A COMPARISON OF THE OBJECTIVES OF PHYSICAL EDUCATION AT NORTH TEXAS STATE UNIVERSITY

THESIS

Presented to the Graduate Council of the North Texas State University in Partial Fulfillment of the Requirements

For the Degree of

MASTER OF SCIENCE

By

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The purpose of the study is to investigate the priority of objectives of physical education as determined by various groups of people involved in the physical education program at North Texas State University. The specific problem is to investigate the priority of objectives of physical education as ranked by the women faculty of physical education, as ranked by four members of the men's faculty of physical education, as ranked by 101 women physical education majors, and as ranked by one-hundred women non-majors all participating in the physical education program at North Texas State University. It attempts to examine the relationship existing between the groups in regard to a relative ranking of the objectives of physical education.

The testing instrument is adapted from Rosentswieg's study concerning objectives of physical education. The suitability of the instrument is determined by means of a pilot study performed on a group of non-majors at North
Texas State University. The instrument is administered to the subjects using a paired-comparison type method. These paired-comparisons are used to determine the rankings of the various groups.

The thesis is organized into five chapters. The first chapter includes an introduction to the study, together with a statement of the problem, purpose of the problem, scope, definition of terms used in the study, and the procedures involved in the study. Chapter II contains a review of literature related to the objectives of physical education. Chapter III includes the procedures employed in carrying out the study, such as the testing instrument, selection of subjects, and an analysis of data. Chapter IV contains an analysis of data, along with a discussion of the findings. Chapter V contains a summary of the study, together with the conclusion of the study and recommendations for a future study.

The analysis of data includes a comparison of the rankings of each group of subjects with each of the other groups. A coefficient of correlation is computed to determine the relationships between each group. All eleven comparisons are found to be reliable at least at the .05 level of confidence. A coefficient of alienation and a coefficient of forecasting efficiency are computed
to determine the predictibility of the coefficient of correlation. None of the relationships are found to be of predictive value. It is, therefore, concluded that the groups are independent in their ranking of the objectives of physical education.
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CHAPTER I

INTRODUCTION

During the last fifty years physical education objectives have been studied closely. The emphasis has shifted with each passing generation. The objectives of physical education are many and varied according to one's own viewpoint. Perhaps Maryhelen Vannier and Hollis Fait best sum up the overall objectives of physical education, in the following manner:

The aims, goals, and purposes of physical education are the same as those of all other school subjects—to develop well-rounded, happy, healthy, skilled, and productive individuals. . . . Physical education in schools is directed, purposeful activity focused upon the development, care, use and movement of the total body (5, p. 8).

Just what are the most important objectives of physical education? How should they be stressed in a sound program of physical education? The present study investigated the priority of objectives of physical education as determined by various groups involved in physical education at North Texas State University. It compared various groups to determine what relationship existed between them.
Purpose of the Study

The purpose of the study was to investigate the beliefs held, as exhibited in objectives, by various groups of people at North Texas State University.

Statement of the Problem

The study attempted to investigate the priority of objectives of physical education as determined by various groups of people involved in physical education at North Texas State University and to examine the relationship concerning objectives which existed between the various groups of people. Specifically, the study attempted to establish the following:

1. The study attempted to establish the ranking of objectives as determined by the women's physical education faculty, all the women graduate assistants, and four members of the men's faculty of physical education.

2. The study attempted to establish the ranking of objectives as determined by one-hundred women non-majors.

3. The study attempted to establish the ranking of objectives as determined by 101 women physical education majors.

4. The study attempted to compare the ranking of the objectives as determined by (a) the teachers and all the students, (b) ranking of the teachers and the physical
education majors, (c) the ranking of the teachers and the non-physical-education majors.

5. The study attempted to make a comparison between the ranking of the objectives as determined by the physical-education majors and the first- and fourth-semester non-physical-education majors.

6. The study attempted to compare the ranking of the majors and the ranking of the non-majors.

Procedures

The study included the following procedures:

1. The tool itself was adapted from Joel Rosentswieg's study concerning the objectives of physical education (3). It included ten objectives of physical education, each fully defined. Each objective was set up in a paired-comparison-type situation with every other objective. The subjects were asked to select the one they thought was the most important objective of physical education.

2. The subjects included the women's faculty of physical education, the graduate assistants, four members of the men's faculty of physical education who most often taught the women majors, 101 women physical education majors, and one-hundred non-majors who were participating in the physical education program at North Texas State University.
3. The objectives were tabulated from the paired-comparisons to arrive at a ranking for each group of subjects. On the basis of these rankings, the Spearman rank-correlation coefficient was computed to find the relationship between each group of subjects. A coefficient of alienation and a coefficient of forecasting efficiency were computed to test the predictibility of the correlation coefficient (2, pp. 176-177).

Scope and Limitations of the Study

The testing was limited to the women's faculty of physical education at North Texas State University, including graduate assistants. It also included four members of the men's faculty of physical education who most often taught the women majors. The other groups involved in the testing were 101 women physical-education majors, and one-hundred women non-majors who were participating in service classes at North Texas State University. They were either first- or fourth-semester physical-education students.

The testing instrument was adapted from Rosentswieg's study on the objectives of physical education (3). It contained a list of ten objectives of physical education, each set up in a paired-comparison-type situation. It was assumed that this list of objectives covered the
breadth of objectives of physical education and that they would be understood by all those subjects taking the test. The statistical method used to compute the data was the Spearman rank-correlation coefficient (4, pp. 202-206). Also employed were a coefficient of alienation and a coefficient of forecasting efficiency (2, pp. 176-177).

Definition of Terms

1. Objectives.—these include "goals or purposes subordinate to an aim and greater than outcomes in scope; a guide in the selection of content or activity, methods and outcomes" (1, p. 382).

2. Physical education faculty.—This includes the physical education teachers, women graduate assistants, and four members of the men's faculty of physical education who teach courses most often taken by women physical-education majors at North Texas State University.

3. Physical education majors.—this includes 101 women physical-education majors at North Texas State University.

4. Non-major students.—this includes one-hundred women who are participating in the service classes at North Texas State University who have a major other than physical education.
Organization of Remaining Chapters

Chapter II is composed of a survey of the literature concerning the objectives of physical education. Chapter III contains the procedures used in the study, the subjects, the testing instrument and its administration, the experimental design, and the procedures for analyzing the data. Chapter IV includes analysis of the data collected, and Chapter V summarizes the findings of the study.
CHAPTER BIBLIOGRAPHY


CHAPTER II

REVIEW OF LITERATURE

The purpose of the study was to investigate the priority of objectives of physical education at North Texas State University. Before proceeding with the investigation, a thorough review of the literature pertaining to the objectives of physical education was undertaken.

There have been numerous studies completed concerning the objectives of physical education. The literature reviewed in this chapter was set up in chronological decades, beginning in the 1920's. Through the years, the emphasis on the objectives of physical education has shifted from one objective to another and back again. In each decade, the leaders in the field have expounded their views on the subject.

1921-1930

In 1922 Clark Hetherington said that physical education is concerned, "first, with the organization and leadership of children in big muscle activities according to social standards, and second, with control of health and growth conditions naturally associated with the leadership of the activities so that the educational process may go on without handicaps" (12, p. 45).
Agnes Wayman, in 1928, summarized the general aims of physical education as follows:

1. Development of organic power
2. To secure and maintain muscular development and a reasonable degree of bodily skill and grace
3. To provide an incentive and an opportunity for every student to secure physical recreation
4. To conserve the social and moral values of games and sports
5. To establish high ideals and efficient administration of athletics
6. To develop judgment, leadership, "followership," and a love of recreation
7. To teach types of recreational activity that will hold over for later life (29, p. 42).

1931-1940

In 1931, William La Porte related that the ultimate aim of physical education might well be to develop and train the individual so as to enable him to realize his maximum capacities both physically and mentally and to teach him to use his powers intelligently and cooperatively under any conditions. He added the following list of objectives as essential to a sound program of college physical education:

1. It should correct physical or organic defects whenever possible.
2. It should develop native capacities to the maximum.
3. It should develop organic functioning.
4. It should create interest in a variety of activities with emphasis on recreational and leisure time expression.
5. It should expose the individual to a variety of physical-mental-social experiences.
6. It should discover and challenge man's physical-mental ability.
7. It should acquaint man with his strong and weak points.
8. It should acquaint the individual with the various types of activities adapted to his particular condition or age (15, pp. 5-6).

In 1933, V. W. Lapp conducted a study to determine the pupil objectives of physical education in high school. He administered a questionnaire to fourteen-hundred male and female students, in which they were to rank the type of achievements they expected to gain from their physical-education classes. He found that those who liked physical education seemed to find more benefits than those who did not. Also, the students were very consistent in classifying the items into high and low groups. The study also found that improvement in "character education" is caught from the teacher, not taught by him. Half of the boys and girls indicated that they were not learning games and sports that they would wish to play in later life. For both sexes, physical education seemed to be popular in all schools, except for the girls in one. In conclusion, Lapp stated that the teachers of girls' physical education were stressing the social aspect more than the boys' teachers but that the boys seemed to be getting more of these values, even though their teachers did not stress the social aspect (16).
The American Physical Education Association, in 1934, divided the objectives of physical education into five categories:

1) Physical fitness
2) Mental health and efficiency
3) Social-moral character
4) Emotional expression and control
5) Appreciations (1, p. 30).

In 1939, Whitelaw Morrison and Jesse Williams stated that physical education in school aims at the education of the individual in which the unity of man is respected as well as the fourfold development of organic powers, neuromuscular skills, play interests, and the development of social and moral standards (32). In 1940, Charles McCloy divided the objectives into five major headings:

1) Physical objectives
2) Skills and abilities
3) Applied knowledge and habits
4) Development of character and personality
5) Cultural objectives (18, p. 58).

In 1940, Gertrude Baker expounded her philosophy that the purpose of physical education was activity. A sound program of physical activity, she said, resulted in an educated body—that is, a body in which the muscles have been trained and one which moves intelligently because there is an interrelationship of neuromuscular and thought processes (3, p. 6).
1941-1950

By 1948 the emphasis had shifted back to a broader view of objectives. David Brace asserted that physical education was designed to promote physical fitness, and to equip the student with such skills and attitudes as will enable him to engage outside of school and later life in recreational activities which will bring enjoyment and at the same time help him to maintain physical fitness (5, p. 5).

In 1948, Jay B. Nash brought forth the following objectives of physical education:

1. Organic development
2. Neuromuscular skill development
3. Emotional power, poise, and control development

In 1950, Ruth Evans and Leo Gans agreed upon three basic objectives that should be gained in physical education:

1. The development of those socially acceptable modes of behavior which enable persons to live and work and play together.
2. The development of attitudes favorable to physical activity, especially work and play.
3. The development in each student of the ability to increase his use of organic power, strength, endurance, and neuromuscular skill (11, p. 167).

1951-1960

In 1951, Clifford Brownell and Patricia Hagman suggested that the objectives of physical education should be related to the development of the following:
1. Physical fitness
2. Social and motor skills
3. Knowledge and understandings
4. Habits, attitudes, and appreciations

(7, p. 183)

Delbert Oberteuffer, also in 1951, presented the idea that modern physical education should be developed in response to man's needs. It should serve as a medium for the total education of the being, intelligently, emotionally, and developmentally, by the use of movement (22, p. 5). In that same year, Charles Cowell, Arthur Daniels, and Harold Kenney completed a study in which they agreed that the purposes of physical education were (1) good health and physical education, (2) self-control and sportsmanship, and (3) good posture by the high school boys and girls (8, pp. 288-289).

In 1954, Williams stated still another interpretation of the objectives of physical education:

Physical education should aim to provide skilled leadership and adequate facilities which will afford an opportunity for the individual or group to act in situations which are physically wholesome, mentally stimulating and satisfying, and socially sound (31, p. 222).

In 1957, Vannier and Fait recommended that

The aims, goals, and purposes of physical education are the same as those of all other school subjects—to develop well-rounded, happy, healthy, skilled, and productive individuals. . . . Physical education in schools is directed, purposeful activity focused upon the development, care, use, and movement of the total body (28, p. 8).
The next year, Hilda Kozman, Roselind Cassidy, and Chester Jackson postulated that the overall objective of the school physical-education program may be thought of as helping each boy and girl

1) To understand and accept the body as an instrument for self expression.
2) To grow in understanding and skills in maintaining fitness for living.
3) To develop socially acceptable and personally rewarding behaviors in and through relationships with others in physical education activities.
4) To acquire enthusiasms, skills, and rich resources for leisure time activities (14, pp. 373-374).

In 1959, William Solley and Frazier Damron agreed that the accomplishment of goals in physical education is dependent on the emphasis placed on skill development. There is a need to develop more complex and longer lasting social, mental, and physical traits, but it should be somewhat proportionate to achievement in skill. They further stated that to develop a high level of skill in a physical-education activity is to increase the ability of the individual to lead a wholesome and enjoyable life. The program should be taught with the goal of developing the individual to maximum accomplishments in the physical, social, and mental aspects of life through the development of skills in physical activity (27).

Also, in 1959 Wayne Crawford stated that the purposes of physical education vary according to national and world
conditions. During national emergencies, the emphasis centers on physical-fitness activities. During peacetime, recreational activities and social outcomes are stressed. This, he continued, should not be the case. National conditions should not dictate objectives in setting up a desirable program of physical education. The program should provide a reasonable amount of physical fitness, above-average skill in at least one recreational sport, and the realization of desirable social attitudes and practices (9).

That same year, Karl Bookwalter stated that, "Objectives are the point of departure in appraisal of program effectiveness" (4, p. 10). He also stated that there are some commonly accepted purposes for physical education. These include (1) physical fitness, (2) psychological development, (3) social traits and qualities, (4) recreational capacity, and (5) safety capacity. In addition, the program should impart the habits, skills, knowledge, and fitness in individual-dual type activities to promote their recreational use in leisure time (4).

Eugene Nixon and Frederick Cozens, also in 1959, divided the ultimate aim or purpose of physical education into a number of general objectives including the development of organic power and vigor, the development of specific skills in physical education activities, the development of
desirable social habits and attitudes, and the development of an enjoyment of recreation (21, p. 67).

1961-1970

As cited by Ray Duncan and Helen Watson in 1960, the American Association of Health-Physical Education Recreation amplified the following general objectives:

1) To develop and maintain maximum physical efficiency
2) To develop useful physical skills
3) To act in socially useful ways
4) To enjoy wholesome physical recreation (10, p. 33)

In that same year, according to Natalie Shepherd, the objectives of physical education as agreed upon by leaders in the field would include the following:

1) Maintenance and development of organic power
2) Maintenance and development of neuromuscular skills
3) Maintenance and development of standards of behavior commensurate with the dignity of the individual and the ideals of the democratic society; develop poise and control
4) Maintenance and development of interpretative and value judgments
5) Maintenance and development of knowledge, understanding, and appreciations relevant to the activities of physical education (25, p. 233).

In 1963, Robert Brackenbury defended the mental aspects of physical education. He stated that too much emphasis is placed upon physical fitness, that it should be a desirable by-product rather than the aim of physical education. If physical education is to maintain its place
in the educational process, he continued, it must develop the mental processes involved in participating in a game or activity as well as the physical skills involved (6).

The following year, Raymond Weiss, in his report on physical fitness, stated that physical activity is more important to human development than physical fitness, although physical fitness is important in the program in several ways: (1) it enables one to better enjoy physical activity, (2) fitness sustains skill learning, and (3) fitness increases excellence in performance on the athletic field (30).

In 1966, Joseph Oxedine reported that social development is almost a "forgotten objective" in the field of physical education. He stated that the physical-education class should serve as a place where the children can interact and learn to work together. They should learn social skills and attitudes that will carry over into other areas of education. He further stated that physical education or any sports experience can be a most dynamic force in the social development of the young person (23).

In more recent years the objectives of physical education have taken on a more complex and detailed meaning. In 1969, Clifford Wilson, in a study on the diversity of meanings of physical education, isolated and identified
the varying concepts of physical education as perceived by teachers and students. He used one-hundred and nineteen college physical-education majors, forty-six teachers of health and physical education, and two-hundred and eighty-three high school students. They were asked to respond to an open-end question regarding the meaning of physical education. The high school students reflected a physical fitness and short-games direction with limited awareness of any other values. Wilson concluded that there appears to be a failure to communicate between the teachers and their students on the objectives or meaning of physical education (33).

Also, in 1969, Rosentswieg conducted a study in which the objectives of physical education were ranked by one-hundred college physical educators as follows:

- Organic vigor
- Neuromuscular skills
- Leisure time activities
- Self-realization
- Emotional stability
- Democratic values
- Mental development
- Social competency
- Spiritual and moral strength
- Cultural appreciation

On the basis of his study, Rosentswieg concluded that the ranking of the objectives of physical education are relatively clear and consistent with the unique objectives occupying positions of primacy (24).
In 1970, Anthony Annarino developed the objectives of physical education under five broad traditional categories: organic, neuromuscular, interpretive, social, and emotional (2, p. 25). That same year, Eldon Snyder focused attention on the socialization process within physical education and sports. He stated that physical education and sports are frequently cited as contributors to the development of desirable traits for playing diffuse roles such as democratic citizenship, moral character, adjusted personality, respect for constituted authority, and the ability to win and lose graciously (26, p. 1).

1971-

In 1971, Katherine Ley divided the objectives of physical education into three categories of knowledge. One large area of content must be devoted to activity and the performance of activity. Physical education should teach the students how to play a wide variety of activities. The second category of knowledge should emphasize the effects of activity. It should teach the students why they exercise, what the benefits of activity are, and what different kinds of benefits are possible as a result of participating in active pursuits. The third category should include factors modifying participation in activities and their effects. Physical education should teach the student about himself now and also about what to expect in the future (17).
Dorothy Mohr, also in 1971, stated that physical education experiences are designated to serve five major purposes:

1) To help the student learn to move skillfully and effectively
2) To develop an understanding of voluntary movement
3) To enable the student to better understand space, time, mass-energy relationships and other related concepts
4) To help the students to interact in socially accepted ways
5) Organic development (19, p. 23).

She went on to say that knowledge and understanding as well as social behaviors and skill performance should be included in the objectives of every daily play in physical education (19, p. 23).

In 1971, Ann Jewett, Sue Jones, Sheryl Luneke, and Sarah Robinson presented one of the newest trends concerning the objectives of physical education. Their study involved the educational change that is coming about in the taxonomy for physical-education objectives. They felt that some of the process behaviors that should be included in the curriculum were problem-solving skills, concept-formation skills, data-processing skills, the ability to make judgments and discriminate, the ability to summarize, and the ability to form valid conclusions. Curriculum must be process oriented if the learners are to develop processing behaviors (13).
Summary

The objectives of physical education have been viewed over a period of fifty years by reading many of the top leaders in the field. There appears to have been a shift in emphasis with each passing decade having its own interpretation concerning the objectives of physical education. Each of the cited authorities has contributed to determining the objectives of physical education, and a study of this nature would be impossible without a general idea of these objectives.
CHAPTER BIBLIOGRAPHY


CHAPTER III

PROCEDURES

The study investigated the priority of ten objectives of physical education as determined by the physical-education faculty for women, the women physical-education majors, and one-hundred women students participating in the physical-education program at North Texas State University. Included in this chapter are a description of the subjects selected, the testing instrument and its administration, and an analysis of data.

Selection of Subjects

The subjects selected included the women's faculty of physical education, including graduate assistants, and four members of the men's faculty of physical education who were most in contact with the women majors. Included in the study were 101 women physical-education majors currently enrolled at North Texas State University. This included freshmen, sophomores, juniors, and seniors who were majoring in physical education. The last group of subjects included one-hundred non-major women students participating in the physical-education service classes at North Texas State University, the only
stipulation being that they have a major other than physical education and that fifty were to participate in their first semester of physical education and fifty were to participate in their fourth semester of physical education. They were selected at random from a wide variety of activity courses with no more than six women from each class. No attention was given to their individual skill or ability.

Testing Instrument

The selection of the instrument was determined by the objectives of the study. The tool itself was adapted from Rosentswieg's study on the objectives of physical education (2). (For a copy of the tool see Appendix A.) It was composed of a list of ten objectives of physical education, each fully defined. Each objective was set up in a paired-comparison-type situation with every other objective. The subjects were asked to select one objective from each pair that they thought was the most important objective of physical education. The subjects were allowed to add to the list any additional objectives that they thought should be included in a good program of physical education. It was assumed that the subjects were serious and forthright in their approach to and their answering of the test.
Before the actual subjects were tested, a pilot study was performed on a class of women non-majors to determine if the tool would be of any use in obtaining the information needed to meet the objectives of the study. It was found that the instrument was understood by the subjects in the pilot study and that a ranking of objectives could be obtained from the instrument.

Test Administration

The instrument was administered in the fall semester of 1971 and the spring semester of 1972. The members of the women's faculty were contacted during a faculty meeting and asked to complete the test and return it. The men teachers were contacted individually during office hours and asked to complete the instrument. In all, twenty-three teachers participated in the study.

The tool was administered to the women physical-education majors during classes for majors or as they were later identified. They were asked to select from the paired-comparisons the objective that they thought was most important and to add any additional objectives they thought should be included in a sound program of physical education. There were seventeen freshmen, twelve sophomores, thirty-seven juniors, and thirty-five senior students participating in the study.
The one-hundred non-major women were contacted during service classes at North Texas. These included fifty women enrolled in their first semester of physical education and fifty women enrolled in their fourth semester of physical education with no more than six being from each of a wide variety of classes. They were asked to complete the instrument during class time.

Analysis of Data

A composite ranking for the ten objectives was established from all the data compiled. The selected objective from each pair was tabulated to arrive at a ranking of the objectives for each group of subjects. The objectives were tallied each time they were circled on the instrument, and the objective with the most tallies was ranked as number one and so on through ten. On the basis of these rankings, the Spearman correlation coefficient was computed to find the correlation between the teachers and all the students, between the teachers and the majors, between the teachers and the non-majors, between the four classes of majors, between the majors and non-majors, and between the first- and fourth-semester non-majors (3, pp. 202-206). A coefficient of alienation and a coefficient of forecasting efficiency were computed to determine the predictability of the correlation.
coefficient (1, pp. 176-177). The results were analyzed to determine if there were a significant relationship.

The open-end question on which the subjects were allowed to add any additional objectives was analyzed empirically for any additional information.

Summary

The testing instrument, which was adapted from Rosentswieg's study on the objectives of physical education, was administered to the faculty, the women physical education majors, and one-hundred non-majors during the fall and spring of 1971-72. The data were analyzed using the Spearman rank correlation coefficient to determine the relationship between the subjects concerning the objectives of physical education. A coefficient of alienation and a coefficient of forecasting efficiency were computed to determine the predictability of the correlation coefficient.
CHAPTER BIBLIOGRAPHY


CHAPTER IV

ANALYSIS OF DATA

When the data collection was completed, the objectives, as determined by the faculty, the physical-education majors, and one-hundred non-majors all involved in the physical-education program at North Texas State University, were ranked and compared. This chapter includes a presentation of the data and a discussion of the findings of the study.

Faculty and Student Relationships

The following table shows the ranking of objectives as determined by the faculty and all the students surveyed:

TABLE I
FACULTY AND STUDENT RANKING OF THE OBJECTIVES

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Faculty Ranking</th>
<th>All the Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuromuscular skills</td>
<td>1</td>
<td>Emotional stability</td>
</tr>
<tr>
<td>Self-realization</td>
<td>2</td>
<td>Neuromuscular skills</td>
</tr>
<tr>
<td>Leisure-time activity</td>
<td>3</td>
<td>Self-realization</td>
</tr>
<tr>
<td>Organic vigor</td>
<td>4</td>
<td>Social competency</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>5</td>
<td>Mental development</td>
</tr>
<tr>
<td>Social competency</td>
<td>6</td>
<td>Organic vigor</td>
</tr>
<tr>
<td>Mental development</td>
<td>7</td>
<td>Leisure-time activity</td>
</tr>
<tr>
<td>Cultural appreciation</td>
<td>8</td>
<td>Cultural appreciation</td>
</tr>
<tr>
<td>Democratic values</td>
<td>9</td>
<td>Democratic values</td>
</tr>
<tr>
<td>Spiritual and moral strength</td>
<td>10</td>
<td>Spiritual and moral strength</td>
</tr>
</tbody>
</table>
The relationship between the ranking of the teachers and the ranking of the students was determined by computing the coefficient of correlation between the two rankings. The Spearman rank coefficient of correlation was the statistical procedure employed. The coefficient of correlation was .72. This was found to be reliable at the .05 level of confidence.

In order to evaluate and interpret the effectiveness of the obtained correlation in regard to predictive value, a coefficient of alienation and a coefficient of forecasting efficiency were determined. The coefficient of forecasting efficiency was .31. This indicated that the forecasting efficiency of the obtained coefficient was only 31 percent better than chance prediction and that the correlation had a low or minimum predictive value. There is a relationship between the ranking of the faculty and the ranking of the students; however, it is not great enough to assure accuracy in forecasting or predicting one variable from the other. (The data are presented in Table XIII on page 44.)

Faculty and Physical-Education Majors Relationships

The following table shows the ranking of objectives as determined by the faculty and the physical-education majors:
TABLE II
FACULTY AND PHYSICAL EDUCATION MAJORS' RANKING OF THE OBJECTIVES

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Ranking</th>
<th>Physical-Education Majors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuromuscular skills</td>
<td>1</td>
<td>Emotional stability</td>
</tr>
<tr>
<td>Self-realization</td>
<td>2</td>
<td>Self-realization</td>
</tr>
<tr>
<td>Leisure-time activities</td>
<td>3</td>
<td>Mental development</td>
</tr>
<tr>
<td>Organic vigor</td>
<td>4</td>
<td>Neuromuscular skills</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>5</td>
<td>Organic vigor</td>
</tr>
<tr>
<td>Social competency</td>
<td>6</td>
<td>Social competency</td>
</tr>
<tr>
<td>Mental development</td>
<td>7</td>
<td>Leisure-time activities</td>
</tr>
<tr>
<td>Cultural appreciation</td>
<td>8</td>
<td>Cultural appreciation</td>
</tr>
<tr>
<td>Democratic values</td>
<td>9</td>
<td>Democratic values</td>
</tr>
<tr>
<td>Spiritual and moral strength</td>
<td>10</td>
<td>Spiritual and moral strength</td>
</tr>
</tbody>
</table>

The relationship between the ranking of the teacher and the ranking of the physical-education majors was determined by computing the coefficient of correlation between the two rankings. The Spearman rank coefficient of correlation was the statistical procedure employed. The coefficient of correlation was .75. This was found to be reliable at the .05 level of confidence. The coefficient of forecasting efficiency was .34. This indicated that the forecasting efficiency was .34. This indicated that the forecasting efficiency of the obtained coefficient was only 34 percent better than chance prediction and that the correlation had a low predictive value. There was a relationship between the ranking of the faculty and the physical education majors; however, it was not great enough to assure accuracy in forecasting or predicting one variable.
from the other. (The data are presented in Table XIII on page 44.)

Faculty and Non-major Relationships

The following table shows the ranking of objectives as determined by the faculty and the non-major students:

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Ranking</th>
<th>Non-majors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuromuscular skills</td>
<td>1</td>
<td>Neuromuscular skills</td>
</tr>
<tr>
<td>Self-realization</td>
<td>2</td>
<td>Social competency</td>
</tr>
<tr>
<td>Leisure-time activities</td>
<td>3</td>
<td>Self-realization</td>
</tr>
<tr>
<td>Organic vigor</td>
<td>4</td>
<td>Organic vigor</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>5</td>
<td>Emotional stability</td>
</tr>
<tr>
<td>Social competency</td>
<td>6</td>
<td>Mental development</td>
</tr>
<tr>
<td>Mental development</td>
<td>7</td>
<td>Leisure-time activities</td>
</tr>
<tr>
<td>Cultural appreciation</td>
<td>8</td>
<td>Cultural appreciation</td>
</tr>
<tr>
<td>Democratic values</td>
<td>9</td>
<td>Democratic values</td>
</tr>
<tr>
<td>Spiritual and moral strength</td>
<td>10</td>
<td>Spiritual and moral strength</td>
</tr>
</tbody>
</table>

The relationship between the ranking of the teachers and the ranking of the non-majors was also computed, using the Spearman rank correlation coefficient as the statistical procedure. The coefficient of correlation was .79. This was found to be reliable at the .05 level of confidence. The coefficient of forecasting efficiency was .38. This indicated that the forecasting efficiency of the obtained coefficient was only 38 percent better than chance prediction and that the correlation had a low predictive value.
There was a relationship between the ranking of the faculty and the non-majors; however, it was not great enough to assure accuracy in forecasting or predicting one variable from the other. (The data are presented in Table XIII on page 44.)

Majors and Non-majors Relationships

The following table shows the ranking of objectives as determined by the physical education majors and the non-majors:

<table>
<thead>
<tr>
<th>TABLE IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAJORS' AND NON-MAJORS' RANKING OF THE OBJECTIVES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical-education majors</th>
<th>Ranking</th>
<th>Non-majors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional stability</td>
<td>1</td>
<td>Neuromuscular skills</td>
</tr>
<tr>
<td>Self-realization</td>
<td>2</td>
<td>Social competency</td>
</tr>
<tr>
<td>Mental development</td>
<td>3</td>
<td>Self-realization</td>
</tr>
<tr>
<td>Neuromuscular skills</td>
<td>4</td>
<td>Organic vigor</td>
</tr>
<tr>
<td>Organic vigor</td>
<td>5</td>
<td>Emotional stability</td>
</tr>
<tr>
<td>Social competency</td>
<td>6</td>
<td>Mental development</td>
</tr>
<tr>
<td>Leisure-time activities</td>
<td>7</td>
<td>Leisure-time activities</td>
</tr>
<tr>
<td>Cultural appreciation</td>
<td>8</td>
<td>Cultural appreciation</td>
</tr>
<tr>
<td>Democratic values</td>
<td>9</td>
<td>Democratic values</td>
</tr>
<tr>
<td>Spiritual and moral strength</td>
<td>10</td>
<td>Spiritual and moral strength</td>
</tr>
</tbody>
</table>

The relationship between the ranking of the physical-education majors and the non-majors was also computed using the Spearman rank correlation coefficient as the statistical procedure. The coefficient of correlation was .70. This was found to be reliable at the .05 level of
confidence. The coefficient of forecasting efficiency was .29. This indicated that the forecasting efficiency of the obtained coefficient was only 29 percent better than chance prediction and that the correlation had a low predictive value. There was a relationship between the majors and non-majors; however, the relationship was not great enough to assure accuracy in the forecasting or predicting one variable from the other. (The data are presented in Table XIII on page 44.)

Freshmen and Senior Relationships

The following table shows the ranking of objectives as determined by the freshmen and senior physical-education majors:

### TABLE V

**FRESHMEN'S AND SENIORS' RANKING OF THE OBJECTIVES**

<table>
<thead>
<tr>
<th>Freshmen</th>
<th>Ranking</th>
<th>Seniors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental development</td>
<td>1</td>
<td>Emotional stability</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>2</td>
<td>Self-realization</td>
</tr>
<tr>
<td>Self-realization</td>
<td>3</td>
<td>Neuromuscular skills</td>
</tr>
<tr>
<td>Social competency</td>
<td>4</td>
<td>Leisure-time activities</td>
</tr>
<tr>
<td>Organic vigor</td>
<td>5</td>
<td>Social competency</td>
</tr>
<tr>
<td>Neuromuscular skills</td>
<td>6</td>
<td>Mental development</td>
</tr>
<tr>
<td>Cultural appreciation</td>
<td>7</td>
<td>Organic vigor</td>
</tr>
<tr>
<td>Spiritual and moral strength</td>
<td>8</td>
<td>Cultural appreciation</td>
</tr>
<tr>
<td>Leisure-time activities</td>
<td>9</td>
<td>Democratic values</td>
</tr>
<tr>
<td>Democratic values</td>
<td>10</td>
<td>Spiritual and moral strength</td>
</tr>
</tbody>
</table>

The relationship between the ranking of the senior and freshmen physical-education majors was computed, using
the Spearman rank correlation coefficient as the statistical procedure. The coefficient of correlation was .56. This was found to be reliable at the .05 level of confidence. The coefficient of forecasting efficiency was .17. This was only 17 percent better than chance prediction and indicated a low predictive value for the correlation. There was a relationship between the freshmen and senior majors; however, it was not great enough to assure accuracy in forecasting or predicting one variable from the other. (The data are presented in Table XIII on page 44.)

Freshmen and Sophomore Relationships

The following chart shows the ranking of objectives as determined by the freshmen and sophomore physical-education majors:

| TABLE VI |
| FRESHMEN'S AND SOPHOMORES' RANKING OF THE OBJECTIVES |

<table>
<thead>
<tr>
<th>Freshmen</th>
<th>Ranking</th>
<th>Sophomores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental development</td>
<td>1</td>
<td>Emotional stability</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>2</td>
<td>Self-realization</td>
</tr>
<tr>
<td>Self-realization</td>
<td>3</td>
<td>Neuromuscular skills</td>
</tr>
<tr>
<td>Social competency</td>
<td>4</td>
<td>Organic vigor</td>
</tr>
<tr>
<td>Organic vigor</td>
<td>5</td>
<td>Mental development</td>
</tr>
<tr>
<td>Neuromuscular skills</td>
<td>6</td>
<td>Leisure-time activities</td>
</tr>
<tr>
<td>Cultural appreciation</td>
<td>7</td>
<td>Social competency</td>
</tr>
<tr>
<td>Spiritual and moral strength</td>
<td>8</td>
<td>Cultural appreciation</td>
</tr>
<tr>
<td>Leisure-time activities</td>
<td>9</td>
<td>Spiritual and moral strength</td>
</tr>
<tr>
<td>Democratic values</td>
<td>10</td>
<td>Democratic values</td>
</tr>
</tbody>
</table>
The relationship between the ranking of the sophomore and freshmen physical-education majors was also computed using the Spearman rank correlation coefficient as the statistical procedure. The coefficient of correlation was .58. This was found to be reliable at the .05 level of confidence. The coefficient of forecasting efficiency was .19. This indicated that the forecasting efficiency of the obtained coefficient was only 19 percent better than chance prediction and that the correlation had a low predictive value. There was a relationship between the ranking of the sophomore and freshmen physical-education majors; however, it was not great enough to assure accuracy in forecasting or predicting one variable from the other. (The data are presented in Table XIII on page 44.)

Freshmen and Junior Relationships

The following table shows the ranking of objectives as determined by the physical-education majors in the freshmen and junior classes:

| TABLE VII |
| FRESHMEN'S AND JUNIORS' RANKING OF THE OBJECTIVES |

<table>
<thead>
<tr>
<th>Freshmen</th>
<th>Ranking</th>
<th>Juniors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental development</td>
<td>1</td>
<td>Emotional stability</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>2</td>
<td>Neuromuscular skills</td>
</tr>
<tr>
<td>Self-realization</td>
<td>3</td>
<td>Self-realization</td>
</tr>
<tr>
<td>Social competency</td>
<td>4</td>
<td>Mental development</td>
</tr>
<tr>
<td>Organic vigor</td>
<td>5</td>
<td>Organic vigor</td>
</tr>
<tr>
<td>Neuromuscular skills</td>
<td>6</td>
<td>Social competency</td>
</tr>
<tr>
<td>Cultural appreciation</td>
<td>7</td>
<td>Leisure-time activities</td>
</tr>
<tr>
<td>Spiritual and moral strength</td>
<td>8</td>
<td>Cultural appreciation</td>
</tr>
<tr>
<td>Leisure-time activities</td>
<td>9</td>
<td>Democratic values</td>
</tr>
<tr>
<td>Democratic values</td>
<td>10</td>
<td>Spiritual and moral strength</td>
</tr>
</tbody>
</table>
The relationship between the ranking of the freshmen and the ranking of the junior physical-education majors was computed using the Spearman rank correlation coefficient as the statistical procedure. The coefficient of correlation was .76. This was found to be reliable at the .05 level of confidence. The coefficient of forecasting efficiency was .35. This indicated that the forecasting efficiency of the obtained coefficient was only 35 percent better than chance prediction and that the correlation had a low predictive value. There was a relationship between the ranking of the freshmen and the junior physical-education majors; however, it was not great enough to assure accuracy in forecasting or predicting one variable from the other. (The data are presented in Table XIII on page 44.)

Sophomore and Junior Relationships

The following table shows the ranking of objectives as determined by the physical-education majors in the sophomore and junior classes:

### TABLE VIII

**SOPHOMORES' AND JUNIORS' RANKING OF THE OBJECTIVES**

<table>
<thead>
<tr>
<th>Sophomores</th>
<th>Ranking</th>
<th>Juniors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional stability</td>
<td>1</td>
<td>Emotional stability</td>
</tr>
<tr>
<td>Self-realization</td>
<td>2</td>
<td>Neuromuscular skills</td>
</tr>
<tr>
<td>Neuromuscular skills</td>
<td>3</td>
<td>Self-realization</td>
</tr>
<tr>
<td>Organic vigor</td>
<td>4</td>
<td>Mental development</td>
</tr>
<tr>
<td>Mental development</td>
<td>5</td>
<td>Organic vigor</td>
</tr>
<tr>
<td>Leisure-time activities</td>
<td>6</td>
<td>Social competency</td>
</tr>
<tr>
<td>Social competency</td>
<td>7</td>
<td>Leisure-time activities</td>
</tr>
<tr>
<td>Cultural appreciation</td>
<td>8</td>
<td>Cultural appreciation</td>
</tr>
<tr>
<td>Spiritual and moral strength</td>
<td>9</td>
<td>Democratic values</td>
</tr>
<tr>
<td>Democratic values</td>
<td>10</td>
<td>Spiritual and moral strength</td>
</tr>
</tbody>
</table>
The relationship between the ranking of the sophomore and junior physical-education majors was computed using the Spearman rank correlation coefficient as the statistical procedure. The coefficient of correlation was .95. This was found to be reliable at the .01 level of confidence. The coefficient of forecasting efficiency was .69. This indicated that the forecasting efficiency of the obtained coefficient was 69 percent better than chance prediction and that the correlation had a somewhat higher predictive value than the preceding group relationships. It was still not great enough to assure accuracy in forecasting or predicting one variable from the other. (The data are presented in Table XIII on page 44.)

Sophomore and Senior Relationships

The following table shows the ranking of objectives as determined by the sophomore and senior physical-education majors:

<table>
<thead>
<tr>
<th>Sophomores</th>
<th>Ranking</th>
<th>Seniors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional stability</td>
<td>1</td>
<td>Emotional stability</td>
</tr>
<tr>
<td>Self-realization</td>
<td>2</td>
<td>Self-realization</td>
</tr>
<tr>
<td>Neuromuscular skills</td>
<td>3</td>
<td>Neuromuscular skills</td>
</tr>
<tr>
<td>Organic vigor</td>
<td>4</td>
<td>Leisure-time activities</td>
</tr>
<tr>
<td>Mental development</td>
<td>5</td>
<td>Social competency</td>
</tr>
<tr>
<td>Leisure-time activities</td>
<td>6</td>
<td>Mental development</td>
</tr>
<tr>
<td>Social competency</td>
<td>7</td>
<td>Organic vigor</td>
</tr>
<tr>
<td>Cultural appreciation</td>
<td>8</td>
<td>Cultural appreciation</td>
</tr>
<tr>
<td>Spiritual and moral strength</td>
<td>9</td>
<td>Democratic values</td>
</tr>
<tr>
<td>Democratic values</td>
<td>10</td>
<td>Spiritual and moral strength</td>
</tr>
</tbody>
</table>
The relationship between the ranking of the sophomore and senior physical-education majors was computed using the Spearman rank correlation coefficient as the statistical procedure. The coefficient of correlation was .87. This was found to be reliable at the .01 level of confidence. The coefficient of forecasting efficiency was .51. This indicated that the forecasting efficiency of the obtained coefficient was 51 percent better than chance prediction and that the correlation had a low predictive value. There was a relationship between the sophomore and senior physical-education majors; however, it was not great enough to assure accuracy in forecasting or predicting one variable from the other. (The data are presented in Table XIII on page 44.)

Junior and Senior Relationships

The following table shows the ranking of objectives as determined by the junior and senior physical-education majors:

| TABLE X |
| JUNIORS' AND SENIORS' RANKING OF THE OBJECTIVES |

<table>
<thead>
<tr>
<th>Juniors</th>
<th>Ranking</th>
<th>Seniors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional stability</td>
<td>1</td>
<td>Emotional stability</td>
</tr>
<tr>
<td>Neuromuscular skills</td>
<td>2</td>
<td>Self-realization</td>
</tr>
<tr>
<td>Self-realization</td>
<td>3</td>
<td>Neuromuscular skills</td>
</tr>
<tr>
<td>Mental development</td>
<td>4</td>
<td>Leisure-time activities</td>
</tr>
<tr>
<td>Organic vigor</td>
<td>5</td>
<td>Social competency</td>
</tr>
<tr>
<td>Social competency</td>
<td>6</td>
<td>Mental development</td>
</tr>
<tr>
<td>Leisure-time activities</td>
<td>7</td>
<td>Organic vigor</td>
</tr>
<tr>
<td>Cultural appreciation</td>
<td>8</td>
<td>Cultural appreciation</td>
</tr>
<tr>
<td>Democratic values</td>
<td>9</td>
<td>Democratic values</td>
</tr>
<tr>
<td>Spiritual and moral strength</td>
<td>10</td>
<td>Spiritual and moral strength</td>
</tr>
</tbody>
</table>
The relationship between the ranking of the junior and the ranking of the senior physical-education majors was computed using the Spearman rank correlation as the statistical procedure. The coefficient correlation was .88. This was found to be reliable at the .01 level of confidence. The coefficient of forecasting efficiency was .52. This indicated that the forecasting efficiency of the obtained coefficient was only 52 percent better than chance prediction and that the correlation had a low predictive value. There was a relationship between the ranking of the juniors and the ranking of the seniors; however, it was not great enough to assure accuracy in forecasting or predicting one variable from the other. (The data are presented in Table XIII on page 44.)

First- and Fourth-Semester Non-major Relationships

The following table shows the ranking of objectives as determined by the first-semester and the fourth-semester non-majors:

**TABLE XI**

FIRST- AND FOURTH-SEMESTER NON-MAJORS' RANKING OF THE OBJECTIVES

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Ranking</th>
<th>Fourth Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuromuscular skills</td>
<td>1</td>
<td>Neuromuscular skills</td>
</tr>
<tr>
<td>Social competency</td>
<td>2</td>
<td>Self-realization</td>
</tr>
<tr>
<td>Self-realization</td>
<td>3</td>
<td>Social competency</td>
</tr>
<tr>
<td>Organic vigor</td>
<td>4</td>
<td>Leisure-time activities</td>
</tr>
<tr>
<td>Mental development</td>
<td>5</td>
<td>Organic vigor</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>6</td>
<td>Emotional stability</td>
</tr>
<tr>
<td>Cultural appreciation</td>
<td>7</td>
<td>Mental development</td>
</tr>
<tr>
<td>Leisure-time activities</td>
<td>8</td>
<td>Cultural appreciation</td>
</tr>
<tr>
<td>Democratic values</td>
<td>9</td>
<td>Democratic values</td>
</tr>
<tr>
<td>Spiritual and moral strength</td>
<td>10</td>
<td>Spiritual and moral strength</td>
</tr>
</tbody>
</table>
The relationship between the ranking of the first-semester non-majors and the ranking of the fourth-semester non-majors was computed, using the Spearman rank correlation coefficient as the statistical procedure. The coefficient of correlation was .84. This was found to be reliable at the .01 level of confidence. The coefficient of forecasting efficiency was .46. This indicated that the forecasting efficiency of the obtained coefficient was only 46 percent better than chance prediction and that the correlation had a low predictive value. There was a relationship between the ranking of the first-semester non-majors and the ranking of the fourth-semester non-majors; however, it was not great enough to assure accuracy in forecasting or predicting one variable from the other. (The data are presented in Table XIII on page 44.)

(For a graphical presentation of all the comparisons, see Figures 1-11 on pages 45-50.)

A Composite Ranking

A composite ranking of all the subjects showed the following results:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuromuscular skills</td>
<td>1</td>
</tr>
<tr>
<td>Self-realization</td>
<td>2</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>3</td>
</tr>
<tr>
<td>Social competency</td>
<td>4</td>
</tr>
<tr>
<td>Mental development</td>
<td>5</td>
</tr>
<tr>
<td>Organic vigor</td>
<td>6</td>
</tr>
<tr>
<td>Leisure-time activities</td>
<td>7</td>
</tr>
<tr>
<td>Cultural appreciation</td>
<td>8</td>
</tr>
<tr>
<td>Democratic values</td>
<td>9</td>
</tr>
<tr>
<td>Spiritual and moral strength</td>
<td>10</td>
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</table>
TABLE XIII
COEFFICIENTS INDICATING THE RELATIONSHIP BETWEEN
THE VARIOUS GROUPS TESTED

<table>
<thead>
<tr>
<th>Group</th>
<th>Coefficient of Correlation</th>
<th>Coefficient of Alienation</th>
<th>Coefficient of Forecasting Efficiency</th>
</tr>
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<tr>
<td>Faculty-All Students</td>
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<td>.69</td>
<td>.31</td>
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<tr>
<td>Faculty-Majors</td>
<td>.75</td>
<td>.66</td>
<td>.34</td>
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<tr>
<td>Faculty-Non-Majors</td>
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<td>.62</td>
<td>.38</td>
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<td>Majors-Non-Majors</td>
<td>.70</td>
<td>.71</td>
<td>.29</td>
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<td>Freshmen-Seniors</td>
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<td>Freshmen-Sophomores</td>
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<tr>
<td>Freshmen-Juniors</td>
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<td>.35</td>
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<tr>
<td>Sophomores-Juniors</td>
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<td>Sophomores-Seniors</td>
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<tr>
<td>Junior-Seniors</td>
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<td>.52</td>
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<tr>
<td>First-Fourth-Semester Non-Majors</td>
<td>.84</td>
<td>.54</td>
<td>.46</td>
</tr>
</tbody>
</table>
Fig. 1 -- A comparison between the faculty and all the students.

Fig. 2 -- A comparison between the faculty and the majors.

Objectives:

1 - Organic vigor
2 - Democratic values
3 - Social competency
4 - Cultural appreciation
5 - Self-realization
6 - Leisure-time activities
7 - Mental development
8 - Emotional stability
9 - Neuromuscular skills
10 - Spiritual and moral strength
Fig. 3--A comparison between the faculty and non-majors

Objectives:

1. Organic vigor
2. Democratic values
3. Social competency
4. Cultural appreciation
5. Self-realization

6. Leisure-time activities
7. Mental development
8. Emotional stability
9. Neuromuscular skills
10. Spiritual and moral strength

Fig. 4--A comparison between the majors and non-majors

Objective*
**Objective**

1. Organic vigor
2. Democratic values
3. Social competency
4. Cultural appreciation
5. Self-realization
6. Leisure-time activities
7. Mental development
8. Emotional stability
9. Neuromuscular skills
10. Spiritual and moral strength
Fig. 7--A comparison between the freshmen and juniors

Fig. 8--A comparison between the sophomores and juniors

*Objective:*

1 - Organic vigor
2 - Democratic values
3 - Social competency
4 - Cultural appreciation
5 - Self-realization
6 - Leisure-time activities
7 - Mental development
8 - Emotional stability
9 - Neuromuscular skills
10 - Spiritual and moral strengths
**Objective:**

1. Organic vigor
2. Democratic values
3. Social competency
4. Cultural appreciation
5. Self-realization
6. Leisure-time activities
7. Mental development
8. Emotional stability
9. Neuromuscular stability
10. Spiritual and moral strength

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**Fig. 9**—A comparison between the sophomores and seniors

**Fig. 10**—A comparison between the juniors and seniors
Fig. 11--A comparison between the 1st-semester non-majors and the 4th-semester non-majors

*Objective:

1 - Organic vigor
2 - Democratic values
3 - Social competency
4 - Cultural appreciation
5 - Self-realization
6 - Leisure-time activities
7 - Mental development
8 - Emotional stability
9 - Neuromuscular skills
10 - Spiritual and moral strength
Subject-Initiated Objectives

The subjects were allowed to contribute any additional objectives that they thought should be added to the program of physical education at North Texas State University. These came in the form of an open-end question at the end of the test in which they were asked to add any additional objectives not covered in the ten given in the test itself. The following were added:

1. To gear the program more toward physical-fitness development, especially in recreational activities.
2. To participate in physical education for the sake of having fun.
3. To encourage self-expression.
4. To do something to make the student feel good physically—something relatively vigorous.
5. To become well-trained in one field of physical education—past the beginner level.
6. To encourage self-improvement pertaining to appearance.
7. To have freedom from lecture classes and to establish closer student-teacher relationship.
8. To have better confidence from gained abilities.
9. To gain ability to work in a group.
10. To realize other’s potential.
11. To maintain general endurance.
Most of the objectives added could be included in the ten objectives given on the test. This tends to support the idea that Rosentswieg covered the objectives of physical education rather conclusively in his study.

Discussion of Findings

All the groups placed the objective, neuromuscular skills, in a relatively high position in the ranking. Perhaps, as did William Solley and Frazier Damron (7), they thought that skill development and body control are essential before any type of game or sport can be enjoyed. Possibly, the subjects agreed with David Brace (1, p. 5), who stated that physical education should equip the student with skills that will enable her to enjoy recreational activities in later life. Possibly the faculty, who ranked neuromuscular skills as the primary objective, understood the importance of skill development in the physical-educational program. According to the survey of the literature, the majority of the studies listed neuromuscular skills as one of the primary objectives of physical education. Solley and Damron justified the importance of neuromuscular skills by saying that to develop a high level of skill in a physical-education activity is to increase the ability of the individual to lead a wholesome and enjoyable life.
The objective, self-realization, was ranked second or third by every group surveyed which indicated agreement among the groups. Perhaps, most of the subjects felt as William Laforge (4) did that physical education should develop and train the individual to realize his maximum capacities, both physically and mentally. The physical-education class does afford the student a good opportunity to understand and develop herself and her capabilities.

The objective, emotional stability, was ranked relatively high by the subjects, although its ranking was more divergent. Most of the physical-education majors ranked the objective high, while the faculty and non-majors ranked it near the center of the ten objectives. There appeared to be no discernable reason why the physical-education majors ranked emotional stability so high. According to the studies in the survey of literature, most of the leaders agreed that emotional stability was an important aspect of physical education but not one of the primary objectives.

There was general agreement among the groups to rank the objective, organic vigor, between the fourth, fifth, sixth, and seventh positions in the rankings. This medium ranking by the groups perhaps indicated that cardiovascular
efficiency and muscular strength were not of primary importance when compared with the other objectives of physical education. This objective, organic vigor, was listed in most of the studies found in the survey of literature, but its ranking there was divergent also. This divergence could arise from sampling differences in the groups surveyed. Male subjects might tend to place a higher priority on organic vigor. It was ranked as the primary objective in Rosentswieg's study, but it placed lower in importance than the other objectives in the studies by Dorothy Mohr and Ruth Evans and Leo Gans.

The objective, leisure-time activities, diverged most in the rankings of the various groups. It ranged from third position down to ninth position. The divergence indicated that there was a failure of influence among the groups concerning the importance of leisure-time activities. The faculty ranked this objective third, as did the teachers in Rosentswieg's study. Possibly, as adults, the teachers have had more opportunity to realize the value of leisure-time activities. Most of the leaders in the field list it as an objective of physical education but not one of primary importance. Most of the students tended to agree with this position on ranking the objective.
There was also a great deal of divergence in ranking the objective, social competency. It ranged from the second to the seventh position in the rankings of the various groups. Possibly, the subjects thought, as did most of the leaders in the field, that social competency should be stressed, but it was not as important as some of the other objectives listed in the study.

The groups were very similar in their ranking of the objective, cultural appreciation. It was ranked seventh by two groups and eighth by all the remaining groups. Cultural appreciation was mentioned in the review of literature but did not appear to be as important as the other objectives of physical education. It ranked tenth in Rosenthal's study. All of the subjects tended to agree that cultural appreciation was not as important as the other objectives given.

The objective, democratic values, received a consistently low ranking by all the groups involved. This consistently low ranking indicated that none of the subjects thought the objective, democratic process, was as important as the other objectives given on the instrument. Possibly the subjects viewed democratic values as a general educational objective not unique to the physical-education class.
The objective, spiritual and moral strength, also was ranked consistently low by all of the groups surveyed. The low ranking was indicative of the relative unimportance placed on this objective compared with the other objectives given in the tool. Spiritual and moral strength, also, is not a unique objective to the physical education class.

It was interesting to note the areas in which the teachers and students tended to agree. The teachers and both groups of non-majors were the only groups listing neuromuscular skills as the prime objective of physical education. Perhaps the non-majors could see a need to develop certain skills for lifetime sports, and the physical-education class would be the best opportunity to acquire such skills.

The tendency in the majors' group was to emphasize emotional stability rather than neuromuscular skills as did the teachers, as the prime objective of physical education. The ranking of the teachers was similar to the ranking found in Rosentswieg's study. None of the majors' groups ranked neuromuscular skills as the prime objective of physical education. There could be a number of reasons for this divergence. Possibly, the value the majors placed on the objectives reflected their understanding of the
objectives. It could be that the majors were trying to renounce the stereotyped idea that physical education is primarily a place to develop oneself physically. If they are continually told in every physical-education class that physical education should be primarily a place to develop oneself physically, then possibly they are trying to reject this idea just to be different. Perhaps, they want to get away from the norm. Another idea involves peer influence. Peer influence plays an important role in moulding the ideas of the students. The major students relate to one another and influence each other's thinking concerning physical education. In view of this, the teachers would not be such an overpowering influence since the students tended to agree more with each other than with the teachers.

The freshmen majors had the most divergent ranking of the ten objectives. Their ranking of mental development as the prime objective was in agreement with Robert Brackenbury's idea that mental development is the most important objective and that too much emphasis is placed on physical development (2). It could be that the freshmen ranking was divergent because they were freshmen. They had just graduated from high school and had not had the opportunity to get as well integrated in the college program and with the other physical-education majors. Another possibility could be that the freshmen majors were ranking the objectives according to their personal wants. They could
possibly have ranked lowest the objectives in which they were weakest.

The highest correlation occurred between the sophomore, junior, and senior comparisons. The sophomores, juniors, and seniors tended to be closer in agreement concerning the ranking of the objectives than the other groups compared. All three groups ranked emotional stability as the prime objective, with self-realization and neuromuscular skills alternating as second and third. There would appear to be a close fusion of ideas on the part of the sophomores, juniors, and seniors. They have had time to live and work together and influence each other's thinking to a greater extent than the other groups.

There was also a high degree of similarity between the rankings of the first- and fourth-semester non-majors. They both ranked neuromuscular skills as the prime objective with social competency and self-realization alternating as second and third. It was concluded from this that there is little difference in the stress placed upon objectives of physical education between the first- and fourth-semester service classes.

The subjects tended to agree with the ten objectives as set forth in the instrument itself. A few ideas were added, such as self-confidence, self-improvement, general endurance, and fun. Most of the ideas submitted fitted into one of the ten objectives already included in the instrument.
CHAPTER BIBLIOGRAPHY


CHAPTER V

SUMMARY, FINDINGS, AND CONCLUSION

The purpose of the study was to investigate the priority of objectives of physical education as determined by the women's physical education faculty and four members of the men's faculty, the women physical-education majors, and one-hundred women non-majors all participating in the physical-education program at North Texas State University. Each subject was administered the testing instrument and given sufficient time to complete it.

The rankings for each group were tabulated from the paired-comparisons on the tool, and the Spearman rank-correlation coefficient was computed to determine the relationship between each group compared. A coefficient of forecasting efficiency was computed to determine the predictive value of the correlation coefficient.

This chapter includes a summary of the major findings, the conclusion, and recommendations for further studies.

Major Findings

The analysis of data revealed the following major findings:
1. There was a positive relationship concerning the objectives of physical education between the faculty and all the students, the faculty and all the majors, and between the faculty and the non-majors; but the relationship was not great enough to be of predictive value.

2. There was a positive relationship concerning the objectives of physical education between the freshmen-senior groups, between the freshmen-sophomore groups, and between the freshmen-junior groups; but the relationship was not great enough to be of predictive value. The relationship between the sophomore-junior groups and between the junior-senior groups had a minimum predictive value.

3. Although there was a positive relationship concerning the objectives of physical education between the first- and fourth-semester non-majors and a positive relationship between the physical-education majors and the non-majors, the relationship was not great enough to be of predictive value.

Conclusion

Within the limits and bounds of the study, it was concluded that the groups studied were independent in their ranking of the objectives of physical education.

Recommendations

The following recommendation is made for further investigation into the study of objectives of physical
education at North Texas State University:

A similar study should be conducted in two or three years to see if the ideas of the freshmen physical education majors change or if there is a shift in emphasis concerning the objectives of physical education.
APPENDIX A

A SPECIFIC RANKING OF OBJECTIVES


Please read the following carefully. Then turn the page for further instructions.

1. ORGANIC VIGOR--by participating in physical-activity courses, the student develops cardiovascular efficiency and muscular strength.

2. DEMOCRATIC VALUES--by participating in physical-activity courses, the student is given an opportunity to function as a part of the democratic process.

3. CULTURAL APPRECIATION--by participating in physical-activity courses, the student is given an opportunity to understand and appreciate the beauty of human movement.

4. SOCIAL COMPETENCY--by participating in physical-activity courses, the student develops her ability to cooperate and work with other students.

5. SELF-REALIZATION--by participating in physical-activity courses, the student gains a better understanding of herself and her capabilities.

6. LEISURE TIME ACTIVITIES--by participating in physical-activity courses, the student develops recreational and leisure-time skills that will extend into later life.

7. MENTAL DEVELOPMENT--by participating in physical-activity courses, the student gains knowledge and learns to reason and make judgments when placed in movement-oriented situations.

8. EMOTIONAL STABILITY--by participating in physical-activity courses, the student is given an opportunity to release tension and to practice self-control.

9. NEUROMUSCULAR SKILLS--by participating in physical-activity courses, the student develops general body control and efficiency of movement through skill development.

10. SPIRITUAL AND MORAL STRENGTH--by participating in physical-activity courses, the student is given an opportunity to examine her moral standards.
Classification_________________  Major_________________

Hours Completed in Physical Education_________________

From the following pairs of objectives, circle the one that you feel should be the most important objective of physical education. Tear off sheet one and refer to it for the definitions of the objectives.

1. Self-realization--Cultural appreciation
2. Self-realization--Neuromuscular Skills
3. Neuromuscular skills--Spiritual and moral strength
4. Self-realization--Democratic values
5. Emotional stability--Neuromuscular skills
6. Spiritual and moral strength--Cultural appreciation
7. Neuromuscular skills--Mental development
8. Neuromuscular skills--Organic vigor
9. Self-realization--Organic vigor
10. Leisure-time activities--Spiritual and moral strength
11. Self-realization--Social competency
12. Spiritual and moral strength--Social competency
13. Emotional stability--Cultural appreciation
14. Leisure-time activities--Organic vigor
15. Cultural appreciation--Neuromuscular skills
16. Self-realization--Emotional stability
17. Organic vigor--Emotional stability
18. Organic vigor--Spiritual and moral strength
19. Social competency--Leisure-time activities
20. Self-realization--Leisure-time activities
21. Mental development--Emotional stability
22. Organic vigor--Mental development
23. Leisure-time activities--Democratic values
24. Democratic values--Organic vigor
25. Cultural appreciation--Leisure-time activities
26. Social competency--Organic vigor
27. Self-realization--Spiritual and moral strength
28. Mental development--Leisure-time activities
29. Social competency--Neuromuscular skills
30. Emotional stability--Social competency
31. Democratic values--Emotional stability
32. Democratic values--Mental development
33. Social competency--Democratic values
34. Cultural appreciation--Democratic values
35. Mental development--Social competency
36. Self-realization--Mental development
37. Democratic values--Spiritual and moral strength
38. Cultural appreciation--Social competency
39. Organic vigor--Cultural appreciation
40. Neuromuscular skills--Democratic values
41. Emotional stability--Leisure-time activities
42. Mental development--Cultural appreciation
43. Leisure-time activities--Neuromuscular skills
44. Spiritual and moral strength--Mental development
45. Spiritual and moral strength--Emotional stability

List below any additional objectives that you feel should be added to the list:

1.
2.
3.
BIBLIOGRAPHY

Books


Nash, Jay B., Physical Education Its Interpretations and Objectives, Iowa, Wm. C. Brown Co., 1948.


**Articles**


