for this study will be presented in order of the questions posed in the "Statement of the Problem" contained in Chapter I. For purposes of clarity, the questions will be re-stated, and the discussion of the subsequent data will immediately follow each question.

Sub Problem I: To compare the attitude relationships and differences between junior and senior physical education majors with those of their parents toward physical education.

Will physical education majors score higher on the Wear Attitude Inventory than their parents?

Research, using the Wear Attitude Inventory as an assessment of attitude, was completed by Broer (6), Campbell (9), Moyer et al. (29) and Murray (31); all indicating favorable attitudes toward physical education, as expressed by college students in general. It was hypothesized that physical education majors, the professionals of tomorrow, would have a much more propitious attitude toward physical education than the average student population; also, a more positive attitude than their parents, most of whom were involved in other occupations.

The study was successful in comparing the attitude differences between physical education majors and their parents toward physical education. The group mean for the parents, as shown in Table I, was 123.27, compared to 125.59 for the students. A one-way analysis of

TABLE I

COMPARISON OF WEAR SCORES (FORM A) OF STUDENTS AND PARENTS

	Wear Validation	Students	Parents
Males	diel Sergelffreuer stalle State – forwere de flatte voorweren die fan 1904 State voorweren stalle beken beken t De state state stalle stal	123.59	121.19
Females	All art rea for	129.20	125.35
TOTAL	114.59	125.59	123.27

variance yielded an F ratio of 2.32, which was not significant at the .05 level (see Table II, p. 21). Therefore, it was believed that there was no difference between students and parents, regarding their attitudes toward physical education; both groups possessing a very positive perspective.

There was no significant relation between the attitudes of

TABLE II

F RATIO FOR COMPARISON OF WEAR SCORES (FORM A)
OF STUDENTS AND PARENTS

Source	df	Sum of Squares	Mean Square	F needed for significance at .05 level	F obtained
Between	3	818.76	272.92	dir en voy die	AA 44 70 70
Within	122	13855.04	113.57		
TOTAL	125	14673.80		2.68	2.32

fathers vs. students (r = .18) and mothers vs. students (r = .11). It can therefore be assumed that the attitudes of the students were not dependent on the attitudes of the parents, and it did not appear that the parents influenced that attitude of their offspring toward physical education. However, because both the students and the parents had positive attitudes toward physical education, it could be possible that the positive attitudes of the parents actually did aid in the formation of similar attitudes of their offspring.

Will fathers of physical education majors attain a higher score on the Wear Attitude Inventory (Form A) than mothers of physical education majors?

The posing of a question, such as this, was to investigate if there would be any difference in the attitudes of fathers compared to mothers. In 1962, Keogh (22) found no male-female differentiation in student attitudes toward physical education, and it was not expected that there would be any discrimination between the scores of fathers and mothers on the Wear Attitude Inventory (Form A).

The group means for the fathers and mothers were 121.19 and 125.35, respectively (see Table I, p. 20). As expected, this was not a statistically significant difference at the .05 level and no differentiation existed between fathers' and mothers' expressed attitudes toward physical education.

Will parents of male physical education majors attain a higher score on the Wear Attitude Inventory (Form A) than parents of female physical education majors?

It was hypothesized that parents of male physical education majors would have more positive attitudes toward physical education than parents of female physical education majors. This was thought to be true because of the alleged greater acceptability of the male role in sport, and the often discussed stereotyped masculine stigma attached to the female participant.

No significant overall difference was revealed between parents of male and female physical education majors, implying that parents did not view physical education in a more positive manner because they had a son, rather than a daughter, enrolled in the professional preparation program. However, a one-way analysis of variance showed some difference between fathers and mothers of male and female physical education majors; the F score equalling 2.72 at the .05 level (see Table III, p. 23). By the use of the Scheffé test, a difference was found between mothers of females and fathers of females, with an F ratio of 7.17; mothers having more positive attitudes. A difference was also found between mothers of males and fathers of females, with an F ratio of 6.71; mothers again scoring higher. Because of the rigorousness of the Scheffé test, statistical significance was determined at the .1 level (see Tables IV & V).

TABLE III

COMPARISON OF WEAR SCORES (FORM A) OF PARENTS OF MALE STUDENTS

AND PARENTS OF FEMALE STUDENTS

	Number	Mean Score
Parents of Males		
Fathers	27	123.74
Mothers	27	124.85
TOTAL	514	123.90
Parents of Females		
Fathers	15	116.60
Mothers	15	126.27
LATOT	30	122.25

TABLE IV

ANALYSIS OF VARIANCE ON WEAR SCORES (FORM A) OF PARENTS

OF MALE STUDENTS AND PARENTS OF FEMALE STUDENTS

	alle de la company de la compa	راند منظوم منید مانانا جهانی کردند شده منید به این است. با همدهی بادانات شده میچ به آماد به جهر شده است. به منید به اندانات است.	ال مطالبة والمراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة والمراجعة المراجعة ا	and a significant point of the company of the control of the contr	PLES SERVICES OF THE PROPERTY
Source	df	Sum of Squares	Mean Square	F needed for significance at .05 level	F obtained
Between	3	875.49	291.83	Par 400 pg pro	to the en
Within	80	7825.20	97.82	the 44 st sid	
LATOT	83	8700.69		2. 72	2.98

TABLE V

SCHEFFÉ SCORES FOR PARENTS OF MALE STUDENTS

AND PARENTS OF FEMALES

	Fathers of Males	Mothers of Males	Fathers of Females	Mothers of Females
Fathers of males	Other and their dead	•17	5.03	.63
Mothers of males	.17	Mf day tree gre	6.71	•20
Fathers of females	5.03	6.71		7.17
Mothers of females	. 63	•20	7.17	

No accountability can be hypothesized in regard to the more positive attitudes of the mothers in both cases, unless the mothers were assumed to be more involved with any positive attitudes expressed by their offspring in the home setting; the father occupying the bread winning role and, consequently, spending less time with the children. However, this is only a suggestion and no evidence is available to support such a statement.

Sub Problem II: To investigate the possible variables which may affect parental attitudes toward physical education.

This study was not successful in attempting to investigate the suggested variables thought to affect parental attitudes toward physical education. The manner in which the questions were stated was not conducive to correlational statistics. A one-way analysis of variance on the majority of the variables yielded no difference as related to parental scores on the Wear Attitude Inventory (Form A). However, the particular questions stated may not have been the most appropriate to

use in this situation, as no validation was pre-determined for the questionnaire.

Will there be a difference between the educational level of the parent and his or her attitude toward physical education?

Rehhberg (35) indicated that the educational expectations of the student vary positively with the level of the parents' education. Pounds and Hawkins (33) showed that the higher the educational level of the parent, the less he or she would encourage a male into a teaching career, and the more they would inspire a female. An inverse relationship was hypothesized between the educational level of the parents and their attitudes toward physical education. Certain physical educators seem concerned about a perceived low level of academic respect received from members of other professions. If this were the case, it would seem logical that parents who had a higher level of education would hold less favorable attitudes toward physical education than those parents who would not be viewed by the general public as members of the "academe". Seemingly in contrast to this hypothesis, Young (52) examined high school girls of different socioeconomic groups, and found no difference between them with reference to attitudes toward physical education.

It was evident from the data that there was no significant difference in the attitudes of parents and their educational level. This was obvious due to fluctuations in scores on the Wear Attitude Inventory (Form A) (see Table VI, p. 26). Implications derived from this information do not appear to support any hypothesis that more highly educated people might tend to hold less favorable attitudes toward

physical education because of any perceived "snobbery" toward physical education.

TABLE VI

COMPARISON OF WEAR SCORES (FORM A) AND
EDUCATIONAL LEVEL OF PARENT

	n v Kurtusin kapitatiin vuonna saiven läätäinen en kärtusiin ja valtaassa, ja kaiken ja valkein ja valtaassa s Pyrantiin kuitusen ja ja kapitaja ja pyräyyytyisin en kaitassa ja	
	Number	Mean Score
Grade School		
Fathers Mothers	6 3	121.83 116.66
TATOT	9	120.11
High School		
Fathers Mothers	19 26	121.94 126.57
TOTAL	145	124.62
Trade/Vocational		
Fathers Mothers	8 3	121.12 128.33
TOTAL	11	123.09
College/University		
Fathers Mothers	5 9	117.60 124.11
TOTAL	11,	121.78
Post Graduate		
Fathers Mothers	<u>l,</u> 1	121.25 122.00
TOTAL	5	121.l ₁ 0

Will the age of the parent affect his or her attitudes toward physical education?

Although attitudes are thought to remain relatively consistent, certain changes may occur as an individual ages and is subjected to more stimuli in the environment. It was wondered if older parents would have more positive or more negative attitudes toward physical education. No difference was revealed by conducting a one-way analysis of variance on the fathers' scores. An F ratio of 3.67 on the mothers' scores suggested some difference, but the administration of the Scheffé test did not reveal any significant difference (see Tables VII, VIII, IX, and X). There may have been no apparent difference in the scores because all the parents would be fairly set in their attitudes, and there would likely be little attitude change between the ages of 45-65.

TABLE VII

COMPARISON OF WEAR SCORES (FORM A) AND AGE OF PARENT

Age	Number	Mean Score
Under 45		
Fathers Mothers	13 21	120.15 126.19
TATOT	3l ₁	123.88
45-55		
Fathers Mothers	23 19	121.43 124.68
TOTAL	l ₄ 2	122.90
56-65		
Fathers Mothers	6 2	122.50 123.00
TOTAL	8	122.62

TABLE VIII

F RATIO FOR FATHERS' AGES VS. WEAR SCORES (FORM A)

Source	df	Sum of Squares	Mean Square	F needed for significance at .05 level	F obtained
Between	2	25.28	12.64		
Within	39	3569.50	91.50		
TOTAL	41	3594.78	and ded erro may	3.24	.15

TABLE IX

F RATIO FOR MOTHERS' AGES VS. WEAR SCORES (FORM A)

Source	df	Sum of Squares	Mean S q uare	F needed for significance at .05 level	F obtained
Between	2	7818.45	3909.22		de de les
Within	39	41561.84	1065.69	र्ताम संस्था गाउँ गाउँ	one and him but
TOTAL	归	l;9380 . 29		3.24	3.67

TABLE X
SCHEFFÉ TEST FOR MOTHERS! AGES VS. WEAR SCORES (FORM A)

	Under 45	46-55	5 6-65	
Under 45	and the same and th	.02	.02	
46-55	.02		.002	
56-65	.02	.002		
Management was a service and construction of the control of the co	ويستري الرافاة المتالية المتالية والمتالية والمتالية والمتالية والمتالية والمتالية والمتالية والمتالية والمتالية	STATE OF THE STATE	nganga , y sylppisamandaga ngangagananaga nya upa nganganga	

Will there be a difference between the past "sport experience" of the parents and his or her attitudes toward physical education?

It was hypothesized that there would be a positive relationship between the past sporting experience of the parents and their present attitudes toward physical education. As mentioned earlier in the paper, both Lemen (24) and Mista (27) found more positive attitudes among college women who had enjoyed their high school physical education program and participated in extracurricular physical activities. Graybeal (18) deduced that females who had participated in a required program of physical education also demonstrated more positive attitudes toward physical education than those who had not been subjected to such a program. Wiedamann and Alder (51) reported similar findings for males. Brumbach and Cross (7) found that athletes scored higher on the Wear Attitude Inventory, and that more numerous years of physical education training would yield more positive attitudes toward physical educa-However, a one-way analysis of variance of the data in the present study showed no harmony between the attitudes of parents and their past participation in sports. An F score of only 2.35 was obtained and this was not significant at the .05 level (see Table XI, p. 30). Although a positive relationship may have occurred, it may not have been due to the physical education program, but rather, to outside physical activity. Also, parents could have had positive attitudes in spite of, rather than because of, their past physical education program (see Table XII, p. 30).

TABLE XI

COMPARISON OF WEAR SCORES (FORM A) AND PARENTS' PAST PARTICIPATION IN SPORTS

	Number	Mean Score
Past Participation		
Fathers Mothers	34 33	121.67 126.72
TOTAL	67	124.16
No Past Participation		
Fathers Mothers	8 9	119.12 120.33
TOTAL	17	119.76

TABLE XII

F RATIO COMPARING SCORES ON WEAR (FORM A) AND PARENTS! PAST PARTICIPATION IN SPORTS

		ann eann an tagaige maga guartaig af teagain ann ann an tagailt aig an tagain air ai Bhaigan ann agailteann an tha an 1720 air an ta-ann an tagain air an tagain an tagain an tagain an tagain an t	regionemen in material mediatri digitari digitari garapat yang persengan yang bersasa sebesah digitari digitar NGC Mediatri digitari semila (MIC) di mediatri garapat sengan mengan pengan digitari.	nus distaturum eriamisium maatatatavastamaanistatelistän valti valtimaanintaa siin. Viitaksi Siisimänäliissä pikanta kähnen – minkä minnistaksiminki, kekinaani Siisiminki ja keisiminen ja	
Source	df	Sum of Squares	Mean Square	F needed for significance at .05 level	F obtained
Between	3	696.13	232.0l;	چېند منت بېرند څخه او د د د د د د د د د د د د د د د د د د	entersprograme (1996 - 1996 - 1996) And Charles State (1996) The Charles State (1996) The Charles State (19 State State State (1996) The Charles
Within	81	8004.87	98.82	san en en en	del del
TOTAL	8l;	8700.7		2.72	2.35
			rigi alaha silkada may dilikiga asasa di 1,000,000 mila di 1,000,000	ray arana da 1984 bil 1873-1988 Million sasilir rakat da 1831 aran 1982-bil yan aranazir 1885 ga gibi yan bil	regionerante d'accidentage que traggé évallacidate, que cetta litate projections

Will there be a difference between the present level of physical activity of the parent and his or her attitudes toward physical education?

It was hypothesized that those parents most currently active in physical activity would yield more positive attitudes toward physical education, because such parents would tend to place a higher value on the benefits of such physical activity, if their attitudes toward physical education were congruent with their behavior in physical activity. A one-way analysis of variance did not reveal any difference at the .05 level (F = 1.55). Also, in a separate analysis of variance on mothers' scores, no difference was found (F = 1.73). Therefore, the mull hypothesis of no relationship between the parents' attitudes and their present participation in sports must be accepted (see Tables XIII, XIV, XV, pp. 32-33). This could be due to the differences between voluntary physical activity and the formalized physical education program, and the consequent difference in attitudes toward the two concepts.

Will there be a difference between the size of the community, of which the parent is currently a resident, and his or her attitudes toward physical education?

Within the limits of the investigation by Sewell and Orenstein (38), it was reported that as the size of community increased, the proportion of students choosing a high status job increased. Pounds and Hawkins (33) found that parents would be more likely to encourage their sons into teaching, if they resided in a rural area. The current investigation of the difference between parental attitudes toward physical education and the size of community, was conducted out of curiosity, to determine if any difference existed between this variable and parental attitudes, as it seems that physical education is regarded more favorably

TABLE XIII

COMPARISON OF WEAR SCORES (FORM A) AND PARENTS'

PRESENT PARTICIPATION IN SPORTS

	Number	Mean Score
None		
Fathers Mothers	12 18	122.91 121.83
TOTAL	30	122.26
Under 3 Hours		
Fathers Mothers	13 15	117.92 126.46
TOTAL	28	122.50
3-6 Hours		
Fathers Mothers	11 5	122.63 127.80
TOTAL	16	124.25
Over 6 Hours		
Fathers Mothers	6 4	122.16 134.00
TOTAL	10	126.90

TABLE XIV

TOTAL F RATIO FOR PARENTS' PRESENT PARTICIPATION
IN SPORTS VS. WEAR (FORM A) SCORES

Source	đf	Sum of Squares	Mean Square	F needed for significance at .05 level	F obtained
Between	7	1138.45	162.64	20 00 00	days given large scale
Within	76	7562.2 5	104.83	·.	pro mo em em
		8700.7		2.114	1.55

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TABLE XV

ANALYSIS OF VARIANCE FOR MOTHERS FOR PRESENT PARTICIPATION
IN SPORTS VS. WEAR (FORM A) SCORES

Source	df	Sum of Squares	Mean Square	F needed for significance at .05 level	F obtained
Between	3	570.61	190.20		din see mer two
Within	38	4171.03	109.76		gra had did gay.
TOTAL	42	4741.64		2.85	1.73

in some communities than others. If any difference was found, investigation could be conducted to determine why discrepancies could exist. No difference between parental attitudes and the size of community, of which they were resident, could be shown, as the parents could not agree on the size of community in which they resided (see Table XVI, p. 34).

Will the number of children in the family affect the parents' attitudes toward physical education?

A study by Rehhberg (35) showed that educational expectations varied negatively with family size. The writer was curious as to whether the parents would have more positive or more negative attitudes toward physical education, if they had larger families, and if they would be more likely to encourage or discourage their offspring into physical education on that basis. No difference could be shown between parental attitudes and the number of children in the family, as the data were specious and the parents could not always agree on the number of offspring they had (see Table XVII, p. 35).

TABLE XVI

COMPARISON OF WEAR SCORES (FORM A) AND SIZE OF COMMUNITY

OF WHICH PARENT IS A RESIDENT

	Number	Mean Score
Under 2500		
Fathers Mothers	10 9	120.50 127.77
TOTAL	19	123.94
2500-25,000		
Fathers Mothers	12 13	123.75 122.61
TOTAL	25	121.60
25,000-50,000		
Fathers Mothers	12 11	123.75 125.63
TATOT	23	124.65
50,000-100,000		
Fathers Mothers	3 4	111.33 130.25
TOTAL	7	122.14
Over 100,000		
Fathers Mothers	5 5	123.60 124.00
TOTAL	10	123.80

TABLE XVII

COMPARISON OF WEAR SCORES (FORM A) AND NUMBER OF CHILDREN IN FAMILY

	Number	· Mean Score
l child		
Fathers	1	129.00
Mothers		125.00
TATOT	2	127.00
2 children		
Fathers	7	123.14
Mothers	8	131.25
TOTAL	15	127.46
3 children		
Fathers	15	119.06
Mothers	13	125.61
TOTAL	28	122.10
4 children		
Fathers	9 9	119.00
Mothers	AND AND ADDRESS OF THE PARTY OF	124.33
TOTAL	18	121.66
5 children		
Fathers	5 5	122.60
Mothers	The state of the s	122.80
TATOT	10	122.70
6 children		
Fathers	3 3	124.33
Mothers	And the second s	118.66
LATOT	6	121.50
7 children		
Fathers	1	126.00
Mothers		122.00
LATOT	2	124.00
3 children		
Fathers	0	000.00
Mothers	O manages primer, views alleged to gar-ratio i title of the last primer purposes. The contract of the last primer purposes are the contract of the last primer purposes.	00.00
TATAL	О	000.00
children	_	• • • • •
Fathers	7	130.00
Mothers	2 Description of the control of the	123.00
TATAL	3	125.33

Sub Problem III: Will the parents be satisfied with the occupational choice of their offspring and recommend that they enter the physical education profession?

The writer was curious as to the number of parents who were satisfied with the career choice of their son or daughter, compared to the number who were dissatisfied. It was believed that parents who were satisfied with the occupational choice of their offspring would have much more positive attitudes toward physical education, than those parents who were not. The majority (97.65 percent) of the parents were satisfied, and it was, therefore, not statistically feasible to determine any difference on the basis of such a small sample. In each case, at least one parent was satisfied with the occupational choice of his or her offspring, indicating support for the hypothesis that at least a certain degree of parental encouragement is expedient for the pursuit of any career. If the parents had not been satisfied with the career choice of their offspring, it was felt that instigation of public information programs to alleviate such dissatisfaction, would be warranted (see Table XVIII, p. 37).

It was wondered how many parents would recommend physical education as a career for their offspring. In view of the current teacher surplus and publicized lack of opportunity, it was not felt that many parents would recommend that their offspring enter the field. However, 71.43 percent of the parents indicated that they would suggest physical education as a career for their sons and 75 percent indicated a similar reaction in regards to their daughters (see Table XIX, p. 37). This

TABLE XVIII

COMPARISON OF WEAR SCORES (FORM A) AND PARENTS: SATISFACTION
WITH CAREER CHOICE OF OFFSPRING

	Number	Mean Score
Satisfied		
Fathers Mothers	1 <u> 1</u> 1 1	121.17 125.80
TOTAL	82	123.կ8
Not Satisfied		
Fathers Mothers	1	122.00 107.00
TOTAL	2	114.50

TABLE XIX

COMPARISON OF WEAR SCORES (FORM A) AND PARENTS! RECOMMENDATION
OF PHYSICAL EDUCATION AS A CAREER CHOICE FOR THEIR OFFSPRING

	Number	Mean Score
Recommended		
Fathers Mothers	29 31	119.41 126.48
LATOT	60	123.06
Did Not Recommend		
Fathers Nothers	13 11	125.15 122.18
TOTAL	24	123.79

compares to percentages of parents of 47 percent and 73 percent, respectively, who would recommend that their son or daughter enter "teaching" (33). If a great percentage of parents would not recommend physical education as a career choice, it is felt that the profession would have cause to worry that desirable candidates were being excluded from the field, due to parental pressure. A situation, such as this, would demand the implementation of information programs, emphasizing the positive rewards that could be offered by such a career. It was also hypothesized that parents who did recommend physical education as an occupational choice would have more positive attitudes toward physical education than those who did not. There was no difference in the Wear Attitude Inventory (Form A) scores between the two groups of parents (F = 2.71), as shown in Table XX.

TABLE XX

F RATIO COMPARING WEAR (FORM A) SCORES AND PARILYES: RECOMMENDATION
OF PHYSICAL EDUCATION AS A CAREER CHOICE

Source	đf	Sum of Squares	Mean Square	F needed for significance of .05 level	F obtained
Between	3	810.58	270.19	the ten the co	
Within	80	7890.12	9 8.63		
TATOT	83	8700.7		2. 72	2.71

It was also wondered if parents would desire more information on the profession of physical education. It was the opinion of the author that the general public knows very little about the physical

education profession, and would desire more information, if it were available. It was wondered if parents of physical education majors, as a part of the general public, really wished to know more about the field. Forty-one of the parents indicated that they would desire more information on this area, but may have only indicated so out of curiosity, thinking that they might receive some literature. The 43 who did not request more information may have already felt that they had an adequate understanding, due to communications with their offspring.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

SUMMARY

The purpose of this study was threefold:

- 1. To compare the attitude relationships and differences between physical education majors and their parents toward physical education.
- 2. To investigate possible variables which may affect parental attitudes toward physical education.
- 3. To determine the degree of parental satisfaction with the occupational choice of their offspring.

The Wear Attitude Inventory and personal information sheets were distributed to all junior and senior physical education majors and their respective parents. Seventy-eight percent of the forms were completed and returned.

The data were then analyzed. The mean score for the parents was 123.27 out of a possible 150.00; indicating positive attitudes toward physical education. This compared to a mean score of 125.59 for the students, although the difference was not statistically significant at the .05 level. There was no significant coefficient obtained between the scores of students and parents.

The study was not successful in finding a relationship between parental attitudes toward physical education to certain variables such as the age, educational level, and sporting experience of the parents.

The vast majority of the parents (97.65 percent) were satisfied with the career choice of their offspring, and 71.43 percent would recommend that their son enter the field, compared to 75 percent who would recommend physical education as a career choice for their daughter.

FINDINGS

Judging from the results contained within the realm of this study, several findings may be drawn:

- 1. All groups tested had positive attitudes toward physical education, as evaluated by the Wear Attitude Inventory (Form A).
- 2. There was no significant correlation between the scores of students and parents.
- 3. Mothers of female physical education majors scored significantly higher on the Wear Attitude Inventory (Form A) than did fathers of female physical education majors.
- 4. Mothers of male physical education majors scored significantly higher on the Wear Attitude Inventory (Form A) than fathers of female physical education majors.
- 5. No difference in attitudes was obtained in relation to the age and educational level of the parents or their past or present participation in physical activity.

CONCLUSIONS

Judging from the results contained within the realm of this study study, it may be concluded that the group of physical education majors and their respective parents tested hold propitious attitudes toward physical education. There was no significant correlation between the

scores of students and parents.

There was no significant overall difference in attitudes between parents of male and female physical education majors, although the mothers of males and females obtained higher scores on the Wear Attitude Inventory (Form A) compared to fathers of females.

Specific variables, such as the age or educational level of the parent and his past or present level of physical activity did not relate to the attitudes expressed by parents toward physical education. Due to specious data, the study was unsuccessful in determining any attitudinal differences in relation to the number of offspring the parent had and the size of community in which he or she lived.

Parents were not dissatisfied with the career choice of their offspring and the majority would recommend it as a profession for their child to enter.

RECOMMENDATIONS

Although this study attempted to answer some of the considerations regarding parental attitudes toward physical education, there is room for much more research to be conducted in this area. Further study could be done to determine if:

- 1. There is a disparity in attitudes of parents of physical education majors compared to attitudes of parents of non-physical education university students.
- 2. There is a difference in the attitudes of students whose parents were living together in the same household, compared to the attitudes of students whose parents were dead or divorced.

- 3. There is a discrepancy in parental and student attitudes if the student is single, compared to if the student is married, and consequently assumed to be more independent.
- 4. There is a relationship between parental and student attitudes and the success of the student in the university physical education program, as measured by the grade point average.
- 5. There is a difference in parental and student attitudes in relation to the position that the physical education major occupied in the birth order of the family.

SELECTED BIBLIOGRAPHY

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BIBLIOGRAPHY

- 1. Alden, M. "The Factors in the Required Physical Education Program That Are Least Attractive to the College Girl," Research Quarterly, 3:97, 1932.
- 2. Alderman, R. B. "A Sociopsychological Assessment of Attitude Toward Physical Activity in Champion Athletes," Research Quarterly, 11:1-9, 1970.
- 3. Anderson, T. W. "The Attitudes of High School Girls Toward Physical Activities," Research Quarterly, 5:49, 1934.
- 4. Baker, M. C. "Factors Which May Influence the Participation in Physical Education of Girls and Women 15-25 Years of Age,"
 Research Quarterly, 11:126-31, 1940.
- 5. Bell, M., and Walters, E. "Attitude of Women at the University of Michigan Toward Physical Education," Research Quarterly, 24:379-85, 1953.
- 6. Broer, M. R., Cox, K. S., and Way, E. "Attitude of University of Washington Women Students Toward Physical Education Activity," Research Quarterly, 26:379-84, 1955.
- 7. Brumbach, W. S. "Effect of a Special Conditioning Class Upon Students Attitudes Toward Physical Education," Research Quarterly, 39:211-13, 1968.
- 8. Bullock, M., and Alden, F. "Some of the Factors Determining the Attitude of Freshmen Women at the University of Oregon Toward Required Physical Education," Research Quarterly, 4:60-70, 1933.
- 9. Campbell, D. E. "Student Attitudes Toward Physical Education," Research Quarterly, 39:456-62, 1968.
- 10. "The Wear Attitude Inventory Applied to Junior High School Boys," Research Quarterly, 39:888-93, 1968.
- . "Relationship Between Scores on the Wear Attitude Inventory and Selected Physical Fitness Scores," Research Quarterly, 40:470-79, 1969.
- 12. Carr, M. "The Relationship Between Success in Physical Education and Selected Attitudes Expressed by High School Freshmen Girls," Research Quarterly, 16:176-91, 1945.
- 13. Chambers, K. "Verbalized Attitudes Toward Physical Education and Participation in Physical Activity." Unpublished Master's thesis, University of Montana, 1968.

- 14. Cutler, R. K. "Attitudes of Male Students Toward Physical Education in Selected Junior Colleges in California." Unpublished doctoral dissertation, Stanford University, 1958.
- 15. Drinkwater, B. "Development of an Attitude Inventory to Measure the Attitude of High School Girls Toward Physical Education as a Career for Women," Research Quarterly, 31:574-81, 1960.
- 16. Edgington, C. "Development of an Attitude Scale to Measure Attitudes of High School Freshmen Boys Towards Physical Education," Research Quarterly, 39:505-11, 1968.
- 17. Erickson, C. R. "A Comparison of the Effects of Two Methods of Teaching Physical Education on Physical Fitness and Attitude." Unpublished Ed.D. dissertation, North Texas State University, 1969.
- 18. Graybeal, E. "Measurement of Attitudes in Physical Education for Women," Research Quarterly, 7:60-63, 1936.
- 19. Ingram, E. J. "Public Attitudes Toward Education." Unpublished Master's thesis, University of Alberta, 1961.
- 20. Kappes, E. E. "Inventory to Determine Attitudes of College Women Towards the Physical Education Department," Research Quarterly, 25:429-33, 1954.
- 21. Kenyon, G. S. "Six Scales for Assessing Attitudes Toward Physical Activity," Research Quarterly, 39:566-74, 1968.
- 22. Keogh, J. "Analysis of General Attitudes Toward Physical Education," Research Quarterly, 33:239-46, 1962.
- 23. "Extreme Attitudes Toward Physical Education," Research Quarterly, 24:27-34, 1963.
- 24. Lemen, M. G. "The Relationship Between Selected Variables and Attitudes of College Women Toward Physical Education and Certain Sports." Unpublished doctoral dissertation, Iowa State University, 1962.
- 25. Likert, R. A. "A Technique for the Measurement of Attitudes," Archaeological Psychology, 22:5-43, 1932.
- 26. McDonald, F. J. Educational Psychology. San Francisco: Wadsworth Publishing Co., 1959.
- 27. Mista, N. J. "Attitudes of College Women Toward Their High School Physical Education Program," Research Quarterly, 39:166-71, 1968.
- 28. Moore, B. Y. "The Attitude of College Women Toward Physical Education Activity as a Means of Recreation," Research Quarterly, 12:720-25, 1941.

- 29. Moyer, L. J., Mitchem, J. C., and Bell, M. M. "Women's Attitudes Toward Physical Education in the General Education Program at Northern Illinois University," Research Quarterly, 37:515-19, 1966.
- 30. Murphy, G., and Likert, R. Public Opinion and the Individual.

 New York: Harper and Brothers, 1938.
- 31. Murray, J. A. "Attitudes of Male College Freshmen in Louisiana and Texas Toward Physical Education Activity Classes." Unpublished doctoral dissertation, East Texas State University, 1969.
- 32. O'Bryan, M., and O'Bryan, K. G. "Attitudes of Males Towards Selected Aspects of Physical Education," Research Quarterly, 40: 343-52, 1969.
- 33. Pounds, H. R., and Hawkins, M. C. "Adult Attitudes on Teaching as a Career," Journal of Teacher Education, 20:339-42, 1969.
- 34. Plummer, T. C. "Factors Influencing the Attitudes of College Women in Physical Education." Unpublished doctoral dissertation, The State University of Iowa, 1952.
- 35. Rehhberg, R., and Westby, D. "Parental Encouragement, Occupation, Education and Family Size," Social Forces, 45:362-73, 1967.
- 36. Richardson, C. "Thurstone Scale for Measuring Attitudes of College Students Toward Physical Fitness and Exercise," Research Querterly, 31:638-44, 1960.
- 37. Seaman, J. A. "Attitudes of Physically Handicapped Children Toward Physical Education," Research Quarterly, 41:439-45, 1970.
- 38. Sewell, W., and Orenstein, A. "Community of Residence and Occupational Choice," American Journal of Sociology, 70:551-63, 1965.
- 39. Sherif, M., and Sherif, C. An Outline of Social Psychology. New York: Harper and Row, 1948.
- 40. Sherlock, B., and Cohen, A. "The Strategy of Occupational Choice: Recruitment to Dentistry," Social Forces, 44: 303-18, 1966.
- 41. Smith, R., and Ramsey, C. "Parental Authority and Job Choice," American Journal of Sociology, 63:143-49, 1963.
- 1/2. Smith, W. R. "A Questionnaire Study in Regards to the Attitude of Men Students Toward the Required Physical Education Program,"
 Research Quarterly, 1:216-18, 1933.
- 1.3. Swain, E. "Help Stamp Out Stereotypes," American Vocational Education, 12:28-32, 1967.

- 44. Thurstone, L. L., and Chave, E. J. "The Measurement of Attitude," Chicago, University of Chicago Press, 1929.
- 45. Vincent, M. F. "Attitudes of College Women Toward Physical Education and Their Relationship to Success in Physical Education," Research Quarterly, 38:126-31, 1967.
- 46. Wang, C. K. A. "Suggested Criteria for Writing Attitude Statements,"

 Journal of Social Psychology, 3:367-73, 1932.
- 47. Wear, C. L. "The Evaluation of Attitude Toward Physical Education as an Activity Course," Research Quarterly, 22:114-26, 1951.
- 48. "Construction of Equivalent Forms of an Attitude Scale,"
 Research Quarterly, 26:113-19, 1955.
- 49. Webster's New World Dictionary. New York: Popular Library Inc., 1968.
- 50. Wessel, J. A., and Nelson, R. "Relation Between Strength and Attitude Toward Physical Education Activity Among College Women," Research Quarterly, 35:562-69, 1964.
- 51. Wiedamann, I., and Alder, F. "Undergraduate Attitudes and Interests With Regard to Physical Education Activities at Welleskey College," Research Quarterly, 8:15-32, 1937.
- 52. Young, M. L. "Personal and Social Adjustment, Physical Fitness, Attitude Toward Physical Education of High School Girls by Socio-economic Level," Research Quarterly, 41:593-99, 1970.

APPENDIX

APPENDIX A

STATISTICAL ANALYSIS

Formula for Computing Analysis of Variance

A.
$$\overline{X}_{total} = \frac{\overline{X}_1 + \overline{X}_2 + \overline{X}_3 + \overline{X}_{l_1}}{N}$$

B. Total sum of squares =
$$\sum x^2 - \frac{(\sum x)^2}{N}$$

C. Between sum of squares =
$$\left[\sum \frac{(\sum x)^2}{n}\right] - \frac{(\sum \sum x)^2}{N}$$

D. Within sum of squares =
$$\sum_{i=1}^{\infty} \left[\sum_{i=1}^{\infty} - \frac{(\sum_{i=1}^{\infty})^2}{m_i} \right]$$

E.
$$F = \frac{\overline{X}_{s_b}}{\overline{X}_{s_w}}$$
 (mean of between sum of squares)

F. Scheffé test =
$$F = \frac{(x_1 - x_2)^2}{\frac{s_W^2 (N_1 + N_2)}{N_1 N_2}}$$

G. Pearson product-moment correlation:

$$\mathbf{r} = \frac{\mathbb{N}[xy - ([x)([y))]}{\sqrt{\mathbb{N}[x^2 - ([x)^2]][\mathbb{N}[y^2 - ([y)^2]]}}$$

APPENDIX B

DATA COLLECTION DEVICES

PHYSICAL EDUCATION ATTITUDE INVENTORY

DIRECTIONS: Please read carefully.

Below and on the next page, 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 course taught during a regular class period. No reference is intended toward interscholastic or intranural athletics. People differ widely in the way they feel about each statement. There are no right or wrong answers.

You have been provided with a separate answer sheet for recording your reaction to each statement. (a) Read each statement carefully, (b) go to the answer sheet, and (c) opposite the number of the statement place a check in the blank 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 a check under "agree" or "strongly agree". If you disagree, then decide whether to place a check under "disagree" or "strongly disagree". In case you are undecided or neutral, place a check under "undecided". Try to avoid placing a check under "undecided".

Wherever possible, let your own personal experience determine your answer. Work quickly and do not spend very much time on any statement. This is not a test, so please answer each statement as you actually feel about it. Be sure to answer every statement, and record your answer on the answer sheet.

STATEMENTS:

- 1. If for any reason a few subjects have to be dropped from the school program, physical education should be one of the subjects dropped.
- 2. Physical education activities provide no opportunities for learning to control the emotions.
- 3. Physical education is one of the more important subjects in helping to establish and maintain desirable social standards.
- 1. Vigorous physical activity works off harmful emotional tensions.
- 5. I would take physical education only if it were required.
- 6. Participation in physical education makes no contribution to the development of poise.
- 7. Because physical skills loom large in importance in youth, it is essential that a person be helped to acquire and improve such skills.
- 8. Calisthenics taken regularly are good for one's health.

- 9. Skill in active games or sports is not necessary for leading the fullest kind of life.
- 10. Physical education does more harm physically than it does good.
- 11. Associating with others in some physical education activity is fun.
- 12. Physical education classes provide situations for the formation of attitudes which will make one a better citizen.
- 13. Physical education situations are among the poorest for making friends.
- 14. There is not enough value coming from physical education to justify the time consumed.
- 15. Physical education skills make worthwhile contributions to the enrichment of living.
- 16. People get all the physical exercise they need in just taking care of their daily work.
- 17. All who are physically able will profit from an hour of physical education each day.
- 18. Physical education makes a valuable contribution toward building up an adequate reserve of strength and endurance for everyday living.
- 19. Physical education tears down sociability by encouraging people to attempt to surpass each other in many of the activities.
- 20. Participation in physical education activities makes for a more wholesome outlook on life.
- 21. Physical education adds nothing to the improvement of social behavior.
- 22. Physical education class activities will help to relieve and relax physical tensions.
- 23. Participation in physical education activities helps a person to maintain a healthful emotional life.
- 24. Physical education is one of the more important subjects in the school program.
- 25. There is little value in physical education as far as physical well-being is concerned.
- 26. Physical education should be included in the program of every school.
- 27. Skills learned in a physical education class do not benefit a person.
- 28. Physical education provides situations for developing desirable character qualities.

- 29. Physical education makes for more enjoyable living.
- 30. Physical education has no place in modern education.

THANK YOU!

		<u>!</u>	Answer sheet		Code:
	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 12. 13. 14. 15. 16. 17. 18. 19. 20.					
21. 22. 23. 24. 25. 26. 27. 28. 29.			Control of the Contro	Berlinsen ber geweit in der eine der ei	direction years considered in age. direction and the considered in the considered i

INF	ORMATION SHEET (for parents) Code:
1.	I am a: mother father (please check one)
2.	Occupation:
3•	I have a son daughter in physical education at the University of Montana.
4.	Number of children in family:
5.	Approximate age category: under 45
6.	Formal education completed: (please put a check in the place that best described your schooling)
	grade school (1-8) high school (9-12) trade, vocational or technical college or university degree post graduate degree other (please specify)
7.	Approximate size of community in which you currently live: (please check one) 2500-25,000 25,000-50,000 50,000-100,000 over 100,000
8.	Did you ever participate actively in sports? Yes No
9.	Approximately how many hours per week do you presently engage in physical "sporting" activity? (please check one)
	no time per week less them 3 hr. per week 3-6 hr. per week more than 6 hr. per week
10.	Are you satisfied with your son or daughter's choice of physical education as a career? Yes No
11.	Would you have recommended that your son or daughter pursue physical education as a career? Yes No
12.	Would you like more information on the profession of physical education? Yes No
13.	Would you like a summary of the results of this study? Yes No
14.	Comments: (if any)

INFORMATION SHEET (for students) Co			Code:
ı.	Sex:	Male	
		Female	
2.		feel that your parents are satisfied with you al education as a career? (please check one)	r choice of
	Yes		
	No		
3.		feel that your parents would have recommended al education as a career? (please check one)	l that you chose
	Yes _	Statuto.	
	No		
1,	Commer	ets (if may)	