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THE EFFECT OF COACHING AND MOTION PICTURE
STUDY ON THE ATTITUDES OF ELEMENTARY
AND JUNIOR HIGH SCHOOL
BASKETBALL PLAYERS

by

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A THESIS

IN

PHYSICAL EDUCATION

Submitted to the Graduate Faculty
of Texas Technological College
in Partial Fulfillment of
the Requirements for
the Degree of

MASTER OF EDUCATION

Approved

Accepted

Dean of the Graduate /S'cKbol

lAayy 1969

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ACKNOWLEDGMENTS

Appreciation is expressed to the basketball players from Grandfalls - Royalty Independent School District who served as subjects for the study, and to Mr, C, B. V/heeler and Mr. Jerry Johnson for filming.

Appreciation is also expressed to Dr. Doris A. Horton, Professor of Physical Education, Dr. Margaret Wilson, Professor and Head of the Department of the Department of Health, Physical Education, Recreation for Women, and Mrs. Mary Owens, Professor of Physical Education, Texas Technological College, for direction of the study.

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CHAPTER I

INTRODUCTION

Attitudes are powerful directional forces which affect human behavior. While knowledge and skill determine what we are capable of doing, attitudes determine what we will do. (10)

Education must be concerned with attitudes because they constitute an important part of the learning climate, (S) Unless an individual is positively conditioned or holds an appropriate attitude toward a learning outcome, there is little evidence that learning will take place, (B) Carr, in a study of attitudes of freshmen high school girls (9), found a positive relationship between the degree of success exhibited in sports activities in physical education and the degree to which they expressed positive attitudes toward the program. Carr found that the girls with good attitudes were apt to be successful in physical education. Conversely, girls whose attitudes were poor were apt to do poorly in physical education.

Proper attitudes toward basketball were emphasized by Hobson (11) when he explained that they had much to do with winning or losing basketball games. "Regardless of' skill and all-round ability that a player or team may

possess, unless physical condition and mental attitude are adequate, victory cannot be expected." (11)

May (Id) stated that attitudes may be modified in a socially desirable direction by the use of films. He concluded that films act as a motivator, aid learning, and inspire enthusiasm for a subject. Brown and Messersmith (7) stated that students have a tendency to be highly motivated when they see themselves in motion pictures.

Teachers and coaches cannot ignore the necessity of maintaining and improving attitudes if they are to provide an atmosphere of optimum learning and teaching. The present study is based on the premise that attitudes influence present and future behavior, attitudes play a vital role in learning, and that attitudes can be changed. An interest in the present study developed from questions • about the attitudes of basketball players and whether they might be modified by direct teaching and motion picture study.

Statement of Problem

The purpose of the study was to determine the relative influence of coaching and coaching with the use of motion picture study on the attitudes of elementary and junior high school girl basketball players.

Specific questions to be asked were:

(1) What attitudes toward basketball were held by elementary and junior high school basketball players prior to basketball season?

(2) Would a change in attitude take place following three weeks of basketball coaching?

(3) Would the attitudes of elementary and junior high school players be changed by coaching combined with motion picture study?

Definition of Terms

(1) Attitudes were the opinions indicated by responses on the Modified Dexter Behavior-Attitude Inventory. (Appendix B),

(2) Coaching was the act of instructing and training players concerning rules, skills, and strategies in basketball.

(3) Motion picture study was analysis of films in which the observer and performer were the same person. Players analyzed themselves in action three times each week for a period of five to fifteen minutes each day.

Assumptions

The following assumptions underlie the study:

(1) The judges who judged the statements for modification of the attitude inventory were competent.

(2) Attitudes toward basketball can be measured.

(3) All subjects involved in the study answered the inventory honestly.

De-limitations

(1) The sample was limited to two basketball teams of twelve players each from Grandfalls-Royalty School, Grandfalls, Texas.

(2) Elementary basketball players were third, fourth, and fifth grade female students at Grandfalls-Royalty School, Grandfalls, Texas•

(3) Junior high basketball players were sixth, seventh, and eighth grade female students at Grandfalls-Royalty School, Grandfalls, Texas,

CHAPTER II

REVIEW OF LITERATURE

The review of literature will include four sections. The first section will report techniques of attitude scale construction. Attitude inventories which have been constructed by physical educators and attitude studies toward physical education will constitute the second and third sections respectively. The effects of motion picture study and instruction on attitudes will constitute the final section.

Construction of Attitude Scales

Attitude inventories may be classified according to techniques used to develop them. In 1927 Thurstone (26) applied psychophysical scaling methods to the problem of measuring attitudes. The method consisted of arranging a series of opinions relevant to a given attitude object, ranging from most favorable to most unfavorable, in equally spaced experimentally determined units along a continuum. The average scale value endorsed by a subject thus became a measure of his attitude with reference to the attitude object.

Likert's method (15) made the assumption that attitudes were distributed normally; therefore his method

utilized standard deviation units. Likert's method consisted of Sigma scales which were a modification of the Thurstone method. A correlation of .99 was calculated between scale values obtained by Likert's method and that of arbitrarily assigning numerical values from one to five to the various alternative responses. He reported a higher coefficient of reliability by this method than was reported by the Thurstone scoring technique.

Another modification of the Thurstone method was the Remmers's (24) generalized or Master scale method. Remmers stated that the essential difference between the Thurstone method and the generalized scale was that the opinions which constituted the generalized scale were incomplete sentences, without attitude objects. The attitude object was supplied at the time of measurement, so that attitudes towards any one of a group or class of attitude objects could validly be measured by a single scale.

Attitude Inventories Developed by Physical Educators

Seven studies reported the construction of an Attitude Inventory to measure attitudes toward physical education. Carr (9) developed an Attitude Inventory to measure the social, personal, and physical contributions of physical education. The purpose of the Inventory was

to detect difficulties in adjusting to a physical education program in sufficient time to aid the student in making the necessary adjustments, Carr's Inventory was developed for use with high school girls. The Inventory was answered with only "agree" or "disagree".

Two attitude inventories for college men were devised by Wear (29). One was designed to measure the attitude in a pro-test situation and the other was designed to measure the attitude in a post-test situation. The two inventories were recommended for a pre- and post-test situation on either a short or a long term basis. The instruments evaluated attitudes toward physical education and physical well being, muscular strength and coordination, physical and muscular endurance, acquisition of neuromuscular skills, resources for recreational use in leisure time now and in later life, mental health, emotional control, poise, social relationships, and safety,

Kneer's (14) Attitude Inventory is an adaptation of the Wear Inventory, It correlated .84 with the Wear Attitude Inventory and .9 with graphic self-ratings of attitude. Her inventory was recommended for use with girls from eighth grade through college level.

Kappes (13) constructed an Attitude Inventory for college women. The inventory contained two parts. Part one listed 31 activities to which the individual

responded with an estimate of his skills in the activity and how he felt about the activity. Part two consisted of 54 statements of which 20 were statements to determine attitudes toward physical education. Thirty-four statements were included to measure the students attitude toward facilities, costume, equipment, instruction, gymnasium, organization, and administration.

An inventory to measure attitudes toward intensive competition in team sports was developed by McCue, (19) The seventy-seven item inventory evaluated attitudes toward personality development, physical development, public relations, skill development, recreation, and safety and their relation to competition. The instrument was designed for high school and college males,

McGee (20) constructed an attitude scale which measured attitudes toward intensive competition for high school girls. The scale was designed to be used by parents, teachers, and school administrators. It consisted of seventy items which evaluated attitudes toward personality development, recreation, physical development and conditioning, public relations, health, safety, skill, and human relations, and their relation to competition for high school girls.

An inventory to provide a self-appraisal of behavior-attitude in a physical education class was devised by Dexter. (5) The Inventory consisted of 30 statements

which evaluated attitudes in the areas of self-direction, social adjustment, participation, care of equipment and facilities, and personal attractiveness. The instrument was designed for high school girls.

Attitudes Toward Physical Education

The inventories described in the previous section have been used in studies to determine attitudes in physical education classes. Moyer, Mitchem, and Bell (21) used the Wear Attitude Inventory to determine the attitudes of college freshmen and junior women toward physical education at Northern Illinois University, and to ascertain differences between the two groups. The inventory was administered to 444 freshmen and 3² juniors. In addition to the Wear Inventory, 21 questions and/or statements were included to determine the physical education class experiences in high school and in college. They found that both freshmen and juniors expressed a highly favorable attitude toward physical education.

In a study by Vincent (28), the Wear Attitude Inventory was administered to 188 college women in a variety of physical education activities. The purpose was to determine the relationship of attitudes of college women to physical education and to success in physical education. The categories examined were physiological-physical, mental-emotional, social and general values of

physical education. Conclusions were that college women exhibited generally favorable attitudes toward physical education, with those students holding more favorable attitudes tending to enroll in gymnastics and tennis, A significant relationship was found between expressed attitudes and success in physical education, with the greater success accruing to those students expressing more favorable attitudes,

Anderson (3) conducted a study of attitudes of high school girls toward physical activities. Information was secured for the questionnaires from interviews with groups of girls in physical education classes. Eight hundred questionnaires were given to girls in grades 10, 11, and 12 in three public high schools in Des Moines, Iowa. The girls had experienced a program of physical education throughout their school careers. Her findings showed a favorable attitude existed toward horse back riding, skating, and tennis regardless of the type of teaching. Practically all girls were motivated by seeing a good performer.

Effects of Motion Pictures and Instruction on Attitude

One of the possible ways to alter attitudes is through motion pictures; a second way is through instruction.

Anderson and Albeck (2) stated that films have numerous uses. They concluded that it was possible for films to be used by the coach to allow a player to evaluate himself by seeing his own weaknesses and mistakes. They emphasized that there was no better way of correcting errors than with the visual aid of motion pictures,

Brown and Messersmith (7) measured the relative progress of freshman tumbling classes taught with and without the use of moving pictures at Southern Methodist University. Motion pictures were incorporated with instruction in the experimental groups; whereas the control group had instruction without films. The experimental class was shown pictures of experienced tumblers executing selected stunts in correct form and later viewed pictures made of themselves performing the same stunts. No differences in attitude were found between groups; however, they stated that there was a tendency for students to be highly motivated when moving pictures were made of the students and later screened for their viewing.

In a study made by Peterson and Thurstone (23) to determine the persistence of effect of a film, it was found that motion pictures have definite, lasting effects on social attitudes of children. They stated the number of pictures pertaining to the same issue may have a

cumulative effect on attitude. • They found the effect of **motion pictures to be** greater on younger children.

Lockhart (16) made a study on the value of motion pictures as an instructional device in learning motor **skills**. Motion pictures were found to be of definite **value** to groups which had this device as a part of the **regular** instructional program. She emphasized that the rate of improvement in learning was superior with the use of **films**.

Nelson (22) made a study on the effect of slow-motion loopfilms on the learning of golf. An experimental group learned golf with the aid of explanation, demonstration, and slow-motion loopfilm, whereas the control group learned the skill with the aid of explanation and demonstration. His findings indicated no significant changes between groups.

In a study on the effect of training with motion pictures versus flash cards upon football play recognition, Londeree (17) divided twenty-eight boys into two groups, equated on intelligence. He then trained them for play recognition from defensive end position in football. It was determined that motion picture training resulted in shorter play recognition times than flash cards for defensive ends.

Three studies reported administering an attitude inventory preliminary to instruction and following

instruction. Janes (12) investigated the attitudes **of freshmen and** sophomore college students toward physical education. She found that both sophomores and freshmen **held favorable** attitudes toward physical education. Freshmen students enrolled in badminton tended to have **a more** favorable attitude toward physical education than those students enrolled in basketball. It was also reported that the sophomore students enrolled in both archery and volleyball showed little or no change in attitudes toward physical education,

Alexander (1) used the Kneer Attitude Inventory to determine the attitude of freshmen and sophomore women at Sam Houston State College. She found that a majority of the students enrolled in physical education activity classes held a favorable attitude toward physical education. Both freshmen and sophomores showed a significant, positive change during the fall semester.

A study of the evaluation of a basic skill curriculum for women students of low motor ability was made at the University of Washington by Broer. (6) The Wear Inventory was the instrument used. Findings were that students enrolled in a basic physical education course made significant improvement in attitudes following three years of physical education. Students who were not enrolled in a basic physical education course did not make significant gains in attitudes.

Summary

Thurstone and Likert's techniques of scale construction were most frequently used, and attitude inventories have been developed by Carr, Kappes, Kneer, McCue, McGee, Dexter, and Wear. Studies of attitudes toward physical education were made by Anderson, Moyer, Mitchem, Bell, Vincent, Janes and Alexander, The effects of motion pictures on attitude were studied by Anderson and Albeck, Brovm and Messersmith, Peterson and Thurstone, Lockhart, Nelson, and Londeree, The effects of instruction on attitude were studied by Alexander, Broer, and Janes,

Studies have been reviewed concerning attitudes toward physical education and the effects of instruction and motion pictures on attitude. However, no studies have been reported which measure the relative influence of coaching and coaching basketball with motion picture study on the attitudes of girls toward basketball.

CHAPTER III

METHODS AND PROCEDURES

This chapter will contain a description of the methods and procedures used to carry out the purposes of the study. To achieve the purposes of the study, it was necessary to select subjects, to modify an existing attitude scale, to make three periodic assessments of attitude, and to apply appropriate statistical techniques to answer the questions formulated in the statement of the problem.

Selection of Subjects

The subjects selected for this study were 24 female basketball players enrolled in Grandfalls-Royalty School, Grandfalls, Texas, as of September 1, 1967. Subjects were members of two varsity basketball teams. Twelve girls, aged eight to ten years, constituted the elementary basketball team. The varsity junior high school basketball team was composed of twelve players, aged eleven to thirteen years. The subjects were selected by their coach on the basis of their skills and ability to work with their teammates.

Selection of Attitude Inventory

The criteria for selection of the Attitude Inventory were that it had to be objective, scored and simple

to administer. The inventory had to be a valid measure of attitude. Seven inventories were reported in the literature. They were the Wear Inventory, the Kappes Inventory, Carr Inventory, Kneer Inventory, McCue Inventory, McGee Inventory, and the Dexter Behavior-Attitude Inventory. While all seven inventories met the criteria, the Dexter Inventory was chosen because:

(1) The Dexter Behavior-Attitude Inventory was recommended for use with high school level,

(2) The Dexter Behavior-Attitude Inventory was readily available for duplication-

(3) The Dexter Behavior-Attitude Inventory was short and additions could easily be made which applied specifically to concepts of basketball.

(4) The V/ear Inventory was designed for male subjects of college level,

(5) The Carr Attitude Inventory required dichotomous responses of either "agree" or "disagree", hence, did not allow for varying degrees of response,

(6) The Kappes Inventory contained 84 statements which were adapted for college women.

(7) McCue's Inventory was designed for high school and college males,

(8) McGee's Inventory was designed to be used by parents, teachers and school administrators.

Procedure for Modifying Dexter Rg.
havior-Attitude Inventory

Twenty-eight statements which applied specifically to concepts of basketball were taken from Basketball for the Player, the Fan, and the Coach, by Red Auerback (4). A jury of four graduate students majoring in physical education and four basketball coaches v/ere requested to evaluate the statements on concepts of basketball. The judges rated each statement as I - indispensable, E - essential, D - desirable, or U - undesirable. Each statement had four choices; always, often, seldom, and never. The judges were requested to assign a weight of four points to the most desirable response and weights of three, two, and one on the basis of declining rank.

Following the evaluation of statements by the judges, selection of statements was made. If two-thirds or more of the judges rated the statement indispensable, essential or desirable it was retained. If the judges ratings resulted in a tie between responses, the statement was eliminated from further consideration.

Two of the statements were eliminated; therefore, twenty-six statements were added to the Dexter Behavior-Attitude Inventory, In the modified form four statements v/ere stated negatively so that checking never indicated a positive attitude. In order to make the scoring of the negatively worded statements consistent v/ith the positively

worded statements, the scoring was reversed. The modified inventory contained one statement in which the best answer was often. In this case often was given a scale value of four. Thus, favorable attitudes toward basketball were indicated by high scale values, and unfavorable attitudes were indicated by low scale values, regardless of the positive or negative nature of the statement.

The vocabulary of the Modified Dexter Behavior-Attitude Inventory was made suitable for junior high and elementary by use of the Teacher's Word Book of 30,000 Words, by Thorndike and Lorge (25). Words on the Inventory were classified according to grade level. As a result two attitude inventories were developed. The elementary and junior high inventories were similar; however, several words were changed to suit the grade level of the subjects.

In a pilot study, the inventories were administered to junior high and elementary physical education classes. Based on comments, questions and discussion with the physical education classes, additions, corrections and changes were made. In their final form, the junior high and elementary inventories contained 59 and 48 statements respectively. The inventories evaluated attitudes in the areas of self-direction, social adjustment, participation in basketball, care of equipment and facilities, personal attractiveness, and concepts of basketball. The two

Modified Dexter Behavior-Attitude Inventories appear in **Appendix A,**

Collection of Pre-Experimental Data

The Modified Dexter Behavior-Attitude Inventories **were** administered to **12** students at each of two levels; elementary and junior high school, on October 19, the seventh week of the 1967 fall semester. Data obtained **can** be found in Appendix B,

Procedure for Filming;

On November 21 sixteen millimeter black and white films were made of the junior high school team playing in competition with the Balmorhea junior high school team. Additional film of the junior high students was made during the Grandfalls Junior High-Iraan Junior High game ' November 27, 1967. The elementary students were assigned to a team and were filmed on November twenty first while participating in an intra-squad game.

Collection of Intermediate Data

The Modified Behavior-Attitude Inventory was administered for the second time following three weeks of basketball coaching and prior to any study of the motion pictures. The elementary and junior high students took the inventory November 27.

Film Showing and Study

Following the second administration of the Inventory, game films were spliced and each girl in elementary and junior high school saw herself in different basketball game situations three times each week from November 27 to December 20 for a period of 5-15 minutes each practice day. The sections shown were: (1) offensive maneuvers by guards, (2) offensive maneuvers by forwards, (3) jump ball situations, (4) free throw situations, (5) forward's defense against guards, (6) bringing ball to offensive end of court, (7) defense on out of bounds plays, (8) rebounding, (9) inbounds plays and (10) the film in its entirety.

Collection of Post Experimental Data

Following the use of motion picture study during practice session for three weeks, on December 20, 1967, the Modified Dexter Behavior-Attitude Inventory was administered for the third time to each of the subjects.

Statistical Treatment of Data

To determine if changes in attitude took place as a result of coaching, coaching with motion picture study, a t test for difference between means was made. The t tests were made between the pre-experimental data and intermediate data, and the pre-experimental data and post-experimental data.

All tests were made under the null hypothesis which states that no differences between means exist. The ,05 level was set as the level of rejection for the null hypothesis.

CHAPTER IV

FINDINGS AND INTERPRETATIONS

Data were obtained from elementary and junior high school girl basketball players on the Modified Dexter Behavior-Attitude Inventory. Pre-test data were obtained the seventh week of school in the fall semester of 1967. Intermediate data were obtained approximately three weeks **later**. Post test data were obtained December 20, 1967, approximately three weeks after the intermediate data were collected.

The means and standard deviations for the administrations of the Modified Dexter Behavior-Attitude Inventory are listed in Table I,

TABLE I
MEANS AND STANDARD DEVIATIONS OF THE
MODIFIED DEXTER BEHAVIOR-
ATTITUDE INVENTORY

Groups	1st Adm.		2nd Adm.		3rd Adm.	
	I	S.D.	X	S>D.	X	S.D.
^Elementary (n « 12)	133.66	16.15	139.58	14.76	146.00	12.97
*^'Jr. High (n = 12)	171.17	9.70	174.83	11.05	169.83	13.75

* Perfect Score 192

** Perfect Score 236

Analysis of Data for Elementary Level

To answer the questions, what attitudes were held prior to basketball season; did a change in attitude occur following three weeks of coaching in basketball; would attitudes of players be altered by coaching with motion picture study; t tests of significance between means were made. Tests were made under the null hypothesis that there was no difference between means. The level of rejection for the null hypothesis was set at .05,

The t values computed between means for elementary players are shown in Table II,

TABLE II

MEANS AND t VALUES FOR THE MODIFIED DEXTER
BEHAVIOR-ATTITUDE INVENTORY

Elementary Basketball Players		
133.66 \bar{x}_1	139.58 \bar{x}_2	1.41
133.66 \bar{x}	146.00 \bar{x}	2.51*

*Table value required for significance at the .05 level is 2.20.
N = 12.

In Table II the subscript one denotes the mean of the first administration of the Modified Dexter Behavior-Attitude Inventory. Subscripts two and three refer to the means of the second and third administrations respectively.

A mean of 133.66 was obtained on the Modified Behavior-Attitude Inventory prior to basketball season. A score of 192 points was possible; therefore the elementary subjects held a favorable attitude toward basketball at the beginning of the study.

A t value of 1.41 was obtained between the means of attitudes prior to basketball season and following three weeks of coaching. The Table value required for significance at .05 was 2,20, Therefore, the null hypothesis that there was no change in attitude as a result of coaching was not rejected. The t value obtained between the mean prior to basketball season and the post-experimental mean was 2.51. The t value of 2.51 exceeded the table value of 2.20 required for significance at .05. Consequently, the null hypothesis was rejected, and it can be stated that a significant change in attitude took place, and in a favorable direction-

Analysis of Data for Junior High Level

To answer the questions, v/hat attitudes were held prior to basketball season, did a change in attitude occur following three v/eeks of coaching in basketball; would attitudes of players be altered by coaching with motion picture study; t tests of significance v/ere made between means. Tests were made under the null hypothesis, and the level of rejection was set at .05.

The t values calculated between the means for **junior high players** are indicated in Table III.

TABLE III
MEANS AND t VALUES FOR THE MODIFIED
BEHAVIOR-ATTITUDE INVENTORY

Junior High Basketball Players		
171.17 \wedge_i	174.83 X_g	1.08
171.17 \backslash	169.83 X_3	.43

Table value required for significance at .05 level is 2.20,
N = 12.

In Table III the subscript one refers to the first administration of the Modified Dexter Behavior-Attitude Inventory. The second and third administrations are indicated by subscripts two and three respectively.

On the Modified Behavior-Attitude Inventory given prior to basketball season, a mean of 171.17 was computed. The highest score possible was 236; therefore, a favorable attitude was indicated.

The t value obtained between the mean prior to basketball season and the mean following three weeks of coaching was 1.08. Between the mean prior to basketball season and the mean following coaching with motion picture study, a t value of .43 was obtained. The Table value required for significance at the .05 level was 2.20,

Results showed that there was insufficient evidence to reject the null hypothesis, and that there was no relative influence of coaching and motion picture study on attitudes of junior high school basketball players.

CHAPTER V

SUMMARY, CONCLUSION AND DISCUSSION

The present study was conducted to determine the relative influence of coaching without motion picture study and coaching with motion picture study on the attitudes of girls toward basketball.

Specific questions asked v/ere:

(1) What attitudes characterized elementary and junior high school basketball players prior to basketball season?

(2) Did a change in attitude occur following three v/eeks of basketball coaching in elementary and junior high school players?

(3) V/ould attitudes of elementary and junior high school players be altered by coaching combined with motion picture study?

In order to ansv/er these questions the Dexter Behavior-Attitude Inventory was modified to measure attitudes toward basketball. In a pilot study the inventories were administered to senior high, junior high and elementary physical education classes. Based on comments, questions, and discussions with the physical education classes, additions, corrections, and changes v/ere made.

The modified inventory was administered to 12 basketball players in each of tv/o levels; elementary and junior

high school. The Inventory v/as'administered the first time **prior** to basketball season. Following three weeks of coaching, the Modified Decter Behavior-Attitude Inventories v/ere administered for the second time. Coaching with motion picture study was made for three weeks. On December 20, the Inventories were administered for the third time to the same subjects.

To answer the questions posed, a test between means was computed. Means and standard deviations were computed to show the relative distribution of scores.

Conclusions

Based on the results of the study, the following statements can be justified:

(1) The players participating in basketball at Grandfalls-Royalty School held favorable attitudes tov/ard basketball,

(2) A significant positive difference in attitude was found between the mean prior to coaching and the mean following coaching with motion picture study at the elementary level,

(3) There v/ere no significant differences found in attitude betv/een the mean prior to coaching and following coaching with motion picture study at the junior high school level.

Discussion

This study was undertaken to determine the relative influence of coaching v/ithout motion picture study and coaching with motion picture study on the attitudes of girls toward basketball at Grandfalls-Royalty School, Grandfalls, Texas. In many studies reported in the review of literature, an attitude inventory v/as used to evaluate programs or some specific aspect of programs of physical education. The majority of the studies reported that students held a favorable attitude toward physical education. Several studies reported the use of motion pictures in connection with the learning of a specific motor skill. Only two of the studies reported the effects of motion pictures on attitude. Brovm and Messersmith (7) measured the relative progress of freshman tumbling classes taught with and without the use of moving pictures at Southern Methodist University. No differences were found between teaching with motion pictures and teaching without motion pictures.

The findings of the junior high in the present study are in agreement with the findings of the freshman.tumbling classes at Southern Methodist University. A possible explanation for the findings was that the junior high players became tired of watching the same game film. Several players complained about being required to v/atch the film after the second session of film study. Some common complaints were, "Do we have to watch films again?" and "I

want to play basketball now." Possibly the junior high players would have enjoyed the motion picture study more if specific situations from several different game films had been used instead of the situations in only one game **film.**

Peterson and Thurstone (23) found that motion pictures have a definite lasting effect on social attitudes of children. The study further determined that, "the number of pictures pertaining to the same issue may have a cumulative effect on attitude." They found that the effect of motion pictures are greater on the younger children. The findings of the elementary players in the present study concur with the findings of Peterson and Thurstone. The elementary players were enthusiastic and eager about watching the film as well as being active in basketball.

Recommendations for Further Study

Several suggestions for further study evolved from the study. This study was limited to the comparison of the attitudes of girls toward basketball coaching without motion picture study and coaching with motion picture study. Subsequent study might be made of attitudes of girls toward basketball using several game films in the motion picture study.

The Modified Behavior-Attitude Inventory v/as divided into the following sub-topics; Self-direction. Social

Adjustment, Participation in Basketball, Care of Equipment, Personal Attractiveness, and Concepts of Basketball Skills.

It would be of interest to examine the pre-test data, intermediate data, and post-test data inventory scores by sub-groups.

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APPENDIX A

MODIFIED DEXTER BEHAVIOR-ATTITUDE INVENTORY
(Elementary Level)

Directions: Read each statement and think how it describes your behavior. Put a check in the column that tells most nearly what statement is right for you. You are asked to consider this test only from the standpoint of what you do during basketball practices and games.

Your answers will in no way affect your grade in this class. In fact, I am not interested in connecting any person with any paper—so please answer each statement as you actually feel about it. Please Answer Every Question.

Always	Often	Sometimes	Never	<u>Self-Direction</u>
4 _____	2 _____	2 _____	1 _____	1. I work hard in basketball skills when my teacher is not watching,
4 _____	2 _____	2 _____	1 _____	2. I practice to improve the basketball skills that I can not do very well,
4 _____	2 _____	2 _____	1 _____	3. I follow carefully directions that have been given to me in basketball,
4 _____	2 _____	2 _____	1 _____	4. I willingly accept helpful criticism from the teacher and try to correct my faults in basketball,
4 _____	2 _____	2 _____	1 _____	5. I play basketball as cheerfully as I can.
4 _____	2 _____	2 _____	1 _____	6. I think about how I did in basketball after each practice.

Always Often Sometimes Never

Social Adjustment

- !^ _____ 2 _____ 2 _____ 1__ 1, I am thoughtful of the rights of others.
 -^ _____ 2 _____ 2 _____ 1 2. I am courteous,
 -a _____ 2 _____ 2 _____ 1 3. I v/ork with members of my team when playing basketball.
 -!i _____ 2 _____ 2 _____ 1 4. I accept gladly responsibility assigned me by a leader.
 -i _____ 1 _____ 2 _____ 1 5. I accept disappointment v;ithout crying or getting angry.
 4 _____ 2 _____ 2 _____ 1 6, I expect from the team only the consideration v/hich I have earned.

Participation in Basketball

- 4 _____ 2 _____ 2 _____ 1 1. I get to practice and games on time,
 4 _____ 2 _____ 2 _____ 1 2. I dislike being absent from class.
 4 _____ 2 _____ 2 _____ 1 3. I ask to be excused from basketball practice and games only when it is necessary.
 4 _____ 2 _____ 2 _____ 1 4. I do the best I can in playing the game.
 4 _____ 2 _____ 2 _____ 1 5. I give full attention to all instructions that are given in practice by the coach.
 4 _____ 2 _____ 2 _____ 1 6. I encourage others with v/hom I am playing basketball.

Always Of en Sometimes Never

Care of Basketball
Equipment

1. I use basketball and jump ropes as I am instructed to do.
2. I return each piece of equipment to its proper place after using it.
3. I avoid making my dressing area dirty,
4. I arrange my clothes neatly in my basket,
5. I wear proper shoes when playing on the gym floor.

Personal Attractiveness

1. I am particular about the way I look in basketball practice and games.
2. I wear clean clothes in basketball games.
3. I wear clean clothes for each activity.

Concepts of Basketball
Skills

1. I concentrate on a spot or point on the goal or backboard where I want to shoot.
2. I bring the ball down below my waist when starting to shoot.
3. I follow through on my shots.
4. I arch the ball properly while shooting.

1

2

1

4

3

«

3

Always Often Sometimes Never

- | | | | | |
|----------|---|-----------------------------|-----|---|
| 4 | 3 | <u> 2 </u> <u> 1 </u> - | 5. | I catch the ball with my fingers relaxed. |
| 4 | 3 | <u> 2 </u> <u> 1 </u> | 6, | I keep my palms off the ball. |
| <i>k</i> | 3 | <u> 2 </u> <u> 1 </u> | 7. | I catch a high pass with my palms up. |
| 4 | 3 | <u> 2 </u> <u> 1 </u> | B, | I move toward the ball when receiving a pass, |
| 4 | 3 | <u> 2 </u> <u> 1 </u> | 9. | I know where the ball is when I am on the court playing, |
| 4 | 3 | <u> 2 </u> <u> 1 </u> | 10. | I use the simplest pass to complete a play. |
| 1 | 2 | <u> J </u> <u> 4 </u> | 11. | I pass to a player*s back. |
| 2 | 4 | <u> J </u> <u> 1 </u> | 12. | I fake before passing, |
| 4 | 3 | <u> 2 </u> <u> 1 </u> | 13. | I keep my palms off the ball when dribbling. |
| 4 | 3 | <u> 2 </u> <u> 1 </u> | 14. | I have a definite purpose when I dribble in a game or scrimmage. |
| 4 | 3 | <u> 2 </u> <u> 1 </u> | 15. | I keep my head up when I dribble. |
| 4 | 3 | <u> 2 </u> <u> 1 </u> | 16. | I keep my body in a crouched position and use my free hand for balance and protection when dribbling. |
| | | <u> 2 </u> <u> 1 </u> | 17. | My fakes are sharp and distinct. |
| | | <u> 2 </u> <u> 1 </u> | IB. | I have a definite purpose in mind v/hen I fake. |
| | | <u> J </u> <u> 4 </u> | 19. | I cross my feet while sliding on defense. |

Always Often Sometimes Never

2 _____ 2 _____ 1

20, I stay in position on defense, while playing on the forv/ard end or guard end,

J _____ 2 _____ 1

21. On rebounding I try to get between my opponent and the goal.

MODIFIED DEXTER'S BEHAVIOR-ATTITUDE INVENTORY
(Jr. High Level)

Directions: Read each statement and think how it describes your behavior. Put a check in the column that tells most nearly what statement is right for you. You are asked to consider this test only from the standpoint of what you do during basketball practices and games.

Your answers will in no way affect your grade in this class. In fact, I am not interested in connecting any person with any paper—so please answer every question.

Always	Often	Seldom	Never	<u>Self-Direction</u>
<i>Jt</i>	<u>2</u>	<u>2</u>	1	1. I work hard in basketball even when I am not being watched by my coach,
<i>u</i>	3	<u>2</u>	1	2. I practice to improve the basketball skills I use with least success.
<i>k</i>	3	<u>2</u>	1	3. I follow; carefully directions that have been given me in basketball.
<i>I^.</i>	3	<u>2</u>	1	4. I willingly accept helpful criticism and try to correct faults in basketball.
<i>k</i>	3	<u>2</u>	1	5. I play basketball as cheerfully as I can.
<i>k</i>	3	2	1	6. I evaluate my progress in each of my endeavors to learn basketball skills.
<u>Social Adjustment</u>				
4	3	2	1	1. I am respectful of the rights of others.
4	3	2	1	2. I am courteous.
4	3	2	1	3. I work with members of my team when playing basketball.

Always Often Seldom Never

4 2 2 1

4. I accept gladly responsibility assigned by a leader.

Jk 3 2 1

5. I accept disappointment in basketball without being disturbed to a great extent.

Jk 2 2 1

6. I expect from the members of my team only the consideration to which I am entitled.

Participation in Basketball

4 3 2 1

1. I am prompt in reporting to practices and games.

4 3 2 1

2. I dislike being absent from class,

4 3 2 1

3. I ask to be excused from basketball practices and games only when it is necessary.

4 3 2 1

4. I do the best I can when I am participating in basketball practices and games.

4 3 2 1

5. I give full attention to all instructions that are given in practice by the coach.

4 3 2 1

6. I encourage others with whom I am playing basketball.

Personal Attractiveness4 3 2 -1

1. I am particular about my personal appearance in basketball practice,

4 3 2 1

2. I am particular about my personal appearance in basketball games.

4 3 2 1

3. I wear clean clothes in basketball games.

4 3 2 1

4. I dress correctly for each basketball practice.

Always Often Seldom Never

-2 _____ 2 _____ 1

5. I keep my blouse tucked in during basketball games.

Care of Equipment

2 _____ 1

1. I use basketballs and jump ropes as I am instructed to do.

2 _____ 1

2. I return each piece of equipment to its proper place after using it.

2 _____ 1

3. I avoid making my dressing area untidy,

J _____ 2 _____ 1

4. I arrange my clothes neatly in my basket,

2 _____ 1

5. I wear the correct kind of shoes on the gym floor.

Concepts of Basketball Skills

4 3 2 1

1. I concentrate on a spot or point on the goal or backboard where I want to shoot,

1 2 3 4

2. I bring the ball down below my waist when starting to shoot.

4 3 2 1

3. I follow through on my shots.

4 3 2 1

4. I arch the ball properly while shooting.

4 3 2 1

5. I catch the ball with my fingers relaxed.

4 3 2 1

6. I keep my palm off the ball when shooting.

L _____ 2 _____ 1

7. I catch high passes with my palms up.

4 3 2 1

8. I move toward the ball when receiving a pass.

Always Often Seldom Never

- | 4 | 3 | | | |
|---|---|---|---|---|
| | | | | 9. I know where the ball is when I am on the court playing, |
| 1 | 2 | 3 | 4 | 10. I telegraph my passes, |
| 4 | 3 | 2 | 1 | 11. I use the simplest pass to complete the play. |
| 2 | 4 | 3 | 1 | 12. I fake before passing. |
| 1 | 2 | 3 | 4 | 13. I signal a teammate when I'm going to pass, |
| 1 | 2 | 3 | 4 | 14. I pass to a player's back. |
| 4 | 3 | 2 | 1 | 15. I keep my palms off the ball when dribbling. |
| 4 | 3 | 2 | 1 | 16. My fingers are spread when I dribble. |
| 4 | 3 | 2 | 1 | 17. I have a definite purpose when I dribble in a game or practice scrimmage. |
| 4 | 3 | 2 | 1 | IS. I keep my head up when I dribble, |
| 4 | 3 | 2 | 1 | 19. I keep my body in a crouched position and use my free hand for balance and protection when dribbling. |
| 4 | 3 | 2 | 1 | 20. My fakes are sharp and distinct. |
| 4 | 3 | 2 | 1 | 21. I have a definite purpose in mind when I fake. |
| 1 | 2 | 3 | 4 | 22. I cross my feet while sliding on defense. |
| 4 | 3 | 2 | 1 | 23. I stay in position on defense, while playing either on the forv/ard end or guard end. |

Always Often Seldom Never

- 2 _____ 2 _____ 1 24. On rebounding I try to get between my opponent and the goal.
- J _____ 2 _____ 1 25. As soon as my opponent picks up her dribble, I step in close and try to tie up the ball or deflect the pass.
- 2 _____ 2 _____ 1 26. I use short snappy passes when being pressed by the defense.
- =3 _____ 2 _____ 1 27. On defense, I don't reach in with an arm to stop the opponent. I move my body.
- J _____ 2 _____ 1 28. I go off the correct foot when shooting a lay-up shot.
- J _____ 2 _____ 1 29. I yell "switch" when trading players because of a screen, a loose player, etc.
- J _____ 2 _____ 1 30. I go up into the air as high as possible v/hen shooting a lay up shot.
- J _____ 2 _____ 1 31. I never give up on defense. If my girl gets by me, I hustle back into position as soon as possible.

APPENDIX B

MODIFIED BEHAVIOR-ATTITUDE INVENTORY

Raw Scores, Elementary

Subject	1st Adm,	2nd Adm,	3rd Adm,
1.	123	120	133
2.	149	133	147
3.	143	136	149
4.	134	133	135
5.	122	152	152
6.	113	141	145
7.	112	139	157
a.	115	112	124
9.	140	145	160
10.	163	171	157
11.	133	134	127
12.	147	154	166

MODIFIED BEHAVIOR-ATTITUDE INVENTORY

Raw Scores, Junior High

Subject	1st Adm.	2nd Adm.	3rd Adm.
1.	163	163	154
2.	174	190	192
3.	133	137	190
4.	170	179	175
5.	152	163	159
6.	167	170	159
7.	130	173	135
3.	173	165	167
9.	171	133	176
10.	167	190	173
11.	161	159	143
12.	133	171	160

