



A STUDY OF THE LEISURE TIME ACTIVITIES OF THE BOYS  
OF BIG SPRING HIGH SCHOOL DURING THE SCHOOL  
YEAR 1948-1949 AND THE SUMMER OF 1949  
WITH RECOMMENDATIONS FOR THE FUTURE  
DEVELOPMENT OF THE HIGH SCHOOL  
PHYSICAL EDUCATION AND  
THE CITY RECREATION  
PROGRAM

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PROGRAM  
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## CHAPTER I

### INTRODUCTION

The increasing emphasis in recent years on the importance of the nation's educational program of preparing individuals for wise use of leisure cannot be ignored by those who are responsible to some degree for the guidance of youth. "The training of the youth and adult alike for constructive use of their spare time is surely one of the major objectives of modern education. Recreation and education are parallel needs."<sup>1</sup> A study of literature shows that training for leisure time activities should begin early in life.

The leisure time activities in the field of physical education have particular significance because of the fact that they serve a dual purpose - A leisure time activity and a body maintaining activity. The casual observer will realize that an adult will participate in the activities in which he became skilled in childhood. He became skilled in childhood on this interpretative level where he learned the meaning of muscular and organic levels.<sup>2</sup>

In our modern world there seems to be a trend to overlook the interests and needs of youth today. Educators and recreation leaders appear to depend too much on curriculums that do not meet the needs of a given locale.

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<sup>1</sup> H. M. Ball, Youth Tell Their Story, Foreword.

<sup>2</sup> J. B. Nash, The Administration of Physical Education, pp. 125-126.

The curriculum should be created to fit the needs of adolescent boys and girls, enabling them to explore their interests and abilities and bringing them into contact with influences that give direction and purpose to their lives.<sup>3</sup>

Because of this trend the investigator decided to make a study of the leisure time activities of the boys of Big Spring High School, as indicated by their participation, with recommendations for the curriculum of the physical education department and to the recreation program of the city of Big Spring.

#### Purposes of the Study

The purposes of this study were: (1) to determine by grade groups how the boys of Big Spring High School spend their leisure time, (2) to gain information for use in broadening the instruction in physical education and recreation, (3) to have information for possible recommendations for the physical education department and city recreation program.

#### Definition of Terms

The terminology used in this study will correspond to that found in the field of education and in similar surveys. The following definitions will be used:

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<sup>3</sup>J. W. Crabtree, "Creating a Curriculum for Adolescent Youth", Research Bulletin of the National Education Association, VI, (January, 1928), 4.

1. High school students are those students in the ninth, tenth, eleventh, and twelfth grades.<sup>4</sup>

2. Experts, according to Webster, are those having special skill in a field of action.<sup>5</sup>

3. Leisure time, as used in this study, is that time free from employment, study, or mandatory duties.

#### Limitations of the Study

This study was limited to the leisure time activities of the boys of Big Spring High School during the school year 1948-1949 and the summer months, June, July, and August of 1949.

#### Source of Data

The data for this study were accumulated from the following sources: (1) a questionnaire designed to gather information concerning the leisure time activities in which the boys participated, (2) personal observation, (3) records of the city of Big Spring, (4) and similar studies.

#### Treatment of Data

The data were tabulated and handled under the following divisions: (1) student participation (2) whether facilities used were home, public or commercial, (3) the number of hours spent by the student in participation of each activity, and (4) the favorite activities listed by the student.

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<sup>4</sup>Big Spring High School is an 8-4 school.

<sup>5</sup>

Noah Webster, New American Dictionary, p. 339.



### Procedure and Method

The questionnaire was used in the acquisition of the data for this study. Experts approve of the questionnaire's usefulness in research studies. "It is an important instrument in the normative type of research."<sup>6</sup> L. B. Koos found that out of 531 printed studies about one-fourth used questionnaires.<sup>7</sup> Koos also lists the following points for justification of the use of the questionnaire: (1) the questionnaire reaches a large number of people, (2) the questionnaire is objective and impersonal in nature.<sup>8</sup>

The investigator studied questionnaires used in similar studies before constructing the questionnaire. Experts in the field of leisure time activities contributed advice in the construction of the questionnaire. The questionnaire was then constructed and given to one class of students. The difficulties that the students encountered were then used as guides in the revision of the questionnaire. After all revisions had been made the questionnaire was then administered to the physical education classes for boys.

The investigator explained to each class the probable values to be received from the questionnaire. He also

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<sup>6</sup> Carter Good, A. S. Barr, and Douglas Scates, Methodology of Educational Research, p. 325.

<sup>7</sup> L. B. Koos, The Questionnaire in Education, pp. 6-13.

<sup>8</sup> Ibid., pp. 159-166.

explained that the boy's name did not have to appear on the questionnaire and that there would be no personal check made of their work. The investigator also gave each group his promise that a copy of the results of the completed study would be made available in the school library for each student to see.

#### Related Studies

Jess E. Cearley made a study concerning interests of boys with adult supervision and without supervision to be used in the preparation of a physical education curriculum for the junior high schools of Amarillo.<sup>9</sup>

Mildred Mitchell Ratliff made a study surveying the leisure time activities of the girls of Big Spring High School. The purpose of this study was to determine whether the public school was preparing the students for the wise use of leisure time.<sup>10</sup>

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<sup>9</sup>Jess E. Cearley, "To Determine the Physical Activity Interests of the Junior High School Boys of Amarillo, Texas to be used as a Basis for a Physical Education Program," Unpublished Master's thesis, Department of Physical Education, North Texas State College, 1940.

<sup>10</sup>Mildred Mitchell Ratliff, "A Survey of the Leisure Time Activities of Senior High School Girls of Big Spring, Texas," Unpublished Master's thesis, Department of Physical Education, North Texas State College, 1941.

## CHAPTER II

### DESCRIPTION OF FACILITIES

The city of Big Spring is located below the Staked Plains and the Trans Pecos Region of West Texas. It has progressed from a large spring, which Captain Marcy of the United States Army located in 1849, into a transportation, oil, and retail distribution center of seventeen thousand people. It's first growth is attributed to the ranches of the area. In the 1880's the Texas and Pacific Railroads pushed westward, using Big Spring as a major stop and established railroad repair shops. Much of the present population's income is derived from this source. To spur further population increases, came the oil and gas discoveries in the area, which have continued to the present time. Two of the nation's highways cross at Big Spring, United States 80 and United States 67.

As this increase of population has taken place there have also been increases of leisure time. Has Big Spring progressed along with the population increases by offering worthwhile leisure time activities for the boys of high school age?

We think only as we face new problems. Too much waking leisure and sleeping leisure dulls the mind.

Our cities have produced thousands of robots who are mere creatures of the entertainment elements of their environment.<sup>1</sup>

An idle mind is the devil's workshop. That is one of the faults of the youth today, too much time with nothing to do and nothing to do it with. During World War II, with many fathers having been called to serve their country and to be away from home, the necessity for many mothers to go to work in war plants to help supplement the father's pay, our crime by youth has increased.<sup>2</sup>

By personal observation and inquiry, the investigator found Big Spring to have the following facilities. At the high school the investigator found a gymnasium equipped for volleyball and basketball. A cement slab, located between the gymnasium and the main building, was equipped with one basketball court and one volleyball court. South of the gymnasium, a playing field of gravel and rock, which was used by both boys and girls of the high school and the eighth grade. This field was equipped with two softball diamonds, and was also used for touch football. Two asphalt tennis courts were located six blocks east of the high school. The Football and baseball fields were open only for the athletic teams practice and games. The football field was used during June, July and August for the playing of pass tag, which was included in the summer recreation program.

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<sup>1</sup>Nash, op. cit., p. 126.

<sup>2</sup>Tom Clark, "Who's to Blame for Juvenile Crime?" The Rotarian Magazine, LXVIII (April, 1946), p. 21.

The City Park, one and three-tenths miles south of Big Spring, included an area of 268.67 acres. This site was purchased in 1935 for four thousand dollars. W.P.A. labor was used to develop this park. It included an open swimming pool; a nine hole golf course; a lighted softball court with rock bleachers; four lighted asphalt tennis courts; an amphitheater, which seats twenty-five hundred; twenty-three swings; twelve seesaws; eight barbecue pits; twenty small picnic tables; two large banquet tables; one merry-go-round; four lighted croquet courts; a thirty-three by twenty-one foot concrete dance slab; four captive monkeys; and a fish pond. The bermuda lawns and flower beds were well kept and the park was plentifully supplied with large shade trees. The city furnished free lights for the tennis courts, croquet courts, and softball diamond. A fee was charged for the use of the swimming pool and golf course.<sup>3</sup>

Another park, the Salvation Army Park, was located in the west section of Big Spring. There were two softball diamonds, one outdoor basketball court, five seesaws, seven swings, and a chin bar of three heights. The grounds and equipment were badly in need of maintance.

West Side Park was located west of the Salvation Army Park. It was purchased by the Big Spring American Business

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<sup>3</sup>Records of the City of Big Spring.

Club, June 30, 1938.<sup>4</sup> The park had an available playground area, but it had not been developed.

Scenic Drive Park was first purchased by the city, December 11, 1934, for eight thousand dollars, and sold immediately to the state for ten dollars. The state then developed this area as a state park. This park was used mainly as a picturesque drive. There were three swings, one slide, and a partially enclosed rock building used for picnics and dancing.

Moss Creek Lake, part of the city's water system was opened for fishing a portion of the year.

Big Spring had two radio stations, four theaters, a bowling alley, and a professional baseball club.

The American Legion offered baseball to the boys during the summer months. The boys, to be eligible to play, must not have reached their eighteenth year. This program was sponsored by private citizens.

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<sup>4</sup>Ibid.

## CHAPTER III

### FINDINGS OF THE STUDY

In this study 168 senior high school boys of Big Spring, Texas were studied. The questionnaires were tabulated to show the age-grade distribution.

Table 1 shows the age-grade distribution of boys in the four grades of the senior high school of Big Spring, Texas, for the school year 1948-1949. Of the fifty-seven boys in the ninth grade, one boy was thirteen years of age; twenty-five, fourteen years of age; twenty-five, fifteen years of age; three, sixteen years of age; two seventeen years of age; and one, eighteen years of age.

TABLE 1

THE AGE-GRADE DISTRIBUTION OF THE BOYS IN THE SENIOR  
HIGH SCHOOL, BIG SPRING, TEXAS, 1948-49

Age	Grade Placement				Total
	Ninth	Tenth	Eleventh	Twelfth	
13	1	...	...	...	1
14	25	8	...	...	33
15	25	18	6	1	50
16	3	8	21	12	44
17	2	2	9	16	29
18	1	1	2	8	10
19	...	...	...	1	1
Total	57	37	38	36	168

The tenth grade consisted of eight boys, fourteen years of age; eighteen, fifteen years of age; eight, sixteen years of age; two, seventeen years of age; and one, eighteen years of age. The total number of boys in the tenth grade was thirty-seven.

Of the thirty-eight boys in the eleventh grade, six were fifteen years of age; twenty-one, sixteen years of age; nine, seventeen years of age; and two, eighteen years of age.

The twelfth grade consisted of thirty-six boys, one, fifteen years of age; twelve, sixteen years of age; sixteen, seventeen years of age; six, eighteen years of age; and one, nineteen years of age.

Table 2 shows the activity interests of ninth-grade boys as shown by student participation, the average number of hours spent participating in each activity, and the number of boys who learned each activity in school.

The activities listed in order of the number of boys who participated in them are: attending moving picture, forty-eight; listening to the radio, forty-three; swimming, forty-two; observing football, thirty-nine; touch football, baseball, and softball, thirty-seven; bicycling, thirty-five; observing baseball and observing basketball, thirty-three; observing rodeos, twenty-eight; reading, twenty-seven, playing marble machines, twenty-five; riflery, twenty-four; church meetings, twenty-three; auto driving, twenty-two;



scouting, twenty-one; attending circuses, twenty; horseback riding, yo-yoing, and woodworking, nineteen; tops, table tennis, and parties, eighteen; picnics and attending fairs, seventeen; ping pong, and observing volleyball, fifteen; skating, tumbling, volleyball, and wrestling, thirteen; boxing, kiting and keep away, twelve; bowling and cooking, eleven; golf, washers, painting, and club meetings, ten; marbles and gardening, nine; archery, croquet, soccer, and photography, eight; square dancing and tennis, seven; social dancing, leap frog, observing tennis, and observing track, six; jumping rope and track, four; and badminton, canoeing, handball, and speedball, three.

The activities listed in order of the per cent of boys who participated in them are: attending moving pictures, 83 per cent; listening to the radio, 74.4 per cent; swimming, 73.7 per cent; observing football, 67.5 per cent; touch football, baseball, and softball, 69.9 per cent; bicycling, 61.4 per cent; observing baseball and observing basketball, 57.1 per cent; observing rodeos, 47.4 per cent; reading, 46.7 per cent; playing marble machines, 43 per cent; riflery, 42.1 per cent; church meetings, 39.8 per cent; auto driving, 38 per cent; scouting, 36.9 per cent; attending circuses, 35 per cent; horseback riding, yo-yoing, and woodworking, 33.3 per cent; tops, table tennis, and parties, 31.8 per cent; picnics and attending fairs, 29.4 per cent; ping pong

and observing volleyball, 26.3 per cent; skating, tumbling, volleyball, and wrestling, 21.8 per cent; boxing, kiting, and keep away, 21 per cent; bowling and cooking, 19.3 per cent; golf, washers, painting, and club meetings, 17.5 per cent; marbles and gardening, 15.3 per cent; archery, croquet, soccer, and photography, 14.2 per cent; square dancing and tennis, 12.3 per cent; social dancing, leap frog, observing tennis, and observing track 10.6 per cent; jumping rope and track, 7 per cent; and badminton, canoeing, handball and speedball, 5.3 per cent.

Social dancing had the highest average number of hours per week, this number being three. Gardening was second with two and eight-tenths as the average number of hours per week. Horseback riding and listening to the radio were third with two and six-tenths as an average number of hours per week. Croquet and observing track each had two and five-tenths as the average number of hours per week. Swimming, scouting, tumbling, tops, and auto driving, two and four-tenths; canoeing, observing baseball, and attending moving pictures, two and three-tenths; bicycling, badminton, and softball, two and one-tenth; archery, speedball, observing football, and observing basketball, two; kiting and reading, one and nine-tenths; golf, volleyball, woodworking, church meetings, attending fairs, and attending circuses, one and eight-tenths; riflery and table tennis, one and seven-tenths;

ping pong and rodeos, one and five-tenths; tennis, photography, parties and picnics, one and four-tenths; skating, touch football, track washers, and painting, one and three-tenths; square dancing and yo-yoing, one and two-tenths; soccer, leap frog, and playing marble machines, one and one-tenth; bowling, baseball, handball, jumping rope, and wrestling, one; volleyball, nine-tenths; boxing, cooking, and club meetings, seven-tenths; keep away, six-tenths; and marbles and observing tennis each had five-tenths as the average number of hours per week.

Table 2 also indicates the activities which were learned in school. Out of the fifty-nine activities listed, the boys reported having learned thirty-three in school. They were ranked according to the number who reported learning them in school. They were as follows: touch football, seventeen; softball, fourteen; baseball and observing basketball, thirteen; observing football, ten; observing baseball, nine; observing volleyball, eight; reading, seven; swimming, six; tumbling and volleyball, five; woodworking, auto driving, and church meetings, four; scouting and table tennis, three, wrestling and ping pong, two; archery, badminton, boxing, social dancing, square dancing, kiting, tennis, soccer, painting, listening to the radio, club meetings, parties, observing track, observing tennis, and moving pictures, one.

TABLE 2

THE NUMBER AND PER CENT OF FIFTY-SEVEN NINTH-GRADE BOYS  
PARTICIPATING IN LEISURE TIME ACTIVITIES, THE  
AVERAGE NUMBER OF HOURS OF PARTICIPATION  
IN EACH ACTIVITY, AND THE NUMBER OF  
BOYS WHO LEARNED THE ACTIVITY  
IN SCHOOL

Activities	Number of boys par- ticipating in the activity	Per cent of boys participating in the ac- tivity	Average number of hours of participa- tion per week in each ac- tivity	Number of boys who learned the ac- tivity in school
Bowling	11	19.3	1.0	...
Archery	8	14.2	2.0	1
Bicycling	35	51.4	2.1	...
Baseball	37	64.9	1.0	13
Badminton	3	5.3	2.1	1
Boxing	12	21.0	.7	1
Croquet	8	14.2	2.5	...
Canoeing	3	5.3	2.3	...
Social Dancing	6	10.6	3.0	1
Square Dancing	7	12.3	1.2	1
Golf	10	17.5	1.8	...
Handball	3	5.3	1.0	...
Horseback riding	19	33.3	2.6	...
Jumping rope	4	7.0	1.0	...
Kiting	12	21.0	1.0	...
Riflery	24	42.1	1.7	...
Tennis	7	12.3	1.4	1
Speedball	3	5.3	2.0	...
Softball	37	64.9	2.1	14
Soccer	8	14.2	1.1	1
Swimming	42	73.7	2.4	6
Skating	13	22.8	1.3	...
Scouting	21	36.9	2.4	3
Touch Football	37	64.9	1.3	17
Tumbling	13	22.8	2.4	5
Track	4	7.0	1.3	...
Tops	18	31.8	2.4	...
Volleyball	13	22.8	1.8	5
Washers	10	17.5	1.3	...
Wrestling	13	22.8	1.0	2

TABLE 2--Continued

Activities	Number of boys participating in the activity	Per cent of boys participating in the activity	Average number of hours of participation per week in each activity	Number of boys who learned the activity in school
Yo-yoing	19	33.3	1.2	...
Keep away	12	21.0	.6	...
Leap frog	6	10.6	1.1	...
Marbles	9	15.3	.5	...
Ping pong	15	26.3	1.5	2
Table Tennis	18	31.8	1.7	3
Painting	10	17.5	1.3	1
Woodworking	19	33.3	1.8	4
Cooking	11	19.3	.7	...
Gardening	9	15.3	2.8	...
Listening to the radio	43	74.4	2.6	1
Reading	27	46.7	1.9	7
Auto Driving	22	38.0	2.4	4
Club Meetings	10	17.5	.7	1
Church Meetings	23	39.8	1.8	4
Photography	8	14.2	1.4	...
Parties	18	31.8	1.4	1
Playing marble machines	25	43.0	1.1	...
Picnics	17	29.4	1.4	...
Attending fairs	17	29.4	1.8	...
Attending circuses	20	35.0	1.8	...
Observing				
Football	39	67.5	2.0	10
Baseball	33	57.1	2.3	9
Basketball	33	57.1	2.0	13
Track	6	10.6	2.5	1
Volleyball	15	26.3	.9	8
Tennis	6	10.6	.5	1
Rodeos	28	47.4	1.5	...
Moving Pictures	48	83.0	2.3	1

Table 3 indicates the activity interests of tenth-grade boys as shown by student's participation, the average number of hours spent participating in each activity, and the number of boys who learned each activity in school. The activities listed in order of the number of boys who participated in them are: attending moving pictures, listening to the radio, and swimming, thirty-four; observing football, thirty-three; touch football, thirty-two; observing baseball, thirty; baseball, observing basketball, and observing rodeos, twenty-nine; riflery and auto driving, twenty-one; bicycling, softball, and reading, twenty; church meetings, playing marble machines, observing track, and observing volleyball, nineteen; attending fairs and circuses, eighteen; picnics, sixteen; volleyball, fifteen; social dancing, tumbling, wrestling, and ping pong, fourteen; boxing, yo-yoing, and observing tennis, thirteen; scouting, club meetings, and parties, twelve; washers, eleven; tennis, skating, table tennis, and photography, ten; archery, golf, keep away, and marbles, nine; tops and cooking, eight; square dancing, croquet, kiting, track, woodworking, and gardening, seven; bowling, six; leap frog, five; horseback riding, four; canoeing, handball, and painting, three; badminton, speedball, and soccer, two; and jumping rope, one.

TABLE 3

THE NUMBER AND PER CENT OF THIRTY-SEVEN TENTH-GRADE BOYS PARTICIPATING IN LEISURE TIME ACTIVITIES, THE AVERAGE NUMBER OF HOURS OF PARTICIPATION IN EACH ACTIVITY, AND THE NUMBER OF BOYS WHO LEARNED THE ACTIVITY IN SCHOOL

Activities	Number of boys participating in the activity	Per cent of boys participating in the activity	Average number of hours of participation per week in each activity	Number of boys who learned the activity in school
Bowling	6	14.5	2.3	4
Archery	9	21.8	.4	...
Bicycling	20	48.6	2.0	...
Baseball	29	69.4	1.6	11
Badminton	2	4.8	.5	...
Boxing	13	31.5	.6	6
Croquet	7	17.0	1.4	...
Canoeing	3	7.3	1.4	...
Social Dancing	14	34.0	2.0	1
Square Dancing	7	17.0	1.3	1
Golf	9	21.8	.8	1
Handball	3	7.3	1.7	1
Horseback riding	4	9.7	1.8	...
Jumping rope	1	2.4	...	...
Kiting	7	17.0	4.0	...
Riflery	21	51.0	2.0	...
Tennis	10	24.3	1.0	1
Speedball	2	4.8	2.1	1
Softball	20	48.6	1.0	8
Soccer	2	4.8	2.5	...
Swimming	34	81.6	2.0	...
Skating	10	24.3	.6	...
Scouting	12	29.1	1.4	...
Touch football	32	77.7	1.9	15
Tumbling	14	34.0	1.7	11
Track	7	17.0	2.4	4
Tops	8	19.4	.5	...
Volleyball	15	36.4	1.0	9
Washers	11	26.7	.3	...
Wrestling	14	34.0	1.0	7
Yo-yoing	13	31.5	.8	...
Keep away	9	21.8	.6	...

TABLE 3--Continued

Activities	Number of boys participating in the activity	Per cent of boys participating in the activity	Average number of hours of participation per week in each activity	Number of boys who learned the activity in school
Leap frog	5	12.1	.6	...
Marbles	9	21.8	.4	...
Ping pong	14	34.0	.8	...
Table tennis	10	24.3	.9	...
Painting	3	7.3	1.6	...
Woodworking	7	17.0	1.9	2
Cooking	8	19.4	.6	1
Gardening	7	17.0	2.0	1
Listening to the radio	34	81.6	2.8	2
Reading	20	48.6	2.1	4
Auto driving	21	51.0	2.7	1
Club meetings	12	29.1	.8	1
Church meetings	19	46.1	2.0	...
Photography	10	24.3	1.0	...
Parties	12	29.1	1.3	1
Play marble machines	19	46.1	.7	...
Picnics	16	38.8	1.1	...
Attending fairs	18	43.7	1.1	1
Attending circuses	18	43.7	.7	1
Observing				
Football	33	80.1	1.6	9
Baseball	30	72.9	1.8	7
Basketball	20	69.4	1.8	10
Track	19	46.1	1.2	8
Volleyball	19	46.1	1.1	7
Tennis	13	31.5	1.1	5
Rodeos	29	69.4	1.8	1
Moving Pictures	34	81.6	1.9	3



The activities listed in order of the per cent of boys who participated in them are: attending moving pictures, listening to the radio, and swimming, 81.6 per cent; observing football, 80.1 per cent; touch football, 77.7 per cent; observing baseball, 72.9 per cent; baseball, observing basketball, and observing rodeos, 69.4 per cent; riflery and auto driving, 51 per cent; bicycling, softball, and reading, 48.6 per cent; church meetings, playing marble machines, observing track, and observing volleyball, 46.1 per cent; attending fairs and circuses, 43.7 per cent; picnics, 38.8 per cent; volleyball, 36.4 per cent; social dancing, tumbling, wrestling, and ping pong, 34 per cent; boxing, yo-yoing, and observing tennis, 31.5 per cent; scouting, club meetings, and parties, 29.1 per cent; washers, 26.7 per cent; tennis, skating, table tennis, and photography, 24.3 per cent; archery, golf, keep away, and marbles, 21.8 per cent; tops and cooking, 19.4 per cent; croquet, square dancing, kiting, track, woodworking, and gardening, 17 per cent; bowling, 14.5 per cent; leap frog, 12.1 per cent; horseback riding, 9.7 per cent; canoeing, handball, and painting, 7.3 per cent; badminton, speedball, and soccer, 4.8 per cent; and jumping rope, 2.4 per cent.

The average number of hours spent each week participating in each activity is also shown in Table 3. Kiting was listed first with four as the average number of hours spent each week;

listening to the radio, two and eight-tenths; auto driving, two and seven-tenths; soccer, two and five-tenths; track, two and four-tenths; bowling, two and three-tenths; reading and speedball, two and one-tenth; bicycling, social dancing, riflery, swimming, gardening, and church meetings, two; touch football, woodworking, and moving pictures, one and nine-tenths; rodeos, observing basketball, observing baseball, and horseback riding, one and eight-tenths; tumbling and handball, one and seven-tenths; baseball, painting, and observing football, one and six-tenths; croquet, canoeing, and scouting, one and four-tenths; parties and square dancing, one and three-tenths; observing track, one and two-tenths; observing tennis, observing volleyball, attending fairs, and picnics, one and one-tenth; tennis, softball, volleyball, wrestling, and photography, one; table tennis, nine-tenths; attending circuses and playing marble machines, seven-tenths; boxing, skating, keep away, leap frog, and cooking, six-tenths; and washers, three-tenths.

The tenth-grade boys indicated that they had learned in school thirty-three out of the fifty-nine activities listed. The activities the boys reported as having learned in school were as follows: touch football, fifteen; baseball and tumbling, eleven; observing basketball, ten; observing football and playing volleyball, nine; softball and observing track, eight; wrestling, observing baseball, and observing

volleyball, seven; boxing, six; observing tennis, five; bowling, track, and reading, four; attending moving pictures, three; woodworking and listening to the radio, two; and social dancing, square dancing, golf, handball, tennis, speedball, cooking, gardening, auto driving, club meetings parties, attending fairs, attending circuses, and rodeos; one.

Table 4 indicated the activity interests of eleventh-grade boys as shown by student's participation, the average number of hours spent participating in each activity, and the number of boys who learned the activity in school.

The activities listed in order of the number of boys who participated in them are: attending moving pictures, thirty-seven; observing football, thirty-six; swimming, thirty-three, listening to the radio and auto driving, thirty-one; touch football and observing basketball, thirty; observing rodeos, twenty-six; observing baseball, reading, and baseball, twenty-five; riflery and church meetings, twenty-four; playing marble machines, twenty-three; softball, parties, and observing track, eighteen; bicycling and attending circuses, seventeen; attending fairs and ping pong, sixteen; tumbling, track, and observing volleyball, thirteen; observing tennis, picnics, gardening, horseback riding, and golf, twelve; boxing, table tennis, and photography, eleven; bowling, ten; croquet, tennis, wrestling,

painting, and club meetings, nine; social dancing, keep away, and woodworking, eight; scouting and volleyball, seven; yo-yoing, leap frog, and marbles, six; archery, tops, washers, and cooking, five; canoeing, four; jumping rope, kiting, and skating, two; and speedball and soccer, one. None of the boys of the eleventh grade participated in badminton, handball or square dancing.

The activities listed in order of the per cent of boys who participated in them are: attending moving pictures, 98.4 per cent; observing football, 95.7 per cent; swimming, 87.7 per cent; listening to the radio and auto driving, 82.4 per cent; touch football and observing basketball, 79.8 per cent; observing rodeos, 68.9 per cent; observing baseball, reading, and baseball, 66.3 per cent; riflery and church meetings, 63.8 per cent; marble machines, 61.1 per cent; softball, parties, and observing track, 47.8 per cent; bicycling and attending circuses, 45 per cent; attending fairs and ping pong, 42.5 per cent; tumbling, track, and observing volleyball, 34.5 per cent; observing tennis, picnics, gardening, horseback riding, and golf, 31.9 per cent; boxing, table tennis, and photography, 29.2 per cent; bowling, 26.5 per cent; croquet, tennis, wrestling, painting, and club meetings, 23.9 per cent; social dancing, keep away, and woodworking, 21.2 per cent; scouting and volleyball, yo-yoing, leap frog, and marbles, 15.9 per cent; archery, tops, washers,

and cooking, 13.2 per cent; canoeing, 10.6 per cent; jumping rope, kiting, and skating, 5.3 per cent; and speedball and soccer, 2.6 per cent.

The average number of hours spent each week participating in each activity is also shown in Table 4. Skating was listed first with four as the average number of hours spent each week; table tennis, three and four-tenths; club meetings, three and three-tenths; gardening and social dancing, three; listening to the radio, two and nine-tenths; golf, two and eight-tenths; scouting, track, and painting, two and seven-tenths; auto driving, two and six-tenths; baseball and canoeing, two and five-tenths; bicycling and tops, two and four-tenths; movies, tennis, touch football, and tumbling, two and three-tenths; horseback riding and swimming, two and two-tenths; riflery and reading, two and one-tenth; picnics and parties, two; basketball, woodworking, church meetings, and observing football, one and nine-tenths; boxing, one and eight-tenths; bowling, one and seven-tenths; softball, wrestling, ping pong, and observing track, one and six-tenths; speedball and attending fairs, one and five-tenths; observing baseball, photography, and croquet, one and three-tenths; marbles, one and two-tenths; leap frog, attending circuses, and rodeos, one and one-tenth; observing tennis, yo-yoing, and soccer, one; observing volleyball, eight-tenths; playing volleyball, seven-tenths; playing marble machines, washers, kiting, and archery, six-tenths; jumping rope and keep away, five-tenths; and cooking, two-tenths.

TABLE 4

THE NUMBER AND PER CENT OF THIRTY-EIGHT ELEVENTH-GRADE  
BOYS PARTICIPATING IN LEISURE TIME ACTIVITIES, THE  
AVERAGE NUMBER OF HOURS OF PARTICIPATION IN  
EACH ACTIVITY, AND THE NUMBER OF BOYS WHO  
LEARNED THE ACTIVITY IN SCHOOL

Activities	Number of boys par- ticipating in the activity	Per cent of boys par- ticipating in the activity	Average number of hours of participa- tion per week in each ac- tivity	Number of boys who learned the ac- tivity in school
Bowling	10	26.5	1.7	...
Archery	5	13.2	.6	...
Bicycling	17	45.0	2.4	1
Baseball	25	71.5	2.5	11
Badminton	..	....	...	...
Boxing	11	29.2	1.8	5
Croquet	9	23.9	1.3	...
Canoeing	4	10.6	2.5	...
Social Dancing	8	21.2	3.0	1
Square Dancing	..	....	...	...
Golf	12	31.9	2.8	2
Handball	..	....	...	...
Horseback riding	12	31.9	2.2	...
Jumping rope	2	5.3	.5	...
Kiting	2	5.3	.6	...
Riflery	24	63.8	2.1	...
Tennis	9	23.9	2.3	5
Speedball	1	2.6	1.5	...
Softball	18	47.8	1.6	8
Soccer	1	2.6	1.0	...
Swimming	33	87.7	2.2	1
Skating	2	5.3	4.0	...
Scouting	7	18.6	2.7	...
Touch football	30	79.8	2.3	16
Tumbling	13	34.5	2.3	9
Track	13	34.5	2.7	12
Tops	5	13.2	2.4	2
Volleyball	7	18.6	.7	3
Washers	5	13.2	.6	...
Wrestling	9	23.9	1.6	5
Yo-yoing	6	15.9	1.0	...

TABLE 4--Continued

Activities	Number of boys participating in the activity	Per cent of boys participating in the activity	Average number of hours of participation per week in each activity	Number of boys who learned the activity in school
Keep away	8	21.2	.5	1
Leap frog	6	15.9	1.1	...
Marbles	6	15.9	1.2	...
Ping pong	16	42.5	1.6	1
Table tennis	11	29.2	3.4	1
Painting	9	23.9	2.7	1
Woodworking	8	21.2	1.9	1
Cooking	5	13.2	.2	...
Gardening	12	31.9	3.0	2
Listening to the radio	31	82.4	2.9	...
Reading	25	66.3	2.1	8
Auto Driving	31	82.4	2.6	3
Club meetings	9	32.9	3.3	2
Church meetings	24	63.8	1.9	...
Photography	11	29.2	1.3	1
Parties	18	47.8	2.0	...
Playing marble machines	23	61.1	.6	...
Picnics	12	31.9	2.0	...
Attending fairs	16	42.5	1.5	2
Attending circuses	17	45.0	1.1	...
Observing				
Football	36	95.7	1.9	18
Baseball	25	66.3	1.3	9
Basketball	30	79.8	1.9	13
Track	18	47.8	1.6	8
Volleyball	13	34.5	.8	3
Tennis	12	31.9	1.0	2
Rodeos	26	68.9	1.1	1
Moving Pictures	37	98.4	2.3	1

The eleventh-grade boys indicated that they had learned in school thirty-four out of the fifty-nine activities listed. The activities the boys reported as having learned in school were as follows; observing football, eighteen; touch football, sixteen; observing basketball, thirteen; track, twelve; baseball, eleven; observing baseball and tumbling, nine; softball, reading, and observing track, eight; boxing, tennis, and wrestling, five; volleyball, auto driving, and observing volleyball, three; golf, tops, gardening, and club meetings, attending fairs, and observing tennis, two; and attending movies, rodeos, bicycling, social dancing, swimming, keep away, ping pong, table tennis, painting, woodworking, and photography, one.

Table 5 shows the activity interests of twelfth-grade boys as shown by student's participation, the average number of hours spent participating in each activity, and the number of boys who learned the activity in school. The activities listed in order of the number of boys who participated in them are: listening to the radio, thirty-five; attending moving pictures, rodeos, observing football, and observing baseball, thirty-two; observing basketball and auto driving, thirty-one; swimming, thirty; touch football and church meetings, twenty-eight; observing volleyball and reading, twenty-seven; track and parties, twenty-five; attending fairs, twenty-four; baseball, twenty-three; bicycling, riflery, observing tennis, and attending circuses, twenty-two; picnics and playing marble



machines, twenty-one; softball, twenty; wrestling and ping pong, eighteen; club meetings and golf, seventeen; croquet, social dancing, and table tennis, sixteen; tennis and track, fifteen; bowling and horseback riding, fourteen; boxing, thirteen; scouting, twelve; square dancing, volleyball, yo-yoing, and cooking, eleven; keep away, ten; photography, gardening, and tumbling, eight; painting, marbles, leap frog, and archery, seven; woodworking, six; jumping rope and soccer, five; canoeing, four; and tops, kiting, and handball, two. The eleventh-grade boys did not participate in speedball or badminton.

The activities listed in order of the per cent of boys who participated in them are: listening to the radio, 98 per cent; attending moving pictures, rodeos, observing football and observing baseball, 89.6 per cent; observing basketball and auto driving, 86.8 per cent; swimming, 84 per cent; touch football and church meetings, 78.4 per cent; observing volleyball and reading 75.6 per cent; track and parties, 70 per cent; attending fairs, 67.2 per cent; baseball, 64.4 per cent; bicycling, riflery, observing tennis, and attending circuses, 61.6 per cent; picnics and playing marble machines, 58.8 per cent; softball, 56 per cent; wrestling and ping pong, 50.4 per cent; club meetings and golf, 47.6 per cent; croquet, social dancing, and table tennis, 44.8 per cent; tennis and track 42 per cent; bowling and horseback riding, 39.2 per cent; boxing, 36.4 per cent; scouting, 33.6 per cent;

square dancing, volleyball, yo-yoing, and cooking, 30.8 per cent; keep away, 28 per cent; photography, gardening, and tumbling, 22.4 per cent; painting, marbles, leap frog, and archery, 19.6 per cent; woodworking, 16.8 per cent; jumping rope and soccer, 14 per cent; canoeing, 11.2 per cent; and tops, kiting and handball, 5.6 per cent.

The average number of hours spent each week participating in each activity is also shown in Table 5. Listening to the radio was listed first with three and two-tenths as the average number of hours spent each week; reading, three and one-tenth; auto driving, two and nine-tenths; attending moving pictures, two and seven-tenths; swimming and track, two and five-tenths; riflery and tennis, two and two-tenths; rodeos and church meetings, two and one-tenth; parties, handball, horseback riding, attending circuses, and observing baseball, two; attending fairs, observing football, skating, touch football, and golf, one and nine-tenths; baseball, social dancing, observing basketball, and observing track, one and eight-tenths; square dancing, one and seven-tenths; gardening, one and six-tenths; scouting, tops, and observing volleyball, one and five-tenths; bicycling, ping pong, and volleyball, one and four-tenths; club meetings and observing tennis, one and three-tenths; canoeing, softball, cooking, and picnics, one and two-tenths; playing marble machines, table tennis, wrestling, and bowling, one and one-tenth; croquet, one; photography and painting, nine-tenths;

yo-yoing and washers, seven-tenths; boxing, and archery, six-tenths; keep away, tumbling, jumping rope, soccer, and marbles, four-tenths; and woodworking and leap frog, three-tenths. The boys did not list the number of hours spent in participation each week for kiting, badminton, and speedball.

The twelfth-grade boys indicated that they had learned in school thirty-two out of the fifty-nine activities listed. The activities the boys reported as having learned in school were as follows: baseball and touch football, fourteen; observing football and playing tennis, ten; observing baseball, track, and observing basketball, nine; volleyball and track, seven; softball, six; observing volleyball, tumbling, and wrestling, five; reading and observing tennis, four; boxing, square dancing, cooking, club meetings, golf, and attending movies, three; scouting, listening to the radio, and tops, two; and bowling, canoeing, soccer, swimming, skating, leap frog, gardening, and auto driving, one.

Ninety-two per cent of the boys in this study were in the fourteen, fifteen, sixteen, and seventeen year age groups. The four grades of high school indicated that they had learned similar activities in school.

In ranking by grade groupings the first ten activities in which the boys participated, the investigator found a similarity of activity choices. The sedentary activities were high in the tenth-, eleventh-, and twelfth-grade groups.

TABLE 5

THE NUMBER AND PER CENT OF THIRTY-SIX TWELFTH-GRADE  
BOYS PARTICIPATING IN LEISURE TIME ACTIVITIES,  
THE AVERAGE NUMBER OF HOURS OF PARTICIPATION  
IN EACH ACTIVITY, AND THE NUMBER OF BOYS  
WHO LEARNED THE ACTIVITY IN SCHOOL

Activities	Number of boys par- ticipating in the activity	Per cent of boys par- ticipating in the activity	Average number of hours of participa- tion per week in each ac- tivity	Number of boys who learned the ac- tivity in school
Bowling	14	39.2	1.1	1
Archery	7	19.6	.6	...
Bicycling	22	61.6	1.4	...
Baseball	23	64.4	1.8	14
Badminton	..	...	...	...
Boxing	13	36.4	.6	3
Croquet	16	44.8	1.0	...
Canoeing	4	11.2	1.2	1
Social dancing	16	44.8	1.8	...
Square dancing	11	30.8	1.7	3
Golf	17	47.6	1.9	3
Handball	2	5.6	2.0	...
Horseback riding	14	39.2	2.0	...
Jumping rope	5	14.0	.4	...
Kiting	2	5.6	...	...
Riflery	22	61.6	2.2	...
Tennis	15	42.0	2.2	10
Speedball	..	...	...	...
Softball	20	56.0	1.2	6
Soccer	5	14.0	.4	1
Swimming	30	84.0	2.5	1
Skating	10	28.0	1.9	1
Scouting	12	33.6	1.5	1
Touch football	28	78.4	1.9	14
Tumbling	8	22.4	.4	5
Track	15	42.0	2.5	9
Tops	2	5.6	1.5	2
Volleyball	11	30.8	1.4	7
Washers	6	16.8	.7	...
Wrestling	18	50.4	1.1	5
Yo-yoing	11	30.8	.7	...
Keep away	10	28.0	.4	...

TABLE 5 --Continued

Activities	Number of boys participating in the activity	Per cent of boys participating in the activity	Average number of hours of participation per week in each activity	Number of boys who learned the activity in school
Leap frog	7	19.6	.3	1
Marbles	7	19.6	.4	...
Ping pong	18	50.4	1.4	...
Table tennis	16	44.8	1.1	...
Painting	7	19.6	.9	...
Woodworking	6	16.8	.3	...
Cooking	11	30.8	1.2	3
Gardening	8	22.4	1.6	1
Listening to the radio	35	98.0	3.2	2
Reading	27	75.6	3.1	4
Auto driving	31	86.8	2.9	1
Club meetings	17	47.6	1.3	3
Church meetings	28	78.4	2.1	...
Photography	8	22.4	.9	...
Parties	25	70.0	2.0	...
Playing marble machines	21	58.8	1.1	...
Picnics	21	58.8	1.2	...
Attending fairs	25	67.2	1.0	...
Attending circuses	22	61.6	2.0	...
Observing				
Football	32	89.6	1.9	10
Baseball	32	89.6	2.0	9
Basketball	31	86.8	1.8	9
Track	25	70.0	1.8	7
Volleyball	27	75.6	1.5	5
Tennis	22	61.6	1.3	4
Rodeos	32	89.6	2.1	...
Moving				
Pictures	32	89.6	2.7	3

The twelfth-grade boys indicated that of the ten first ranked activities, six were sedentary. The activities

included in the six were: listening to the radio, attending moving pictures, observing rodeos, observing football, observing baseball and observing basketball.

The eleventh-grade boys indicated that of the ten first ranked activities, the sedentary were preferred. They were: attending moving pictures, observing football, listening to the radio, observing basketball, observing rodeos, and reading.

The tenth-grade boys placed five sedentary activities in the first ten ranked. They were moving pictures, listening to the radio, observing football, observing basketball, and observing rodeos.

The ninth-grade boys indicated that they preferred the participating activities, by placing swimming, softball, baseball, touch football, and bicycling in the ten first ranked activities. The boys indicated that they spent more time, on an average, participating in the activities which they had learned in school.

Table 6 indicates the number and per cent of ninth-grade boys who had their own equipment, the number and per cent of boys who used public facilities, and the number and per cent of boys who used commercial facilities. The number of boys who indicated that they used their own equipment were: radio, thirty-nine; bicycling, thirty-four; baseball, thirty-three; touch football and softball, thirty-one; reading, twenty-five; auto driving, twenty-two; riflery and yo-yoing, nineteen; tops, sixteen; swimming and woodworking, fourteen;

observing football and kiting, thirteen; scouting, twelve; cooking, eleven; wrestling, and observing baseball, ten; picnics, parties, keep away, and washers, nine; photography, ping pong, marbles, and boxing, eight; playing marble machines, archery, horseback riding, table tennis, painting, and observing basketball, seven; soccer, gardening, and skating, six; church meetings, club meetings, leap frog, volleyball, movies, tennis, golf, and croquet, four; badminton, social dancing, and tumbling, three, square dancing, handball, jumping rope, and rodeos, two; and observing track, playing volleyball, and canoeing, one. The boys indicated that they did not have their own equipment for track and bowling.

The per cent of boys who indicated that they used their own equipment were: radio, 70.2 per cent; bicycling, 61.2 per cent; touch football and softball, 55.8 per cent; reading, 45 per cent; auto driving, 39.6 per cent; riflery, and yo-yoing, 34.2 per cent; tops, 28.8 per cent; swimming and wood-working, 25.2 per cent; observing football and kiting, 23.4 per cent; scouting, 21.6 per cent; cooking, 19.8 per cent; wrestling and observing baseball, 18 per cent; picnics, parties, keep away, and washers, 16.2 per cent; photography, ping pong, marbles, and boxing, 14.4 per cent; playing marble machines, archery, horseback riding, table tennis, painting, and observing basketball, 12.6 per cent; soccer, gardening, and skating, 10.8 per cent; church meetings, club meetings, leap frog, volleyball, attending moving pictures, tennis,

golf, and croquet, 7.2 per cent; badminton, social dancing, and tumbling, 5.4 per cent; square dancing, handball, jumping rope, and rodeos, 3.6 per cent; and observing track, playing volleyball, and canoeing, 1 per cent.

The number of boys who indicated that they used public facilities were: swimming, twenty-four; attending moving pictures, twenty-one; playing marble machines, seventeen; church meetings, fifteen; observing basketball, fourteen; rodeos, observing baseball, and observing football, twelve; scouting, table tennis, and painting, nine; attending fairs and attending circuses, eight; baseball, horseback riding, softball, ping pong, and listening to the radio, seven; tumbling, reading, picnics, and observing volleyball, six; bowling, volleyball, woodworking, auto driving, and parties, five; square dancing, riflery, skating, club meetings, and observing tennis, four; social dancing and tennis, three; archery, boxing, croquet, canoeing, speedball, touch football, track, tops, and wrestling, two; and square dancing, handball, jumping rope, kiting, yo-yoing, keep away, marbles, and observing track, one.

The per cent of boys who indicated that they used public facilities were: swimming, 43.2 per cent; attending moving pictures, 37.8 per cent; playing marble machines, 30.6 per cent; church meetings, 27 per cent; observing basketball, 25.2 per cent; rodeos, observing baseball, and observing



football, 21.6 per cent; scouting, table tennis, and painting, 16.2 per cent; attending fairs, and attending circuses, 14.4 per cent; baseball, horseback riding, softball, ping pong, and listening to the radio, 12.6 per cent; tumbling, reading, picnics, and observing volleyball, 10.8 per cent; bowling, volleyball, woodworking, auto driving, and parties, 9 per cent; square dancing, riflery, skating, club meetings, and observing tennis 7.2 per cent; social dancing and tennis, 5.4 per cent; archery, boxing, croquet, canoeing, speedball, touch football, track, tops, and wrestling, 3.6 per cent; and square dancing, handball, jumping rope, kiting, yo-yoing, keep away, marbles, and observing track, 1.8 per cent.

The number of boys who indicated that they used commercial facilities were: moving pictures, thirty-nine; rodeos, twenty-two; playing marble machines, eighteen; observing football and swimming, seventeen; observing baseball, fifteen; attending circuses, fourteen; basketball, thirteen; attending fairs, eleven; observing volleyball and bowling, six; table tennis, five; woodworking, picnics, and ping pong, four; club meetings, auto driving, scouting, and square dancing, three; observing track, touch football, tumbling, horseback riding, and social dancing, two; and bicycling, baseball, canoeing, softball, track, wrestling, gardening, reading, church meetings, and photography, one.

TABLE 6

THE NUMBER AND PER CENT OF FIFTY-SEVEN NINTH-GRADE BOYS  
HAVING THEIR OWN EQUIPMENT, THE NUMBER AND PER CENT  
USING PUBLIC FACILITIES, AND THE NUMBER AND  
PER CENT USING COMMERCIAL FACILITIES

Activities	Boys having their own equipment		Boys using public fac- ilities		Boys using commercial facilities	
	Number	Per cent	Number	Per cent	Number	Per cent
Bowling	..	....	5	9.0	6	10.8
Archery	7	12.6	2	3.6	..	....
Bicycling	34	61.2	..	....	1	1.8
Baseball	33	59.4	7	12.6	1	1.8
Badminton	3	5.4	..	....	..	....
Boxing	8	14.4	2	3.6	2	3.6
Croquet	4	7.2	2	3.6	..	....
Canoeing	1	1.8	2	3.6	1	1.8
Social Dancing	3	5.4	3	5.4	2	3.6
Square Dancing	2	3.6	1	1.8	3	5.4
Golf	4	7.2	4	7.2	..	....
Handball	2	3.6	1	1.8	..	....
Horseback riding	7	12.6	7	12.6	2	3.6
Jumping rope	2	3.6	1	1.8	..	....
Kiting	13	23.4	1	1.8	..	....
Riflery	19	34.2	4	7.2	..	....
Tennis	4	7.2	3	5.5	..	....
Speedball	..	....	2	3.6	..	....
Softball	31	55.8	7	12.6	1	1.8
Soccer	6	10.8	..	....	..	....
Swimming	14	25.2	23	43.2	17	30.6
Skating	6	10.8	4	7.2	..	....
Scouting	12	21.6	9	16.2	3	5.4
Touch football	31	55.8	2	3.6	2	3.6
Tumbling	3	5.4	6	10.8	2	3.6
Track	..	....	2	3.6	1	1.8
Tops	16	28.8	2	3.6	..	....
Volleyball	4	7.2	5	9.0	..	....
Washers	9	16.2	..	....	..	....
Wrestling	10	18.0	2	3.6	1	1.8
Yo-yoing	19	34.2	1	1.8	..	....
Keep away	9	16.2	1	1.8	..	....
Leap frog	4	7.2	..	....	..	....
Marbles	8	14.4	1	1.8	..	....
Ping pong	8	14.4	7	12.6	4	7.2
Table tennis	7	12.6	9	16.2	5	9.0

TABLE 6--Continued

Activities	Boys having their own equipment		Boys using public facilities		Boys using commercial facilities	
	Number	Per cent	Number	Per cent	Number	Per cent
Woodworking	14	25.2	5	9.0	4	7.2
Cooking	11	19.8	..	....	..	....
Gardening	6	10.8	..	....	1	1.8
Listening to the radio	39	70.2	7	12.6	..	....
Reading	25	45.0	6	10.8	1	1.8
Auto driving	22	39.6	5	9.0	3	5.4
Club meetings	4	7.2	4	7.2	3	5.4
Church meetings	4	7.2	15	27.0	1	1.8
Photography	8	14.4	..	....	1	1.8
Parties	9	16.2	5	9.0	..	....
Playing marble machines	7	12.6	17	30.6	18	32.4
Picnics	9	16.2	6	10.8	4	7.2
Attending fairs	..	....	8	14.4	11	19.8
Attending circuses	..	....	8	14.4	14	25.2
Observing						
Football	13	23.4	12	21.6	17	30.6
Baseball	10	18.0	12	21.6	15	27.0
Basketball	7	12.6	14	25.2	13	23.4
Track	1	1.8	1	1.8	2	3.6
Volleyball	1	1.8	6	10.8	6	10.8
Tennis	..	....	4	7.2	..	....
Rodeos	2	3.6	12	21.6	22	39.6
Movies	4	7.2	21	37.8	39	69.2

The per cent of boys who indicated that they used commercial facilities were: moving pictures, 69.2 per cent; rodeos, 39.6 per cent; playing marble machines, 32.4 per cent; observing football and swimming, 30.6 per cent; observing baseball, 27 per cent; attending circuses, 25.2 per cent; basketball, 23.4 per cent; attending fairs, 19.8 per cent; bowling and observing volleyball, 10.8 per cent;

table tennis, 9 per cent; woodworking, picnics, and ping pong, 7.2 per cent; club meetings, auto driving, scouting, and square dancing, 5.4 per cent; observing track, touch football, tumbling, horseback riding, and social dancing, 3.6 per cent; and bicycling, baseball, canoeing, softball, track, wrestling, gardening, reading, church meetings, and photography, 1.8 per cent.

Table 7 indicates the number and per cent of tenth-grade boys who had their own equipment, the number and per cent of boys who used public facilities, and the number and per cent of boys who used commercial facilities. The number of boys who indicated that they used their own equipment were: listening to the radio, thirty-three; baseball, twenty-eight; touch football, twenty-four; riflery, twenty; softball, nineteen; bicycling, reading, and auto driving, eighteen; swimming, fourteen; yo-yoing, eleven; wrestling and observing football, ten; photography, scouting, boxing, picnics, and observing baseball, nine; horseback riding and washers, eight; kiting, tennis, skating, and cooking, seven; tops, marbles, ping pong, table tennis, gardening, parties, and observing basketball, six; archery and woodworking, five; croquet, square dancing, golf, volleyball, keep away, church meetings, and observing tennis, four; observing track, painting, and track, three; social dancing, handball, soccer, leap frog, observing volleyball, listening to the radio, and attending moving pictures, two; and bowling, badminton, jumping rope, tumbling, and playing marble machines, one.

TABLE 7

THE NUMBER AND PER CENT OF THIRTY-SEVEN TENTH-GRADE BOYS  
HAVING THEIR OWN EQUIPMENT, THE NUMBER AND PER CENT  
USING PUBLIC FACILITIES, AND THE NUMBER AND  
PER CENT USING COMMERCIAL FACILITIES

Activities	Boys have their own equipment		Boys using public facilities		Boys using commercial facilities	
	Number	Per cent	Number	Per cent	Number	Per cent
Bowling	1	2.7	9	24.3	14	37.8
Archery	5	13.5	3	8.1	1	2.7
Bicycling	18	48.6	2	5.4	..	....
Baseball	28	75.6	4	10.8	3	8.1
Badminton	1	2.7	1	2.7	..	....
Boxing	9	24.3	4	10.8	..	....
Croquet	4	10.8	4	10.8	..	....
Canoeing	..	....	..	....	3	8.1
Social dancing	2	5.4	1	2.7	2	5.4
Square dancing	4	10.8	..	....	3	8.1
Golf	4	10.8	4	10.8	5	13.5
Handball	2	5.4	2	5.4	..	....
Horseback riding	8	21.6	2	5.4	2	5.4
Jumping rope	1	2.7	..	....	..	....
Kiting	7	18.9	..	....	..	....
Riflery	20	54.0	1	2.7	..	....
Tennis	7	18.9	4	10.8	..	....
Speedball	..	....	11	21.7	..	....
Softball	19	51.3	2	5.4	..	....
Soccer	2	5.4	1	2.7	..	....
Swimming	14	37.8	20	54.0	23	62.1
Skating	7	18.9	4	10.8	5	13.5
Scouting	9	24.3	7	18.9	3	8.1
Touch football	24	64.8	9	24.3	..	....
Tumbling	1	2.7	12	32.4	..	....
Track	3	8.1	3	8.1	..	....
Tops	6	16.2	..	....	2	5.4
Volleyball	4	10.8	7	18.9	..	....
Washers	8	21.6	..	....	3	8.1
Wrestling	10	27.0	3	8.1	..	8.1
Yo-yoing	11	29.7	..	....	..	....
Keep away	4	10.8	2	5.4	..	....
Leap frog	2	5.4	2	5.4	..	....
Marbles	6	16.2	..	....	1	2.7
Ping pong	6	16.2	8	21.6	4	10.8
Table tennis	6	16.2	6	16.2	4	10.8

TABLE 7--Continued

Activities	Boys have their own equipment		Boys using public facilities		Boys using commercial facilities	
	Number	Per cent	Number	Per cent	Number	Per cent
Painting	3	8.1	..	....	1	2.7
Woodworking	5	13.5	3	8.1	1	2.7
Cooking	7	18.9	..	....	..	....
Gardening	6	16.2	..	....	..	....
Listening to the radio	33	89.1	1	2.7	2	5.4
Reading	18	48.6	4	10.8	1	2.7
Auto driving	18	48.6	..	....	1	2.7
Club meetings	..	....	6	16.2	1	2.7
Church meetings	4	10.8	8	21.6	..	....
Photography	9	24.3	..	....	1	2.7
Parties	6	16.2	7	18.9	2	5.4
Playing marble machines	1	2.7	13	35.1	10	27.0
Picnics	9	24.3	8	21.6	3	8.1
Attending fairs	..	....	6	16.2	10	27.0
Attending circuses	..	....	5	13.5	8	21.6
Observing						
Football	10	27.0	10	27.0	12	32.4
Baseball	9	24.3	12	32.4	11	29.7
Basketball	6	16.2	11	29.7	13	35.1
Track	3	8.1	10	27.0	2	5.4
Volleyball	2	5.4	7	18.9	11	29.7
Tennis	4	10.8	5	13.5	..	....
Rodeos	2	5.4	8	21.6	18	48.6
Moving pictures	2	5.4	10	27.0	27	73.9

The per cent of boys who indicated that they used their own equipment were: listening to the radio, 89.1 per cent; baseball, 75.6 per cent; touch football, 64.8 per cent; riflery, 54 per cent; softball, 51.3 per cent; bicycling, reading, and auto driving, 48.6 per cent; swimming, 37.8

per cent; yo-yoing, 29.7 per cent; wrestling and observing football, 27 per cent; photography, scouting, boxing, picnics, and observing baseball, 24.3 per cent; horseback riding and washers, 21.6 per cent; kiting, tennis, skating, and cooking, 18.9 per cent; tops, marbles, ping pong, table tennis, gardening, parties, and observing basketball, 16.3 per cent; archery, and woodworking, 13.5 per cent; croquet, square dancing, golf, volleyball, keep away, church meetings, and observing tennis, 10.8 per cent; observing track, painting, and track, 8.1 per cent; social dancing, handball, soccer, leap frog, observing volleyball, listening to the radio, and attending movies, 5.4 per cent; and bowling, badminton, jumping rope, tumbling, and playing marble machines, 2.7 per cent.

The number of boys who indicated that they used public facilities were: swimming, twenty; playing marble machines, thirteen; observing baseball and tumbling, twelve; basketball, eleven; attending moving pictures, observing track, and observing football, ten; bowling and touch football, nine; ping pong, church meetings, rodeos, and picnics, eight; scouting, volleyball, parties, and observing volleyball, seven; club meetings, table tennis, and attending fairs, six; attending circuses and observing tennis, five; baseball, boxing, croquet, golf, tennis, skating, and reading, four; archery, woodworking, wrestling, and track, three;

handball, horseback riding, softball, keep away, and leap frog, two; and badminton, social dancing, riflery, speedball, soccer, and listening to the radio, one.

The per cent of boys who indicated that they used public facilities were: swimming, 54 per cent; playing marble machines, 35.2 per cent; observing baseball and tumbling, 32.4 per cent; basketball, 29.7 per cent; attending moving pictures, observing track, and observing football, 27 per cent; bowling and touch football, 24.3 per cent; ping pong, church meetings, rodeos, and picnics, 21.6 per cent; scouting, volleyball, parties, and observing volleyball, 18.9 per cent; club meetings, table tennis, and attending fairs, 16.2 per cent; attending circuses and observing tennis, 13.5 per cent; baseball, boxing, croquet, golf, tennis, skating, and reading, 10.8 per cent; archery, woodworking, wrestling, and track, 8.1 per cent; handball, horseback riding, softball, keep away, and leap frog, 5.4 per cent; and badminton, social dancing, riflery, speedball, soccer, and listening to the radio, 2.7 per cent.

The number of boys who indicated that they used commercial facilities were: attending moving pictures, twenty-seven; swimming, twenty-three; rodeos, eighteen; bowling, fourteen; observing basketball, thirteen; observing football, twelve; observing baseball and observing volleyball, eleven; attending fairs and playing marble machines, ten; attending



circuses, eight; golf and skating, five; ping pong and table tennis, four; baseball, canoeing, square dancing, scouting, washers, and picnics, three; track, social dancing, horseback riding, tops, listening to the radio, and parties, two; and archery, marbles, woodworking, painting, reading, auto driving, club meetings, and photography, one.

The per cent of boys who indicated that they used commercial facilities were: attending moving pictures, 73.9 per cent; swimming, 62.1 per cent; rodeos, 48.6 per cent; bowling, 37.6 per cent; observing basketball, 35.1 per cent; observing football, 32.4 per cent; observing baseball and observing volleyball, 29.7 per cent; attending fairs and playing marble machines, 27 per cent; attending circuses, 21.7 per cent; golf and skating, 13.5 per cent; ping pong and table tennis, 10.8 per cent; baseball, canoeing, square dancing, scouting, washers, and picnics, 8.1 per cent; track, social dancing, horseback riding, tops, listening to the radio, and parties, 5.4 per cent; and archery, marbles, woodworking, painting, reading, auto driving, club meetings, and photography, 2.7 per cent.

Table 8 indicates the number and per cent of eleventh-grade boys who had their own equipment, the number and per cent of boys who used commercial facilities. The number of boys who indicated that they used their own equipment were: listening to the radio and auto driving, thirty; riflery,

twenty-two; touch football, reading, and baseball, twenty-one; softball, bicycling, and observing football, sixteen; playing marble machines, swimming, and observing baseball, thirteen; track and observing basketball, twelve; gardening, eleven; parties, ten; photography, nine; painting and boxing, eight; horseback riding, seven; croquet, golf, tennis, skating, marbles, woodworking, church meetings, picnics, and observing track, six; archery, tops, yo-yoing, keep away, leap frog, cooking, attending fairs, rodeos, and attending moving pictures, five; canoeing, social dancing, scouting, track, washers, wrestling, ping pong, club meetings, and observing tennis, four; table tennis, observing volleyball, and attending circuses, three; jumping rope, kiting, tumbling, and playing marble machines, two; and soccer and volleyball, one.

The per cent of boys who indicated that they used their own equipment were: listening to the radio and auto driving, 78 per cent; riflery, 57.2 per cent; touch football, reading, and baseball, 54.6 per cent; softball, bicycling, and observing football, 41.6 per cent; playing marble machines, swimming, and observing baseball, 33.8 per cent; track and observing basketball, 31.2 per cent; gardening, 28.6 per cent; parties, 26 per cent; photography, 23.4 per cent; painting and boxing, 20.8 per cent; horseback riding, 18.2 per cent; croquet, golf, tennis, skating, marbles, woodworking, church meetings, picnics,

and observing track, 15.6 per cent; archery, tops, yo-yoing, keep away, leap frog, cooking, attending fairs, rodeos, and attending moving pictures, 13 per cent; canoeing, social dancing, scouting, track, washers, wrestling, ping pong, club meetings, and observing tennis, 10.4 per cent; table tennis, observing volleyball, and attending circuses, 7.8 per cent; jumping rope, kiting, tumbling, and playing marble machines, 5.2 per cent; and soccer and volleyball, 2.6 per cent.

The number of boys who indicated that they used public facilities were: swimming, twenty; attending moving pictures, seventeen; observing football, sixteen; rodeos, fifteen; observing basketball, fourteen; playing marble machines, thirteen; track, touch football, and observing track, twelve; tumbling and attending fairs, ten; church meetings and ping pong, nine; attending circuses and observing baseball, seven; skating, boxing, and observing volleyball, six; bowling, baseball, volleyball, and table tennis, five; wrestling and golf, four; croquet, horseback riding, tennis, softball, and observing tennis, three; picnics, parties, reading, washers, tops, and canoeing, two; and archery, bicycling, social dancing, riflery, scouting, yo-yoing, woodworking, gardening, auto driving, club meetings, and photography, one.

The per cent of boys who indicated that they used public facilities were: swimming, 52 per cent; attending moving pictures, 44.2 per cent; observing football, 41.6 per cent;

rodeos, 39 per cent; observing basketball, 36.4 per cent; playing marble machines, 33.8 per cent; observing track, playing touch football, and track, 31.2 per cent; tumbling and attending fairs, 26 per cent; church meetings and ping pong, 23.4 per cent; attending circuses and observing baseball, 18.2 per cent; skating, boxing, and observing volleyball, 15.6 per cent; bowling, baseball, volleyball, and table tennis, 13 per cent; wrestling and golf, 10.4 per cent; croquet, horseback riding, tennis, softball, and observing tennis, 7.8 per cent; picnics, parties, reading, washers, tops, and canoeing, 5.2 per cent; and archery, bicycling, social dancing, riflery, scouting, yo-yoing, woodworking, gardening auto driving, club meetings, and photography, 2.6 per cent.

The number of boys who indicated that they used commercial facilities were: attending moving pictures, twenty-two; attending fairs, eighteen; playing marble machines, seventeen; swimming, fourteen; rodeos, twelve; attending circuses, eleven; observing football and observing baseball, ten; bowling and observing basketball, eight; skating, seven; observing volleyball, six; social dancing, five; golf, four; riflery and observing track, three; bicycling, baseball, boxing, croquet, canoeing, touch football, tumbling, wrestling, table tennis, listening to the radio, church meetings, tops, yo-yoing, ping pong, reading, auto driving, club meetings, photography, and picnics, one.

TABLE 8

THE NUMBER AND PER CENT OF THIRTY-EIGHT ELEVENTH-GRADE  
BOYS HAVING THEIR OWN EQUIPMENT, THE NUMBER AND  
PER CENT USING PUBLIC FACILITIES, AND THE NUMBER  
AND PER CENT USING COMMERCIAL FACILITIES

Activities	Boys having their own equipment		Boys using public facilities		Boys using commercial facilities	
	Number	Per cent	Number	Per cent	Number	Per cent
Bowling	..	....	5	13.0	8	20.8
Archery	5	13.0	1	2.6	1	2.6
Bicycling	16	21.6	1	2.6	2	5.2
Baseball	21	54.6	5	13.0	2	5.2
Badminton	..	....	..	....	..	....
Boxing	8	20.8	6	15.6	2	5.2
Croquet	6	15.6	3	7.8	2	5.2
Canoeing	4	10.4	2	5.2	2	5.2
Social dancing	4	10.4	1	2.6	5	13.0
Square dancing	..	....	..	....	..	....
Golf	6	15.6	4	10.4	4	10.4
Handball	..	....	..	....	..	....
Horseback riding	7	18.2	3	7.8	..	....
Jumping rope	2	5.2	..	....	..	....
Kiting	2	5.2	..	....	..	....
Riflery	22	57.2	1	2.6	3	7.8
Tennis	6	15.6	3	7.8	..	....
Speedball	..	....	..	....	..	....
Softball	16	41.6	3	7.8	1	2.6
Soccer	1	2.6	..	....	..	....
Swimming	12	33.8	20	52.0	14	36.4
Skating	6	15.6	6	15.6	7	18.2
Scouting	4	10.4	1	2.6	1	2.6
Touch football	21	54.6	12	31.2	2	5.2
Tumbling	2	5.2	10	26.0	2	5.2
Track	4	10.4	12	31.2	1	2.6
Tops	5	13.0	2	5.2	1	2.6
Volleyball	1	2.6	5	13.0	..	....
Washers	4	10.4	2	5.2	..	....
Wrestling	4	10.4	4	10.4	2	5.2
Yo-yoing	5	13.0	1	2.6	1	2.6
Keep away	5	13.0	..	....	..	....
Leap frog	5	13.0	..	....	..	....
Marbles	6	15.6	..	....	..	....
Ping pong	4	10.4	9	23.4	1	2.6
Table tennis	3	7.8	5	13.0	2	5.2
Painting	8	20.8	..	....	..	....

TABLE 6--Continued

Activities	Boys having their own equipment		Boys using public facilities		Boys using commercial facilities	
	Number	Per cent	Number	Per cent	Number	Per cent
Woodworking	5	15.6	1.	2.6	..	....
Cooking	5	13.0	..	....	..	....
Gardening	11	28.6	1	2.6	..	....
Listening to the radio	20	78.0	..	....	2	5.2
Reading	21	54.6	2	5.2	1	2.6
Auto driving	20	78.0	1	2.6	1	2.6
Club meetings	4	10.4	1	2.6	1	2.6
Church meeting	6	15.6	9	23.4	2	5.2
Photography	9	23.4	..	....	1	2.6
Parties	10	26.0	2	5.2	2	5.2
Playing marble machines	2	5.2	13	33.8	17	44.2
Picnics	6	15.6	2	5.2	1	2.6
Attending fair	5	13.0	10	26.0	18	46.8
Attending circuses	3	7.8	7	18.2	11	28.6
Observing Football	16	41.6	16	41.6	10	26.0
Baseball	13	33.8	7	18.2	10	26.0
Basketball	12	31.2	14	36.4	8	20.8
Track	6	15.6	12	31.2	3	7.8
Volleyball	3	7.8	6	15.6	6	15.6
Tennis	4	10.4	3	7.8	..	....
Rodeos	5	13.0	15	39.0	12	31.2
Moving Pictures	5	13.0	17	44.2	22	57.2

The per cent of boys who indicated that they used commercial facilities were: attending moving pictures, 57.2 per cent; attending fairs, 46.8 per cent; playing marble machines, 44.2 per cent; swimming 36.4 per cent; rodeos, 31.2 per cent; attending circuses, 28.6 per cent; observing football and observing baseball, 26 per cent;

bowling and observing basketball, 20.8 per cent; skating, 18.2 per cent; observing volleyball, 15.6 per cent; social dancing 13 per cent; golf, 10.4 per cent; riflery and observing track, 7.8 per cent; bicycling, baseball, boxing, croquet, canoeing, touch football, tumbling, wrestling, table tennis, listening to the radio, church meetings, and parties, 5.2 per cent; and archery, softball, scouting, track, tops, yo-yoing, ping pong, reading, auto driving, club meetings, photography, and picnics, 2.6 per cent.

Table 9 indicates the number and per cent of twelfth-grade boys who had their own equipment, the number and per cent of boys who used public facilities, and the number and per cent of boys who used commercial facilities. The number of boys who indicated that they used their own equipment were: listening to the radio, thirty-three; auto driving, twenty-nine; touch football, twenty-five; baseball and reading, twenty-two; bicycling, riflery, and softball, nineteen; parties, thirteen; tennis, twelve; yo-yoing, eleven; social dancing and croquet, ten; track and keep away, nine; picnics, photography, cooking, scouting, wrestling, and cooking, eight; golf, gardening, and leap frog, seven; archery, swimming, woodworking, and church meetings, six; horseback riding, skating, washers, marbles, ping pong, table tennis, and painting, five; attending moving pictures, club meetings, and jumping rope, four; square dancing, tumbling, observing

football, and observing baseball, three; observing basketball, attending fairs, bowling, kiting, tops, and volleyball two; and canoeing, handball, attending circuses, observing track, observing volleyball, observing tennis, and rodeos, one.

The per cent of boys who indicated that they used their own equipment were : listening to the radio, 89.1 per cent; auto driving, 78.3 per cent; touch football, 67.5 per cent; baseball and reading, 59.4 per cent; bicycling, riflery, and softball, 51.3 per cent; parties, 35.2 per cent; tennis, 32.4 per cent; yo-yoing, 29.7 per cent; social dancing and croquet, 27 per cent; track and keep away, 24.3 per cent; picnics, photography, cooking, scouting, wrestling, and cooking, 21.6 per cent; golf, gardening, and leap frog, 18.9 per cent; archery, swimming, woodworking, and church meetings, 16.2 per cent; horseback riding, skating, washers, marbles, ping pong, table tennis, and painting, 13 per cent; attending moving pictures, club meetings, and jump rope, 10.8 per cent; square dancing, tumbling, observing football, and observing baseball, 8.1 per cent; observing basketball, attending fairs, bowling, kiting, tops, and volleyball, 5.4 per cent; and canoeing, handball, attending circuses, observing track, observing volleyball, observing tennis, and rodeos, 2.7 per cent.

The number of boys who indicated that they used public facilities were: observing baseball, twenty; observing football



and observing basketball, eighteen; observing volleyball, attending rodeos, and swimming, seventeen; track, tennis, attending moving pictures, and church meetings, fourteen; attending circuses, twelve; attending fairs, eleven; track, ping pong, and touch football, ten; playing marble machines and parties, nine; picnics, club meetings, and table tennis, eight; golf, seven; horseback riding and bowling, six; baseball, tennis, tumbling, volleyball and reading, five; social dancing and scouting, four; boxing, croquet, riflery, wrestling, and listening to the radio, three; bicycling, canoeing, softball, soccer, and keep away, two; and square dancing, jumping rope, skating, washers, painting, cooking, auto driving, and photography, one.

The per cent of boys who indicated that they used public facilities were: observing baseball, 4 per cent; observing football and observing basketball, 48.6 per cent; observing volleyball, attending rodeos, and swimming, 45.9 per cent; track, tennis, attending moving pictures, and church meetings, 37.8 per cent; attending circuses, 32.4 per cent; attending fairs, 29.7 per cent; track, ping pong, and touch football, 27 per cent; playing marble machines, club meetings, and table tennis, 21.6 per cent; golf, 18.6 per cent; horseback riding and bowling, 16.2 per cent; baseball, tennis, tumbling, volleyball, and reading, 13 per cent; social dancing and scouting, 10.8 per cent; boxing croquet, riflery, wrestling, and listening to the radio, 8.1 per cent; bicycling, canoeing, softball,

soccer, and keep away, 5.4 per cent; and square dancing, jumping rope, skating, washers, painting, cooking, auto driving, and photography, 2.7 per cent.

The number of boys who indicated that they used commercial facilities were: attending moving pictures, twenty-seven; rodeos, twenty; observing baseball, nineteen; observing volleyball, attending fairs, and swimming, eighteen; observing basketball, sixteen; playing marble machines, fifteen; observing football, fourteen; attending circuses, thirteen; observing track, bowling, eleven; social dancing, eight; golf, and observing tennis, seven; square dancing, six; skating, five; auto driving and ping pong, four; baseball, horseback riding, and listening to the radio, three; scouting, volleyball, table tennis, club meetings, and reading, two; and archery, bicycling, boxing, canoeing, kiting, riflery, tennis, track, wrestling, church meetings, parties, picnics, and yo-yoing, one.

The per cent of boys who indicated that they used commercial facilities were: attending moving pictures, 72.9 per cent; rodeos, 54 per cent; observing baseball, 51.3 per cent; observing volleyball, attending fairs, and swimming, 48.6 per cent; observing basketball, 43.2 per cent; playing marble machines, 40.5 per cent; observing football, 36.4 per cent; attending circuses, 35.2 per cent; bowling and observing track, 29.7 per cent; social dancing, 21.6 per cent; golf and observing tennis, 18.9 per cent; square dancing, 16.2 per cent; skating, 13 per cent; auto driving and ping pong, 10.8 per cent; baseball, horseback riding, and listening to the radio

8.1 per cent; scouting, volleyball, table tennis, club meetings, and reading, 5.4 per cent; and archery, bicycling, boxing, canoeing, kiting, riflery, tennis, track, wrestling, church meetings, parties, picnics, and yo-yoing, 2.7 per cent.

TABLE 9

THE NUMBER AND PER CENT OF THIRTY-SIX TWELFTH-GRADE BOYS  
HAVING THEIR OWN EQUIPMENT, THE NUMBER AND PER CENT  
USING PUBLIC FACILITIES, AND THE NUMBER AND PER  
CENT USING COMMERCIAL FACILITIES

Activities	Boys having their own equipment		Boys using public facilities		Boys using commercial facilities	
	Number	Per cent	Number	Per cent	Number	Per cent
Bowling	2	5.4	6	16.2	11	29.7
Archery	6	16.2	..	....	1	2.7
Bicycling	19	51.3	2	5.4	1	2.7
Baseball	22	59.4	5	13.0	3	8.1
Badminton	..	....	..	....	..	....
Boxing	8	21.6	3	8.1	1	2.7
Croquet	10	27.0	3	8.1	..	....
Canoeing	1	2.7	2	5.4	1	2.7
Social dancing	10	27.0	4	10.8	7	21.6
Square dancing	3	8.1	1	2.7	6	16.2
Golf	7	18.9	7	18.9	7	18.9
Handball	1	2.7	..	....	..	....
Horseback riding	5	13.0	6	16.2	3	8.1
Jumping rope	4	10.8	1	2.7	..	....
Kiting	2	5.4	..	....	1	2.7
Riflery	19	51.3	3	8.1	1	2.7
Tennis	12	32.4	5	13.0	1	2.7
Speedball	..	....	..	....	..	....
Softball	19	51.3	2	5.4	..	....
Soccer	..	....	2	5.4	..	....
Swimming	6	16.2	17	45.9	18	48.1
Skating	5	13.0	1	2.7	5	13.0
Scouting	8	21.6	4	10.8	2	5.4
Touch football	25	67.5	10	27.0	..	....
Tumbling	3	8.1	5	13.0	..	....
Track	9	24.3	10	27.0	1	2.7

TABLE 9--Continued

Activities	Boys having their own equipment		Boys using public facilities		Boys using commercial facilities	
	Number	Per cent	Number	Per cent	Number	Per cent
Tops	2	5.4	..	....	..	....
Volleyball	2	5.4	5	13.0	2	5.4
Washers	5	13.0	1	2.7	..	....
Wrestling	8	21.6	3	8.1	1	2.7
Yo-yoing	11	29.7	..	....	1	2.7
Keep away	9	24.3	2	5.4	..	....
Leap frog	7	18.9	..	....	..	....
Marbles	5	13.0	..	....	..	....
Ping pong	5	13.0	10	27.0	4	10.8
Table tennis	5	13.0	8	21.6	2	5.4
Painting	5	13.0	1	2.7	..	....
Woodworking	6	16.2	..	....	..	....
Cooking	8	21.6	1	2.7	..	....
Gardening	7	18.9	..	....	..	....
Listening to the radio	33	89.1	3	8.1	3	8.1
Reading	22	59.4	5	13.0	2	5.4
Auto driving	29	78.3	1	2.7	4	10.8
Club meetings	4	10.8	8	21.6	2	5.4
Church meetings	6	16.2	14	37.8	1	2.7
Photography	8	21.6	1	2.7	..	....
Parties	13	35.1	9	24.3	1	2.7
Playing marble machines	..	....	9	24.3	15	40.5
Picnics	8	21.6	8	21.6	1	2.7
Attending fairs	2	5.4	11	29.7	18	48.6
Attending Circuses	1	2.7	12	32.4	13	35.1
Observing Football	3	8.1	18	48.6	14	36.4
Baseball	3	8.1	20	54.0	19	51.3
Basketball	2	5.4	18	48.6	16	43.2
Track	1	2.7	14	37.8	11	29.7
Volleyball	1	2.7	17	45.9	18	48.6
Tennis	1	2.7	14	37.8	7	18.9
Rodeos	1	2.7	17	45.9	20	54.0
Moving pictures	4	10.8	14	37.8	27	72.9

In ranking the first ten activities of the four high school grade groups, according to the number of boys using their own equipment, the investigator found that a great deal of similarity existed. 70.2 per cent of the ninth-grade boys used their own radios; 89.2 per cent of the tenth-grade boys; 78 per cent of the eleventh-grade boys; and 81.1 per cent of the twelfth-grade boys.

Auto driving shows a close similarity between the ninth and tenth grade. There is also a close similarity between the eleventh and twelfth grades; however, there is a wide range between the tenth and eleventh grades. In the ninth grade 39.6 per cent used their own cars or drove the family car; tenth grade, 48.6 per cent; eleventh grade, 78 per cent; and twelfth grade, 78 per cent.

The twelfth-grade boys indicated that 32.4 per cent of them used their own equipment in playing tennis. This grade group was the only one who placed tennis in the first ten activities for which they had their own equipment.

In ranking public facilities, according to the ten most widely used, the investigator found that in the tenth grade a high of 54 per cent used the swimming facilities, while in the ninth grade a low of 16.2 per cent used public scouting facilities. Many of the boys in the four grade groups indicated that they used commercial facilities for their activities. In ranking the first ten activities, the

investigator found that the ninth-, tenth-, eleventh-, and twelfth-grade boys used commercial facilities for moving pictures most. The swimming pool, the marble machines, the bowling alley, and the rodeos were also widely used.

Table 10 shows the per cent of boys who wanted to participate in more activities, but did not have the opportunity for the various reasons shown in Table 11.

TABLE 10  
PERCENTAGE OF BOYS WHO WANTED TO PARTICIPATE  
IN OTHER ACTIVITIES

Activities	Per cent of				Per cent of the total
	Ninth grade	Tenth grade	Eleventh grade	Twelfth grade	
Bowling	1.8	8.1	...	...	2.4
Archery	1.8	5.4	2.6	8.1	4.1
Baseball	9.0	5.4	...	...	4.1
Badminton	...	...	...	2.7	.6
Boxing	5.4	8.1	...	...	3.5
Canoeing	1.8	2.7	2.6	8.1	3.5
Social dancing	...	...	...	2.7	.6
Golf	12.6	8.1	...	5.4	8.1
Horseback riding	1.8	8.1	7.8	10.8	6.5
Riflery	7.2	2.7	...	2.7	3.5
Tennis	7.2	5.4	...	2.7	4.1
Softball	...	2.7	...	...	.6
Soccer	...	...	...	2.7	.6
Swimming	9.0	5.4	...	2.7	4.7
Skating	...	2.7	2.6	2.7	1.8
Touch football	...	2.7	...	...	.6
Tumbling	...	2.7	...	...	.6
Volleyball	...	2.7	...	...	.6
Washers	1.8	...	...	...	.6
Wrestling	3.6	5.4	...	2.7	2.9
Keep away	...	2.7	...	...	.6

TABLE 10--Continued

Activities	Per cent of				Per cent of the total
	Ninth grade	Tenth grade	Eleventh grade	Twelfth grade	
Ping pong	1.8	5.4	2.6	2.7	2.9
Woodworking	...	5.4	5.2	...	2.4
Cooking	1.8	...	...	...	.6
Reading	1.8	2.7	...	...	1.2
Auto driving	...	8.1	5.2	...	2.9
Club meetings	19.8	...	...	2.7	8.1
Church meetings	...	...	...	5.4	1.2
Photography	...	2.7	...	...	.6
Attending circuses	...	...	...	2.7	.6
Observing					
Football	7.2	2.7	7.8	10.8	8.1
Baseball	...	...	2.6	8.1	2.4
Basketball	12.6	10.8	10.4	8.1	10.6
Track	...	...	5.2	2.7	1.8
Volleyball	7.2	2.7	2.6	...	3.5
Tennis	1.8	...	2.6	...	1.2
Rodeos	...	...	2.6	...	.6
Motor cycling	7.2	...	7.8	13.0	8.1
Fishing	5.4	8.1	15.6	29.7	13.6
Hunting	9.0	5.4	10.4	13.0	9.4
Camping	1.8	2.7	5.2	2.7	2.9
Handball	1.8	...	...	2.7	1.2
Mountain climbing	1.8	...	...	...	.6
Horse shoes	1.8	...	...	2.7	1.2
Traveling	1.8	...	...	...	.6
Shuffleboard	1.8	...	...	...	.6
Model planes	1.8	2.7	...	5.4	2.4
Speedboat racing	...	...	2.6	16.2	.6
Cards	...	...	...	5.4	1.2
Pool	...	10.8	...	18.9	6.5
Hotrod racing	...	...	...	13.0	2.9
La crosse	...	...	...	2.7	.6
Weight lifting	...	...	...	2.7	.6
Hiking	...	2.7	...	5.4	1.8
Flying	...	...	5.2	...	1.2
Fencing	...	...	2.6	...	.6
Mechanics	...	2.7	...	2.7	1.2
Band	1.8	...	...	2.7	1.2
Loafing	...	2.7	5.2	...	1.8
Ice Skating	...	...	5.2	...	1.2
Water skiing	...	...	5.2	...	1.2
Skiing	...	...	5.2	...	1.2
Whittling	...	2.7	...	...	.6

The activities the boys wanted to participate in are ranked in order of the total per cent of the 168 boys studied. They are: fishing, first, with 13.6 per cent; basketball, second, with 10.6 per cent; hunting, third, with 9.4 per cent; motor cycling, football, club meetings, and golf, fourth, with 8.1 per cent; pool and horseback riding, fifth, with 6.5 per cent; swimming, sixth, with 4.7 per cent; speedboat racing, tennis, baseball, and archery, seventh, with 4.1 per cent; boxing, canoeing, riflery, and observing volleyball, eighth, with 3.4 per cent; hotrod racing, camping, auto driving, ping pong, and wrestling, ninth, with 2.9 per cent; bowling, woodworking, observing baseball, and model planes, tenth, with 2.4 per cent; loafing, hiking, observing track, and skating, eleventh, with 1.8 per cent; reading, church meetings, observing tennis, handball, horse shoes, cards, flying, mechanics, band, ice skating, water skiing, and skiing, twelfth, with 1.2 per cent; and whittling, fencing, weight lifting, la crosse, traveling, mountain climbing, rodeos, attending circuses, photography, cooking, keep away, washers, volleyball, tumbling, soccer, softball, social dancing, touch football, badminton, and shuffleboard, thirteenth, with .6 per cent.

Table 11 shows the reasons given for non-participation in the desired activities shown in Table 10. Of the 168 boys studied, 31.3 per cent of them indicated that they did



not have equipment; 19.5 per cent indicated that the activity was too far from home; 12.4 per cent indicated that the fees were too high; 8.1 per cent indicated that they did not have their parent's consent or the activity was not available; 4.1 per cent indicated that they were working; 2.9 per cent indicated the reason was because of a physical condition; 1.2 per cent indicated that they were too small; and .6 per cent indicated that they were not passing their school work, did not have transportation to the location of the activity, or they were playing in the band.

TABLE 11

PERCENTAGE OF BOYS ACCORDING TO REASONS GIVEN  
FOR NON-PARTICIPATION IN THE ACTIVITIES  
LISTED IN TABLE 10

Reasons	Per cent of				Total per cent
	Ninth grade	Tenth grade	Eleventh grade	Twelfth grade	
Did not have parent's consent	7.2	....	10.4	10.8	8.1
Did not have the equipment	28.8	37.8	26.0	35.1	31.3
Activity too far from home	12.6	22.5	7.8	27.0	19.5
Fees too high	9.0	11.2	15.6	13.5	12.4
Physical condition	1.8	....	7.8	2.7	2.9
Too small	....	5.4	....	....	1.2
Not passing grades	....	2.7	....	....	.6
Activity was not available	....	5.4	7.8	18.9	8.1
Working	5.4	....	10.4	....	4.1
No transportation	....	....	2.6	....	.6
Band	1.8	....	....	....	.6

In Table 12 the activities are ranked according to the boys favorite selections. They are: basketball, first; football, second; swimming, third; baseball, fourth; listening to the radio, fifth; attending moving pictures, sixth; auto driving, seventh; horseback riding, eighth; rodeos, ninth; ping pong, tenth; hunting, eleventh; riflery, reading, and tennis, twelfth; bowling, thirteenth; fishing, fourteenth; softball, fifteenth; track, sixteenth; golf, seventeenth; volleyball, eighteenth; attending fairs, wrestling, social dancing, and boxing, nineteenth; skating, twentieth; bicycling, twenty-first; yo-yoing and photography, twenty-second; pool, twenty-third; playing marble machines and parties, twenty-fourth; archery, woodworking, and motor cycling, twenty-fifth; square dancing, touch football, picnics, camping, and hiking, twenty-sixth; church meetings and scouting, twenty-seventh; croquet, table tennis, cards and loafing, twenty-eighth; tumbling, twenty-ninth; tops, painting, marbles, gardening, attending circuses, and speedboat racing, thirtieth; canoeing, washers, cooking, model planes, and soccer, thirty-first; kiting, thirty-second; club meetings, keep away, horse shoes, hotrod rasing, and flying, thirty-third; and badminton, handball, shuffleboard, metal working, show animals, roping, bull dogging, bull riding, band, whittling, swinging, carving, bird watching, chess, checkers, and dominos, thirty-fourth.

TABLE 12  
FAVORITE ACTIVITY RANKINGS BY GRADE GROUPS

Activities	Ranking in				Ranking of 168 boys
	Ninth grade	Tenth grade	Eleventh grade	Twelfth grade	
Bowling	13	5	10	11	13
Archery	17	12	17	15	25
Bicycling	16	13	16	14	21
Badminton	19	..	..	..	34
Boxing	12	15	11	16	19
Croquet	8	17	17	14	28
Canoeing	19	..	..	14	31
Social dancing	16	16	13	9	19
Square dancing	18	17	..	12	26
Golf	14	11	10	11	17
Handball	..	..	..	16	34
Horseback riding	8	8	7	10	8
Kiting	17	..	..	..	32
Riflery	10	9	9	11	12
Tennis	14	6	9	9	12
Softball	7	12	12	14	15
Soccer	19	16	17	..	31
Swimming	3	4	2	1	3
Skating	15	15	11	14	20
Scouting	16	16	17	16	27
Touch football	..	9	..	16	26
Tumbling	18	17	16	16	29
Tops	15	..	..	..	30
Washers	17	..	..	16	31
Wrestling	14	10	13	15	19
Yo-yoing	13	13	17	15	22
Keep away	18	..	..	..	33
Marbles	16	..	17	..	30
Ping pong	12	8	5	10	10
Table tennis	..	15	15	16	28
Painting	19	16	16	..	30
Woodworking	16	13	16	16	25
Cooking	17	..	..	16	31
Gardening	18	..	17	15	30
Listening to the radio	6	5	6	6	5
Reading	11	8	9	10	12
Auto driving	10	8	9	4	7
Club meetings	19	..	..	16	33
Church meetings	19	17	16	13	27
Photography	17	12	13	16	22

TABLE 12--Continued

	Ranking in				Ranking of 168 boys
	Ninth grade	Tenth grade	Eleventh grade	Twelfth grade	
Parties	19	13	15	13	25
Picnics	13	15	17	16	26
Playing marble machines	13	..	15	14	24
Attending fairs	16	..	7	16	19
Attending circuses	18	..	17	15	30
Football	1	3	1	3	2
Baseball	4	2	4	3	4
Basketball	2	1	3	2	1
Track	15	16	7	8	16
Volleyball	11	12	14	13	18
Rodeos	13	7	6	7	9
Moving Pictures	5	10	8	5	6
Motor cycling	16	16	16	14	25
Fishing	12	8	12	9	14
Hunting	9	8	11	7	11
Camping	17	..	14	15	26
Horse shoes	19	..	..	16	33
Shuffleboard	19	..	..	..	34
Model planes	..	15	..	16	31
Speedboat racing	..	..	17	13	30
Playing cards	19	17	16	14	28
Pool	..	12	17	11	23
Hotrod racing	..	..	..	15	33
Metal working	..	..	..	16	34
Hiking	16	16	17	15	26
Show animals	..	..	17	..	34
Flying	18	..	..	..	33
Roping	..	..	17	..	34
Bull dogging	..	..	17	..	34
Bull riding	..	..	17	..	34
Mechanics	..	..	..	16	34
Band	19	..	..	..	34
Loafing	..	16	13	..	28
Whittling	..	17	..	..	34
Swinging	19	..	..	..	34
Carving	19	..	..	..	34
Bird watching	19	..	..	..	34
Chess	..	17	..	..	34
Checkers	..	17	..	..	34
Dominos	..	17	..	..	34

In comparing this study and a similar study, the investigator found that a similarity existed, especially between the first four activities, basketball, swimming, baseball, and football.<sup>1</sup> The similar study was concerned with physical activities, whereas the investigator's study was concerned with all types of leisure time activities.

TABLE 13

A COMPARISON OF THE FAVORITE ACTIVITIES  
OF THIS STUDY AND A SIMILAR STUDY

Rank	Favorite activities of this study	Rank	Favorite activities of the similar study
1	Basketball	1	Swimming
2	Football	2	Football
3	Swimming	3	Basketball
4	Baseball	4	Baseball
5	Listening to the radio	5	Track
6	Attending movies	6	Tennis
7	Auto driving	7	Boxing
8	Horseback riding	8	Touch football
9	Rodeos	9	Handball
10	Ping pong	10	Playground ball
11	Hunting	11	Wrestling
12	Riflery	12	Soccer
12	Reading	13	Water polo
12	Tennis	14	Archery
13	Bowling	15	Speedball
14	Fishing	16	Life Saving
15	Softball	17	Golf
16	Track	18	Fencing

<sup>1</sup> William Ralph Le Porte, "Seventh Annual Report of the Committee on Curriculum Research," The Research Quarterly of the American Physical Education Association, VI (May, 1935), II.

In ranking the physical activities of the investigator's study, it was found that tennis, softball, and track, would be in fifth, sixth, and seventh places respectively, replacing listening to the radio, attending moving pictures, and auto driving.

## CHAPTER IV

### CONCLUSIONS AND RECOMMENDATIONS

#### Conclusions

From the findings of this study, the following conclusions were reached:

1. Ninety-two per cent of the boys of this study were fourteen, fifteen, sixteen, and seventeen years of age.
2. Public facilities were used, but there was more participation when the boys had their own equipment.
3. The city of Big Spring did not provide playground supervision.
4. The locations of the activities offered were too distant for many of the boys to participate.
5. Parental consent prohibited 7 per cent of the boys from participating in certain of their desired activities.
6. A small per cent of the boys indicated that they had learned the activities through school instruction.
7. The ninth, tenth, eleventh, and twelfth grades showed a close similarity in participation in their first ranking activity choices.
8. Very little similarity was shown among the low ranking activity choices of the four grade groups.

9. The boys of Big Spring High School had similar interests in leisure time activities, compared with boys of similar studies.

10. The four grade groups show a close similarity in the average number of hours spent per week participating in the first four ranked activities.

11. In the four grade groups, commercial facilities were used most for the observing activities.

12. The first three activity choices in which the ninth-grade boys wanted to participate were: club meetings, basketball, and golf.

13. The first three activity choices in which the tenth-grade boys wanted to participate were: club meetings, basketball, and fishing.

14. The first three activity choices in which the eleventh-grade boys wanted to participate were: fishing, hunting, and basketball.

15. The first three activity choices in which the twelfth-grade boys wanted to participate were: fishing, hunting, and motor cycling.

16. The main reasons the boys gave for not participating in certain of their desired activities were: did not have the equipment, activity too far from home, and fees too high.

17. The ten favorite activities of the boys of this study, listed in order of their popularity were: basketball, football,



swimming, baseball, listening to the radio, attending moving pictures, auto driving, horseback riding, rodeos, and ping pong.

#### Recommendations

The following recommendations are made:

1. That the curriculum of the high school be broadened so that instruction may be given in more fields of leisure time activity.

2. That the city of Big Spring encourage the use of facilities that have been provided, especially those where there were no fees.

3. That the city of Big Spring provide playground supervision.

4. That more attention be given the maintenance of the public facilities within the city limits.

5. That fees for city recreation activities be lowered for the high school age group in order that more may participate.

6. That a further study of this problem be an evaluation of leisure time activities.

## APPENDIX

### QUESTIONNAIRE

In the following questionnaire answer as completely as you possibly can. Answer without hesitation for your name will not be used in connection with this paper, and there will be no individual check.

I. A. What is your age? (check one)

11 _____	16 _____
12 _____	17 _____
13 _____	18 _____
14 _____	19 _____
15 _____	20 _____

B. What grade are you in school? (check one)

9th. _____	11th. _____
10th. _____	12th. _____

II. Read the following carefully, then answer number A in column I, and then proceed with the others in order.

A. In column I place a check mark beside each activity in which you participated in your leisure time during the past school year (1948-1949) and the summer of 1949.

B. Did you have the facilities in your own home for the activities checked in column I? Place a check mark in column II for the activities you participated in and used your own equipment.

- C. If the facilities used in the activities were not your own, but were public property, check in column III. Public property means property belonging to the school, city, state, or county.
- D. Place a check in column IV if the facilities you used in the activities were commercial in nature such as, movies and bowling.
- E. In column V check the number of hours spent per week participating in each activity.
- F. In column VI place a check beside the activity in which some instruction was given in school.

[illegible]



[illegible]

Activities	I	II	III	IV	$\frac{1}{2}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	More than 3	VI
Observing											
Tennis											
Rodeos											
Moving pictures											

III. List other activities in which you would liked to have participated in but did not.

_____	_____
_____	_____
_____	_____

IV. Why were you unable to participate in the activities listed above? (check one or more)

1. Did not have parent's consent \_\_\_\_\_
2. Did not have equipment \_\_\_\_\_
3. Activity too far from home \_\_\_\_\_
4. Fees too high \_\_\_\_\_
5. Your physical condition \_\_\_\_\_
6. Other reasons \_\_\_\_\_

_____	_____
_____	_____
_____	_____

V. List in order the ten (10) leisure time activities you like best.

- |          |           |
|----------|-----------|
| 1. _____ | 6. _____  |
| 2. _____ | 7. _____  |
| 3. _____ | 8. _____  |
| 4. _____ | 9. _____  |
| 5. _____ | 10. _____ |

## BIBLIOGRAPHY

### Books

- Bell, H. M., Youth Tell Their Story, Washington, D.C., American Council on Education, 1938.
- Good, Carter V., Barr, A. S., and Scates, Douglas E., Methodology of Educational Research, New York, D. Appleton-Century Co., 1941.
- Koos, L. B., The Questionnaire In Education, New York, Macmillan Co., 1928.
- Nash, J. B., The Administration of Physical Education, New York, A. S. Barnes and Co., 1931.
- Webster, Noah, New American Dictionary, New York, Brooks, Inc., 1947.

### Articles

- Clark, Tom, "Who's to Blame for Juvenile Crime?" The Rotarian Magazine, LXVIII (April, 1946), 21.
- Crabtree, J. W., "Creating a Curriculum for Adolescent Youth," Research Bulletin of the National Education Association, VI (March, 1926), v.
- LePorte, William Ralph, "Seventh Annual Report of the Committee on Curriculum Research," The Research Quarterly of the American Physical Education Association, VI (May, 1935), 3-25.

### Unpublished Material

- Cearley, Jess E., "To Determine the Physical Activity Interests of the Junior High School Boys of Amarillo, Texas To Be used as a Basis for a Physical Education Program," Unpublished Master's Thesis, Department of Physical Education, North Texas State College, 1940.



Ratliff, Mildred Mitchell, "A Survey of the Leisure Time Activities of Senior High School Girls of Big Spring, Texas," Unpublished Master's Thesis, Department of Physical Education, North Texas State College, 1941.