



4-H students in college activities
by Weber H Peterson

A THESIS Submitted to the Graduate Committee in partial fulfillment of the requirements for the Degree of Master of Science in Agricultural Economics
Montana State University
© Copyright by Weber H Peterson (1938)

Abstract:

The 22nd anniversary of 4-H club work in Montana was celebrated by rural Montana youths during 1937. Records show that about 49,000 boys and girls of Montana have been members of this organization. Many lasting values have accrued to the 4-H boys and girls from the training in building citizens who are better able to live useful, happy lives.

Some of the benefits derived from 4-H training as shown by this study are as follows.

- (1) It was found that 4-H students participated in college activities about 50 per cent more, on the average, than did non-4-H students. This was especially true of 4-H boys.
- (2) The effect of 4-H training is more pronounced in the sophomore and junior years of college than in the freshman and senior years.
- (3) This study shows that longer membership in 4-H club means increased participation in college activities and a slightly higher scholastic standing.
- (4) The percentage of 4-H students participating in nine of the ten groups of college activities was higher than the percentage of non-4-H students participating in the same activities. Those nine groups of activities were: (1) athletics, (2) church, (3) clubs, (4) councils and fraternity offices, (5) debate, dramatics and music, (6) honorary societies, (7) judging teams, (8) service organisations, and (9) student senate. The group of activities that the non-4-H students participated in more than the 4-H students was journalism.
- (5) Fraternity affiliation apparently is a means whereby students participate more in activities. It also has some effect toward a higher Scholastic standing. This is more true of 4-H than of non-4-H fraternity students.
- (6) 4-H students have a slightly, though not a significantly higher scholastic standing than non-4-H students while in college.
- (7) A larger percentage of the 4-H students who were enrolled at Montana State College during the winter quarter of 1937 returned to college the winter quarter of 1938 than did the non-4-H students.

4-H CLUB STUDENTS IN COLLEGE ACTIVITIES

by

WEBER H. PETERSON

A THESIS

Submitted to the Graduate Committee
in partial fulfillment of the requirements
for the Degree of Master of Science
in Agricultural Economics at
Montana State College

Approved:

Carl F. Kraenzel
In Charge of Major Work

R. R. Reine
Chairman, Examining Committee

J. B. [Signature]
Chairman, Graduate Committee

Bozeman, Montana
June, 1938

N 378
P45f
col. 2

- 2 -

TABLE OF CONTENTS

	Page
List of Illustrations.....	5
ACKNOWLEDGMENTS.....	7
ABSTRACT.....	8
PART I: INTRODUCTION.....	9
<u>Purpose of Investigation</u>	9
<u>Importance of 4-H Club Movement in the United States and Montana</u>	10
<u>Definition of 4-H Club Work</u>	12
<u>History of the 4-H Club Movement in America</u>	13
<u>History of the 4-H Club Movement in Montana</u>	16
<u>Method of Investigation</u>	19
<u>Source of Data</u>	22
<u>Limitations of Data</u>	22
PART II: COMPARABILITY OF THE 4-H AND NON-4-H STUDENTS.....	24
<u>Is the 4-H Club Group a Select Group?</u>	24
<u>Education of Parents as a Selective Factor</u>	30
<u>Size of Family as a Selective Factor</u>	31
<u>Intelligence as a Selective Factor</u>	32
<u>Age as a Selective Factor</u>	33
<u>Summary of Selective Factors and Comparability of the Two Groups</u>	34
PART III: ANALYSIS OF DATA.....	35
Section I. <u>Analysis of Participation in College Activities</u>	35
Procedure Used.....	35

60033

Ag 11 138 g. Graduate Committee

	Page
Participation Records of All Students of the Two Groups in Activities.....	36
Participation Record of the Boys in Activities.....	36
Participation Record of the Girls in Activities.....	36
Participation of Fraternity and Non-Fraternity 4-H and Non-4-H Students in Activities.....	40
Participation in relation to Length of Membership in 4-H Club.....	42
Distribution of Participation in the Ten Activity Groups.....	43
Distribution of Students in the Groups of Activities.....	49
Summary of Participation in College Activities.....	52
<u>Section II. Analysis of Scholarship</u>	54
Average Scholastic Standing of the Two Groups.....	54
Average Scholastic Standing of the Boys.....	56
Average Scholastic Standing of the Girls.....	56
Scholastic Standing of the Fraternity and Non-Fraternity Students of the Two Groups.....	56
Scholastic Standing in Relation to Length of Membership in 4-H Clubs.....	57
Per cent of Students of the Two Groups Who Return to College.....	60
Summary of Scholarship.....	63
PART IV: THE 4-H PROBLEM OF THE FUTURE.....	63
<u>Age Distribution of 4-H Club Members and Resulting Problems</u> ..	63
<u>Meeting the Needs of the Young People Who Are Not Attending School</u>	64

	Page
<u>Values of 4-H Club Training.....</u>	65
<u>How the 4-H Club Program Can Be Expanded and Broadened to</u> <u>Meet the Needs of Rural Youth.....</u>	67
SUMMARY AND CONCLUSIONS.....	68
APPENDIX A. Supplementary Tables.....	69
APPENDIX B. Notes on Methodology.....	91
BIBLIOGRAPHY.....	99

List of Illustrations

	Page
Figure 1.—Distribution of the 7,268 4-H club members in Montana in 1937 by counties.....	11
Figure 2.—Distribution of college students included in this study.....	21
Figure 3.—Education of the parents of the 4-H and non-4-H students of Montana State College.....	28
Figure 4.—Average participation record of 4-H and non-4-H students of Montana State College by class in college.....	37
Figure 5.—Average participation of 4-H and non-4-H boys of Montana State College by class in college.....	38
Figure 6.—Average participation of 4-H and non-4-H girls of Montana State College by class in college.....	39
Figure 7.—Average participation of the fraternity and non-fraternity students of Montana State College by 4-H club membership.....	41
Figure 8.—Participation record of the 4-H club group by length of membership in 4-H clubs.....	44
Figure 9.—Average participation in groups of activities of 4-H and non-4-H students of Montana State College.....	46
Figure 10.—Distribution of the participation of 4-H and non-4-H students of Montana State College by groups of activities.....	47
Figure 11.—Distribution of participation of 4-H and non-4-H boys and girls of Montana State College by groups of activities.....	48
Figure 12.—Per cent of 4-H and non-4-H club students who enter into the ten activity groups.....	50
Figure 13.—Percentage of 4-H and non-4-H girls who participate in the ten activity groups.....	51
Figure 14.—Percentage of 4-H and non-4-H boys who participate in the ten activity groups.....	53

Figure 15.--Average scholarship of the 4-H and non-4-H students of Montana State College.....	55
Figure 16.--Average grade points per credit of the fraternity and non-fraternity students by 4-H club membership.....	58
Figure 17.--Relationship of scholastic standing to length of membership in 4-H club.....	59
Figure 18.--Per cent of 4-H and non-4-H students of Montana State College who return to college.....	62

ACKNOWLEDGMENTS

The author is indebted to the students and faculty of Montana State College who through replies to questionnaires furnished much important material for this study. He would like to express his appreciation and thanks to Dr. C. F. Kraenzel and Mr. R. E. Cameron for their valuable suggestions and criticisms throughout the study, to Mr. Henry J. Bolles for editing the manuscript, and to his wife for her constant assistance in this study.

4-H CLUB STUDENTS IN COLLEGE ACTIVITIES

ABSTRACT

The 22nd anniversary of 4-H club work in Montana was celebrated by rural Montana youths during 1937. Records show that about 49,000 boys and girls of Montana have been members of this organization. Many lasting values have accrued to the 4-H boys and girls from the training in building citizens who are better able to live useful, happy lives.

Some of the benefits derived from 4-H training as shown by this study are as follows:

(1) It was found that 4-H students participated in college activities about 30 per cent more, on the average, than did non-4-H students. This was especially true of 4-H boys.

(2) The effect of 4-H training is more pronounced in the sophomore and junior years of college than in the freshman and senior years.

(3) This study shows that longer membership in 4-H club means increased participation in college activities and a slightly higher scholastic standing.

(4) The percentage of 4-H students participating in nine of the ten groups of college activities was higher than the percentage of non-4-H students participating in the same activities. Those nine groups of activities were: (1) athletics, (2) church, (3) clubs, (4) councils and fraternity offices, (5) debate, dramatics and music, (6) honorary societies, (7) judging teams, (8) service organizations, and (9) student senate. The group of activities that the non-4-H students participated in more than the 4-H students was journalism.

(5) Fraternity affiliation apparently is a means whereby students participate more in activities. It also has some effect toward a higher scholastic standing. This is more true of 4-H than of non-4-H fraternity students.

(6) 4-H students have a slightly, though not a significantly higher scholastic standing than non-4-H students while in college.

(7) A larger percentage of the 4-H students who were enrolled at Montana State College during the winter quarter of 1937 returned to college the winter quarter of 1938 than did the non-4-H students.

PART I: INTRODUCTION

Purpose of Investigation

This study is designed to compare the college activities of 4-H club college students with those of non-4-H club college students. It is an attempt to arrive at some method of determining the value of 4-H club activity to rural Montana youths.

More specifically, the purposes of this study are:

1: To determine whether young people who have had 4-H experience are more active in college affairs and have a higher scholastic standing than college students who have never belonged to the 4-H organization.

2: To measure, in a general way, the services 4-H club work renders an individual, or a community.

This was done by observing the activity habits of former 4-H members now in college, and of a comparable group of college students who were never members of 4-H clubs. By activity habits is meant joining and taking active part in officially recognized collegiate activities. This was done on the assumption that one of the useful purposes of 4-H clubs is that of "helping rural boys and girls to improve rural farm and home practices and the social life of themselves and of their communities".

Before proceeding into the analysis of the data of this study, it is necessary to note the extent of the 4-H movement in America and Montana and to know something of the nature of 4-H club work, its

aims, and its development from small corn clubs to the largest organization for rural youths in America.

Importance of the 4-H Movement in the United States and Montana

There were over 1,250,000 boys and girls of America who were members of 4-H clubs in 1937. More Montana boys and girls were regularly enrolled in 4-H clubs in the state in 1937 than in any previous year. The 4-H club membership included about 7300 boys and girls supervised by about 1500 voluntary local leaders (see figure 1). 1/ Should not this large number of members alone challenge the interest of even the casual observer?

According to figures released by R. E. Cameron, State 4-H Club Leader, 14 per cent of the eligible farm youths in Montana are members of 4-H clubs. 2/ This figure compares very favorably with that for the United States as a whole, less than eight per cent of the eligible farm youths of the United States being enrolled in 4-H clubs. These figures are for the year 1937. 3/

Over 40 per cent of the students enrolled in the Agriculture and Home Economics courses at Montana State College (spring quarter of 1937) were former 4-H club members. On the basis of a special study, Mr. R. A.

1/ These figures were obtained from records compiled by the State 4-H Club Leader.

2/ By the term "eligible farm youth" is meant the boys and girls between the ages of 10 and 20, the age limits of the 4-H organization.

3/ "4-H Club Work in Montana for 1937", Mimeographed Summary Report for 23rd Annual Conference of Montana Extension Staff, January, 1938.

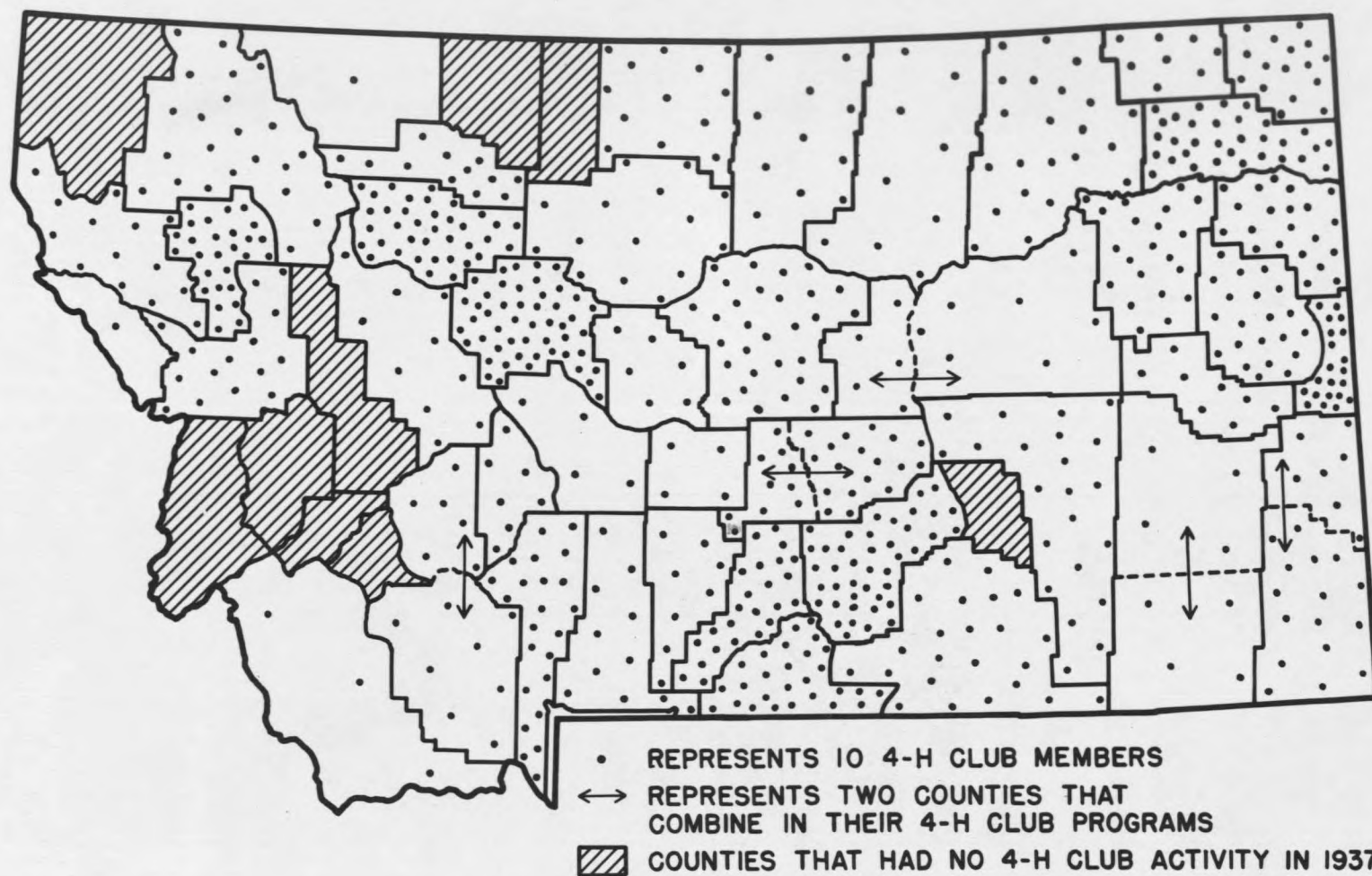


Figure 1.--Distribution of the 7,268 4-H club members in Montana in 1937 by counties. (Source: Table I, Appendix A.)

Turner states "that the 4-H club movement is fostering a desire on the part of the 4-H club members to obtain additional scholastic training and is directing an increasing number toward the State Colleges of Agriculture." ^{4/} He also points out in this study that in the twelve central states reporting for the school year 1936-37, 53.8 per cent of the total student enrollment in Agriculture and Home Economics courses were former 4-H club members. Twenty per cent of all students enrolled at Montana State College in the spring quarter of 1937 were, or had been, a member of a 4-H club. ^{5/} These figures tend to show the importance of the 4-H program in the development of the young people of the nation and of Montana. The importance of the 4-H program is undoubtedly greater in rural communities where there are fewer or no other clubs or agencies to develop and train the youth compared with towns and cities. This organization is the largest rural group of its kind in America.

Definition of 4-H Club Work

The term "4-H club work" as used in this study can be described thus. "Boys' and girls' 4-H club work is a part of the national agricultural extension system carried on by the agricultural extension service of Montana State College, cooperating with the United States Department of Agriculture.

Through 4-H club work rural boys and girls, 10 to 20 years of age, in school

^{4/} Turner, R. A., "4-H Goes to College"—a statistical study of former 4-H club members enrolled in the State Colleges of Agriculture in the Central States, 1936-1937.

^{5/} 1105 college students were enrolled at Montana State College during the spring quarter of 1937 and over 225 of these were former 4-H club members.

and out of school, are organized into groups by county extension agents, under the supervision of volunteer leaders. The latter are assisted and directed by the county agent. The outstanding characteristics of club work are that each member conducts a substantial piece of work, known as a project, designed to show some better practices on the farm, in the home, or in the community; keeps a record of results; explains the work to others; and makes a final report on the work." 6/ Indirectly the student is expected to learn to live and associate with others.

The name, 4-H, stands for head, heart, health and hands. The 4-H pledge, which each member gives when he or she joins a 4-H club is: "I pledge My Head to clearer thinking, My Heart to greater loyalty, My Hands to larger service, and My Health to better living--For My Club, My Community, and My Country." The four leaf clover, the symbol of the organization, signifies the purpose for which the first clubs were formed, namely, soil conservation.

History of 4-H Club Movement in America

The history of the 4-H club organization began in the latter part of the nineteenth century. 7/ During the 1890's and early 1900's there developed a demand for instruction "in the direction of appreciation of rural life and its opportunities, instead of confining teaching to studies that

6/ "4-H Club Guide for Local Leaders--Organization and Project Requirements", Montana Extension Service in Agriculture and Home Economics, February, 1936.

7/ The Smith-Lever Act of 1914 did not officially recognize boys and girls club work although it did establish the extension system. The Capper-Ketcham act of 1928 legally established 4-H Club work.

ignored the country and directed pupils' attention to occupation of towns and cities." 8/

One of the early leaders in the movement, Dr. L. H. Bailey, of Cornell University, recognized the feasibility of such a program. In one of the early leaflets issued by Cornell University he wrote: "Why is the college of Agriculture interesting itself in this work? It is trying to help the farmer and it begins with the most teachable point--the child....The child will teach the parent. The coming generation will see the result."

In 1899, W. B. Otwell of Macoupin County, Illinois, originated the modern idea of the 4-H Club. He offered every boy and girl of Macoupin County one ounce of high-grade seed corn if they would promise to plant the corn and exhibit it at the farmer's institutes. This small project proved such a success that the state of Illinois appointed Otwell to be the director of an exhibit at the Louisiana Purchase Exposition. He had 1000 boys exhibit the corn they had grown. Other states soon followed the example of Illinois. According to a monument erected January 15, 1932, by the Graham Agricultural Club, the first boys' and girls' agricultural club in the United States was established on January 15, 1902, when Albert B. Graham, Superintendent of Rural Schools, organized a club of 85 boys and girls of the Springfield Township, Clark County, Ohio. The purpose of this club as set forth by the monument was "to utilize the daily home and farm environment of these young people as a means of developing a more wholesome understanding

8/ Farrell, George E., "Boys and Girls 4-H Club Work Under the Smith-Lever Act of 1914-1924", U. S. D. A., Misc. Circ. 85, December, 1926, p. 10. The historical sketch presented in this study is based mainly upon this circular and records on file at the State 4-H Club Leader's office.

of agriculture and rural home life; and to help create a more favorable attitude toward life and work in the open country." Other early leaders in the development of 4-H club work were Dr. S. A. Knapp and O. B. Martin in the South and O. H. Benson in Iowa; Miss Marie S. Cromer started girls' club work in South Carolina. Many successful corn clubs and other types of clubs, including girls' canning clubs, were developed in the South. Suitable prizes, such as a trip to Washington, D. C., were offered to winners of state contests. The people of the south were the first to realize the importance of developing the home and the woman's side of country life. Girls undertook projects in canning and poultry raising and in this way were able to supplement the family income.

The country school teachers were the leaders of these early clubs. However, they were not prepared to teach agriculture in a satisfactory manner. The more progressive school superintendents took an active interest in developing a method of teaching agriculture and home-making so that the pupils of the rural schools would get the most out of such courses. The county superintendents of schools were developing farmer's institutes at this time also. These institutes realized the importance of satisfactory training for the farm boys and girls; hence, they endeavored to procure trained instructors for their children.

This was the simple beginning of the 4-H club program, "but it marked the beginning of the new system of education in which the boys and girls, under the direction of the United States Department of Agriculture, State Agricultural Colleges, county extension agents, and parents,

undertook, on their farms and in their homes, to demonstrate one or more improved practices. It developed vision, put joy into the routine farm toil and opened a new approach to the better things in country life." 9/

With the passage of the Smith-Lever Act in 1914, the 4-H movement was given a new impetus. This act created a single extension system through which practically all extension work of the State Agricultural Colleges and United States Department of Agriculture was to be conducted. This act, along with the need for an increased food supply created by the World War, speeded up the development of 4-H clubs in America. Today, there are over one and a quarter million boys and girls who are members of this organization.

History of the 4-H Club Movement in Montana

Club work in Montana has developed along similar lines. The farmers institutes sponsored the movement by giving such addresses at the institute meetings as "How to Keep the Boys and Girls on the Farms".

In 1911, as an outgrowth of the institute discussions, a cooperative plan was launched by the State Fair Association, state and county educational forces, and the Farmer's Institutes for the purpose of conducting short courses in stock judging and household arts at the State Fair. One boy and one girl from each county were to be sent to the Fair, the selection based upon some agricultural achievement such as corn or potatoes raising or proficiency in sewing or fruit canning. At the 1913 Fair 26

9/ Farrell, George E., op. cit, pp. 11 and 12.

boys and 24 girls attended as county contest winners and were given instruction in stock judging and home science. The State Extension Service took charge of the boys' and girls' club work in 1914. That year the first state club leader was appointed. During the year 1915, 413 boys' and girls' clubs were organized, with a total membership of 2,689. As additional county agents were appointed, 4-H club activities became more prominent. The county agents found young people more receptive to new practices than their parents. In this manner progressive agricultural practices were more readily introduced into the communities.

Until about 1920 the rural school teacher was usually the local leader of the 4-H club in Montana. This arrangement was none too satisfactory for several reasons: the teacher usually left the community in May or June and did not return until September; many of the rural teachers were from the towns or cities and hence, did not know much about farm practices. To overcome these difficulties county agents enlisted local people to take charge of the local clubs. Local leaders were given group training by members of the extension service so that the advantages of recent research might be made available to boys' and girls' clubs. The first attempt at standardizing 4-H club literature was made in 1922 by publishing project outlines, local leader guide books, and club secretary books. By 1927 a standard procedure was used in this state for carrying on all county 4-H programs.

During the year 1937, 47 of the 56 counties in the state were carrying on 4-H club work (figure 1 shows the distribution of 4-H

club boys and girls over the state). 4-H club boys and girls are now showing their parents new and approved methods of farming, marketing produce, breeding livestock, and canning methods that have been developed through research work done by the extension service of the agricultural colleges and the United States Department of Agriculture. Parents readily accept new ideas and methods after they have once seen the success that their children are having in using them.

"The chief value to be derived from 4-H club training is educational; 4-H club work teaches the boy and girl how to make their own community a better place in which to live; they do this by first learning and then demonstrating and teaching approved agricultural practices on the farm, in the home, and in the community. Members of 4-H clubs earn money, are taught to be thrifty and acquire property. They are taught to play the game fairly. They learn how to meet together, play together and cooperate with one another in order that they may achieve their goal. Above all 4-H club boys and girls are doers; in this way they become acquainted with the actual problems of the community and learn how to do things through the actual experience of doing them." 10/

The county agricultural agents, home demonstration agents, and the county club agents, under the supervision of the State 4-H Club Leader, develop and conduct 4-H club work. They are ably assisted in this work by the many volunteer local leaders. Usually the interested and informed

10/ Smith, C. B., "Boys and Girls 4-H Club Work", Misc. Circ. No. 77, Revised, November, 1935, U.S.D.A., pp.7 and 8.

farmer makes a better local leader than the country school teacher who already has a full-time job. Club work is an activity separate from, but complementary to, the rural school.

Method of the Investigation

This study of 4-H club activity in Montana is the first of its kind. A method of controlled and selective sampling was used. In a study of this nature, in which more than 7000 individual cases are involved, and in a state of such size as Montana, it was thought best to restrict the study to 4-H club boys and girls attending Montana State College during the winter quarter of 1937. This gives a selective sample in that only the 4-H club students who were in college were studied. In order to make the results more meaningful a group of college students who had never belonged to a 4-H club were selected for the purpose of comparison with the group of 4-H club students.

The 4-H club students who were selected for study were chosen on the basis of returns from a questionnaire that was sent to all of the undergraduate students of Montana State College during the winter quarter of 1937. 11/ All students who reported that they belonged or were formerly members of a 4-H club in Montana were chosen with the following exceptions; no married person was considered; no student with a physical defect or who was sick a great deal was chosen; no orphans or adopted children were included. Those students who did not fill out the

11/ The returns from this questionnaire were only about 65 to 70 per cent; the questionnaire is table II of Appendix A.

questionnaires completely and accurately were not included. ^{12/} There were 198 former 4-H club members who were included in this study (although there were over 225 former 4-H club members in college at this time).

The students who were never members of a 4-H club were selected because of their comparability to the 4-H club group. The comparability of the two groups was based upon the following criteria: sex, size of high school attended, type of farming area and community, class and course in college, college fraternity affiliation, and the amount of money earned by the student. The comparability of the two groups will be discussed further in Part II.

The number of students in the non-4-H club group was only 161. ^{13/} The discrepancy between the number of students in the two groups is due to a shortage of comparable students from which to draw the check group. There were not enough non-4-H students from home communities similar to those of individual 4-H members nor were there enough of the former group who attended high schools of the same size to obtain a sample as large as the 4-H group. However, the differences between the groups will not affect the analysis of the data, because averages and percentages will be used to show the comparisons between the two groups. Figure 2 shows the distribution of the students included in this study.

^{12/} These exceptions were made because it was thought that more representative values could be obtained if the exceptions were not included in this study.

^{13/} By the term non-4-H club group is meant those students who have never affiliated with 4-H; this group will also be referred to as the check group for purposes of comparison.

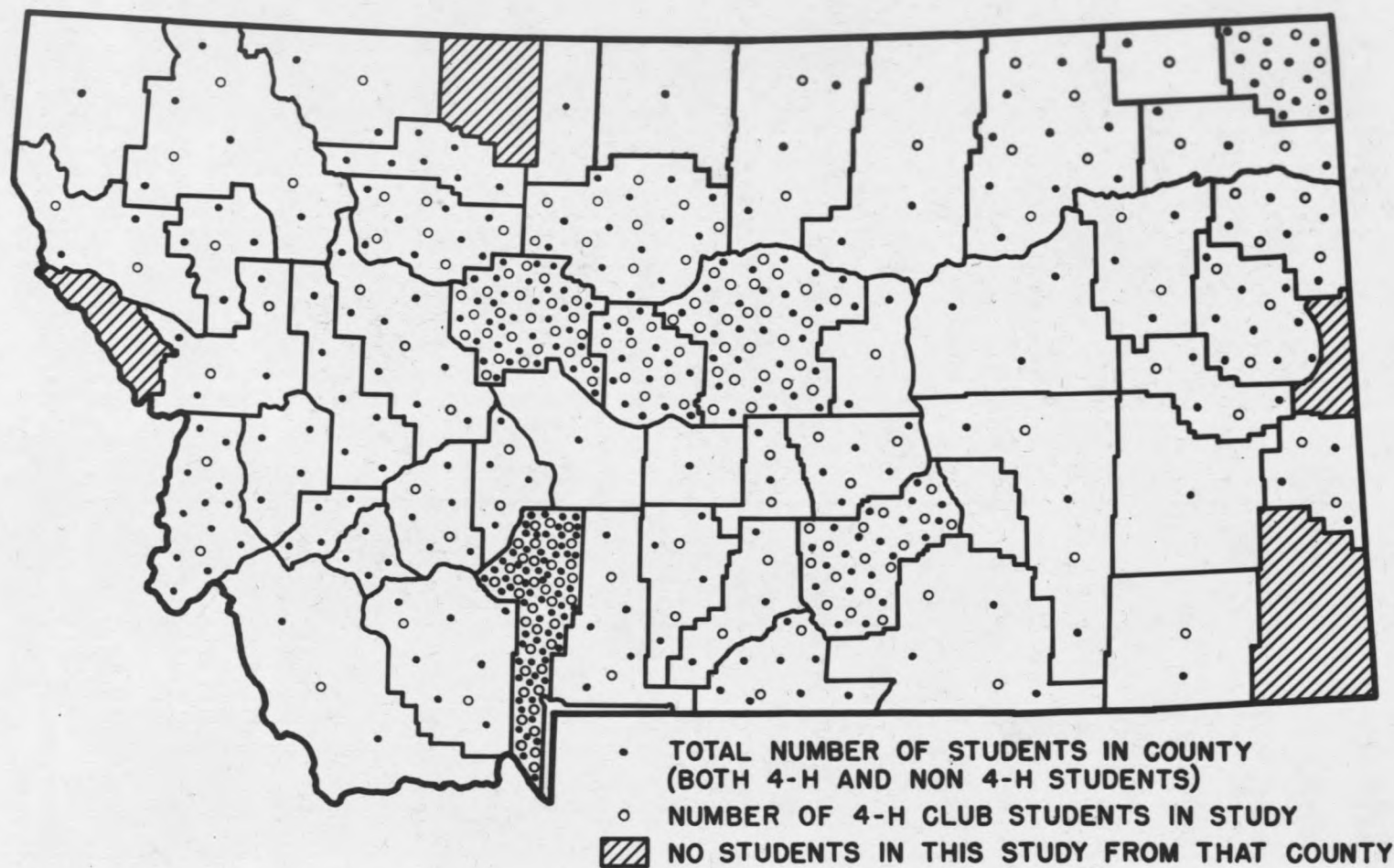


Figure 2.--Distribution of college students included in this study.
(Source: Table III, Appendix A.)

This study was designed to measure the influence of 4-H membership upon a student's participation in collegiate activities, as was previously mentioned. In order to do this a questionnaire on college activities was sent to the students of the two groups. The activities were then rated as to their relative importance. 14/ In this manner a comparison of the total participation records of the two groups was possible.

Source of Data

The data for this study were obtained from four main sources. Two sets of questionnaires were sent out. 15/ The first questionnaire was sent to all undergraduate college students and the second questionnaire was sent to just the 4-H and check groups. The second source of data was the college records in the registrar's office and the Deans' offices (grades and checks on data given in the questionnaires). Records on file at the State 4-H Club Leader's office were also used in assembling the data for this study (information pertaining to the history and importance of 4-H club work in Montana were obtained from this source). Data from publications on related subjects were also drawn upon for use. 16/

Limitations of Data

The greatest limitation in the data was caused by the fact that

14/ See Appendix B, pp. 91-92 for the determination of the rating given to the various activities.

15/ See Tables II and IV of Appendix A for the two questionnaires.

16/ See the Bibliography, p. 99.

there was no complete list of the names of all former 4-H club members available. As was previously mentioned there was only about a 65 or 70 per cent return on the questionnaire that was sent out in an attempt to get a complete list of all former club members enrolled at college. This meant that the records of all former 4-H club members attending college were not included in this study.

The two groups, the 4-H club group and the non-4-H group, are comparable in most respects except total number studied. As was previously mentioned there were 198 former 4-H students included in this study and only 161 students were used as the check group, in order to avoid adding students to the non-4-H group who were not comparable with the 4-H group. This shortage was due to the fact that the population from which the check group was chosen was too small to provide enough comparable students.

Complete information about all students could not be obtained because of the incompleteness of the college records and the fact that all the questions of the questionnaires were not completely nor correctly answered.

Any system of rating activities as to their relative importance will meet with criticism. One activity might be important to one person whereas another person may think the activity is not important. However, (as is discussed more fully under Part III, Section I and in Appendix B), the rating scale used to evaluate the activities of students is considered reliable in that it represents the evaluation of a campus group who are quite representative of the college group as a whole.

PART II: COMPARABILITY OF THE TWO GROUPS

Is the 4-H Club Group a Select Group?

The 4-H club group is a select group in that its program is based upon a project in agriculture or homemaking; this naturally draws to it the rural boys and girls of America for whom it is primarily designed. However, as will be shown later in this section, 4-H club membership represents a cross section of rural youth in America and in Montana rather than the "cream of the crop".

Membership in 4-H is voluntary; the success of 4-H club work depends on the interest which it creates in those who are attracted to it. There is no legal compulsion to join this organization nor to remain a member of it. In fact each year membership in 4-H club must be renewed if continued membership is the desire of the boy or girl. Since this is a voluntary organization, it might be said that the children with the most initiative will be the ones who join 4-H clubs and in this way it is a select group. "There can be no valid objection to this if such is the case, if the door of opportunity to entrance into the system is open to all who are capable of profiting by its activities." 17/

Is it not possible to think of the 4-H club group as a group of boys and girls who might be referred to as the "wall-flowers" instead of being the "cream of the crop"? In the opinion of one of the 4-H club

17/ True, A. C., "The Place of 4-H Clubs in the American System of Public Education", Montana State College Extension Service Circ. 72, March, 1928, p. 6.

leaders of the state of Washington, some of the members of his club were the "mean" children of the community, who were interested in 4-H club activity only as a means of enjoying the trips 4-H club members took, but as a whole his club was made up of just the average boys of the community.

Rural boys and girls, especially the girls (over two-thirds of the 4-H members in Montana and also in the United States are girls) might be expressing a suppressed desire for activity or group approval which they might be able to obtain in a 4-H club. In recent years there has been a migration of rural young boys to the cities. Rural girls, to maintain their prestige and standing in the community, join 4-H clubs where they are given a chance to prove their worthiness and are able to show off their accomplishments.

Rather than assume either of the extreme viewpoints that have been presented, as representing 4-H membership, it appears more judicial to assume that through voluntary membership some of the above and below average boys and girls are members of this organization, but that it is mainly composed of the average rural boy and girl of America and Montana.

In order to control the influence of environment from the standpoint of home life as well as college life, in as far as possible, the non-4-H selections were chosen to compare with the 4-H club students on the basis of the aforementioned criteria: sex, size of high school attended, class and course in college, fraternity membership, same city or town where possible (otherwise cities and towns of similar size), same county if possible (otherwise counties that are similar), and same type

of farming area.

In this study 4-H boys were compared only with non-4-H boys and 4-H girls with non-4-H girls. Whenever possible two people enrolled in the same division in college and from the same high school were compared. This was possible in 14.3 per cent of the cases, as 23 pairs out of 161 comparable pairs were chosen who met these requirements. An additional 8 per cent of the pairs were enrolled in the same college division but were from different, but nevertheless, similar sized high schools in the same county (table I). The remaining pairs were students who had attended the same size high school and were from the same type of farming area but were not from the same counties. These likenesses would tend to help eliminate the differences between the two groups due to environment.

In a thesis entitled "4-H Club Work in the Life of Rural Youth" the author, Mary E. Duthie, also used a check group in measuring the differences between 4-H club groups and non-4-H club groups. ^{18/} In that study she based the comparability of the two groups on such criteria as education of the parents, tenancy, size of family, intelligence, etc. Three of these factors of this study, education of the parents, size of family and scholastic standings of the students are shown in figure 3 and tables II and III.

^{18/} Duthie, Mary E., "4-H Club Work in The Life of Rural Youth", a thesis submitted at the University of Wisconsin, 1936.

TABLE I. COMPARABILITY OF THE 4-H AND NON-4-H COLLEGE STUDENTS WITH RESPECT TO HIGH SCHOOL ATTENDED

Class in College	Total Pairs			A*			B**			C***		
	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls
Total Pairs	161	67	94	23	5	18	12	7	5	126	55	71
Seniors	20	9	11	1	1	0	3	1	2	16	7	9
Juniors	29	14	15	2	0	2	5	3	2	22	11	11
Sophomores	48	17	31	8	1	7	1	1	0	39	15	24
Freshmen	64	27	37	12	3	9	3	2	1	49	22	27

* Column A - Number of Pairs in Same Division in College and from the Same High School

** Column B - Number of Pairs in Same Division in College and from Different High Schools in Same County.

*** Column C - Number of Pairs in Same Division in College and from Different High Schools and Different Counties.

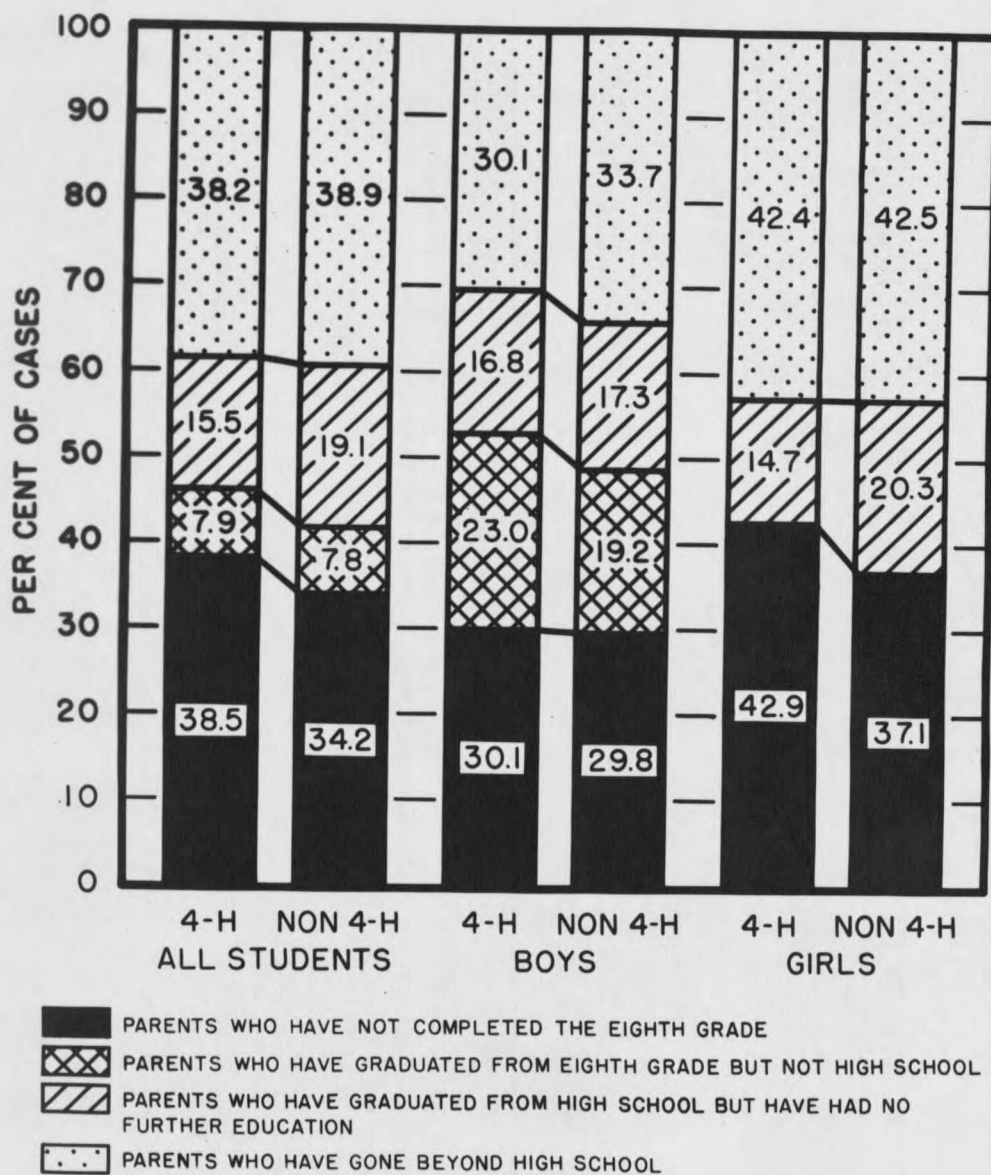


Figure 3.—Education of the parents of the 4-H and non-4-H students of Montana State College
(Source: Table VI, Appendix A.)

TABLE II. NUMBER OF BROTHERS AND SISTERS
OF THE 4-H AND NON-4-H COLLEGE STUDENTS

Classification of Students	Total Brothers and Sisters	Number of Brothers and Sisters of		Total Number of Students	Average No. of Brothers and Sisters per Person
		Boys	Girls		
4-H Group	473	214	259	178	2.66
Brothers	213	103	110	178	1.20
Sisters	260	111	149	178	1.20
Non-4-H Group	401	174	227	143	2.80
Brothers	213	87	126	143	1.49
Sisters	188	87	101	143	1.31

TABLE III. COMPARISON OF RANK IN HIGH SCHOOL
OF 4-H AND NON-4-H COLLEGE STUDENTS*

Class in College	All Students				Boys				Girls			
	Same Diff. Not				Same Diff. Not				Same Diff. Not			
	Total	Rank	Rank	Given	Total	Rank	Rank	Given	Total	Rank	Rank	Given
Total	161	74	60	27	67	25	27	15	94	49	33	12
Pairs												
Seniors	20	3	5	7	9	4	2	3	11	4	3	4
Juniors	29	10	12	7	14	5	5	4	15	5	7	3
Sophomores	48	23	15	10	17	7	5	5	31	16	10	5
Freshmen	54	33	28	3	27	9	15	3	37	24	13	0

* For basis of comparison in this table students of the two groups were paired as they were originally chosen. There were 161 pairs of students (161 4-H students and 161 non-4-H students). The data of this table were obtained from records on file at the registrar's office.

Education of Parents as a Selective Factor

In the analysis of the educational data the following divisions were used in arriving at the education of parents: (1) less than a common school education (did not complete the eighth grade); (2) graduated from the eighth grade but not from high school; (3) graduated from high school but had no additional schooling; and (4) had advanced training or special training such as college, business school, or normal school.

From figure 3 it can be seen that the education of the parents of the two groups is very similar. However, 66 per cent of the parents of the non-4-H club group have at least graduated from the eighth grade as compared with only about 61 per cent of the parents of the 4-H club group. This difference is mainly due to the fact that more of the non-4-H parents have graduated from high school than the 4-H parents. The only noticeable differences in the education of the parents of the boys was that 53 per cent of the parents of the 4-H boys had at least graduated from the eighth grade as compared with 49 per cent of the parents of the non-4-H group. The other difference in this case was that about 34 per cent of the parents of the latter group had gone beyond high school, whereas, only 30 per cent of the parents of the former group had. Even these differences are small. The education of the parents of the girls of the two groups is very similar, the only difference being that 5.5 per cent more of the parents of the non-4-H girls had graduated from high school than had those of the 4-H girls.

These data tend to show that the difference in education of the parents of the two groups is very small; what slight difference there is rests in favor of the parents of the non-4-H group and not with the parents of the 4-H group. ^{19/} Therefore, as far as this study is concerned, it can be concluded that education of the parents is not a selective factor in determining who will be members of 4-H clubs.

Size of Family as a Selective Factor

The factor, size of family, is shown in table II. Only the number of brothers and sisters the individual has was included in this table. The average number of brothers and sisters per student in the 4-H group was 2.7 as compared to 2.8 for the non-4-H students. This is not a significant difference.

The 4-H club group had an average of 1.5 sisters and 1.2 brothers per person; the non-4-H group had an average of 1.5 brothers per person and 1.3 sisters. In other words, the 4-H club group had more sisters per person but not as many brothers.

From these data it can be said that as far as this study was concerned, size of family and the brother-sister relationship was not a selective factor in determining 4-H club membership.

^{19/} Miss Duthie said that, "The education of the parents is associated with the enrollment of the children in 4-H...." However, she made this statement with regard to 4-H students prior to entering college. For basis of comparison see chapter 2, pp. 11-30 of "4-H Club Work in the Life of Rural Youth".

Intelligence as a Selective Factor

The third factor showing the comparability of the two groups is intelligence. Rather than using the word intelligence, the comparability of the two groups will be shown on the basis of high school standing, grade points per credit while attending college, and placement records on entering college. None of these factors were used in the choice of students for this study. These comparisons were made after the selection of the students.

By the term high school standing is meant the class ranking of the student in his high school--high, medium or low. This comparison is shown in table III.

Of the 161 pairs of 4-H and non-4-H college students, 74, or 46 per cent, had been in the same ranks in high school. For another 16 per cent high school ranking could not be determined. This would probably mean that well over half of the pairs of students had the same rank in school although no attempt was made to choose the students on this basis. Over 50 per cent of the girls of the two groups had the same high school ranking.

The grade points per credit of the students were obtained from records of the registrar's office. The number of grade points per credit of the two groups is interesting because of the close similarity in this respect. The average grade points per credit of the 4-H club student was 1.557 and for the non-4-H student it was 1.551. The difference between the groups in average grade points per credit is negligible. (This will

be discussed more fully in Part III, Section II).

By the term placement record is meant the rating given to the student in placement examinations for biology, reading, mathematics, chemistry, psychology and English. 20/ The placement record of the students of the two groups was very similar. 4-H club students had an average placement record of 3.70 per student while that of the non-4-H students is 3.81 per student. The difference in this case is so small that it cannot be considered significant.

From these data it can be said that 4-H club students do not tend to be of a higher intelligence than the non-4-H students. In this study, the students of the two groups seem to be quite comparable on the basis of intelligence. Hence, intelligence does not seem to be a selective factor in determining 4-H membership.

Age as a Selective Factor

Another interesting and significant comparison is the age of the two groups. No attempt was made to control this factor and yet the average age of the members of the two groups differed only .33 of a year. The average 4-H student's age was 20.21 and for the non-4-H student it was 20.54. The average age of the 4-H girl was 19.7 as compared to 20.3 for the non-4-H girls. The 4-H boys were older than the non-4-H boys, the ages being 21.0 and 20.2 years respectively. This shows that the 4-H girls averaged slightly younger than the non-4-H girls; however, the

20/ The placement record score was determined for each student by Professor Tallman of the Mathematic's Department of Montana State College.

4-H boys averaged four-fifths of a year older than the non-4-H boys. These small differences would also tend to show that the students of the two groups are very comparable as to age and that age does not seem to be important as a selective factor in 4-H membership.

Summary of Selective Factors and Comparability of the Two Groups

Analysis of the factors of selection of 4-H membership leads one to believe that the differences between 4-H and a select group of non-4-H students enrolled at Montana State College are not important nor are they consistent in any direction. The educational advantages of the parents of the two groups are very comparable. The members of the two groups seem to come from about the same size of families. The intelligence ratings of the two groups are very similar; the slight differences that prevail are in favor of the non-4-H students.

The students of the two groups attended similar-sized high schools, are similar as to size of family, age, intelligence rating, and education of parents. The basis of choice of the non-4-H students as explained previously, would tend to make the students comparable in such factors as type of farming area, fraternity membership and the amount of money they earned while attending college. For those reasons, it is the contention of this study that membership in 4-H club does not presuppose superiority nor inferiority to the check group but instead just an average boy or girl.

PART III: ANALYSIS OF DATA

Section I. Analysis of Participation in College Activities

Procedure Used.—In order to measure and evaluate the participation of individual students of the two selected groups in college activities a rating scale was devised. This scale was constructed from data obtained from twenty-five undergraduate students (chosen from the entire student body), eight graduate students, and fifteen faculty members. Each person of this group weighted the activities that a student might participate in while attending college. 21/ This was an evaluation of college activities by each individual of the group, and represents a sample of the "true value" of the respective activities on and off the campus. In this manner it was hoped that the properly weighted participation record of each student in the selected groups could be accurately determined and compared.

Every student of the two comparable groups filled out a questionnaire, giving the activities he had participated in and the number of quarters he had been active in each. The participation record of each student was then determined by multiplying the rating or "true value" given to his activities by the number of quarters the student had participated in the individual activities. By adding the weight given to each of his activities his total participation record was obtained. 22/

21/ Appendix B, pp. 92-93 for explanation of the participation record weights.

22/ See page 91 of the Appendix B for explanation of "determining the total participation record".

Participation Records of All Students of the Two Groups in Activities.—One of the most interesting relationships shown in figure 4 is that the average participation record for the 4-H club students was almost 30 per cent higher than that for the non-4-H students. The total average participation for the former group was 91.01 as compared with only 70.75 points for the latter group.

The same figure shows the relationship between year in college and 4-H club membership. In each class the 4-H club students have participated significantly more than their classmates, the non-4-H club students. In each of the four classes the 4-H students have participated at least 20 per cent more than the non-4-H students. The seniors have participated 21 per cent more, juniors 37 per cent, sophomores 40 per cent and the freshmen 24 per cent more. These figures tend to show that the influence of previous 4-H club training is more apparent in the sophomore and junior years than in the freshmen and senior years.

Participation Record of the Boys in Activities.—The average participation record of the 4-H boys is significantly greater than for non-4-H boys (figure 5). For the 4-H club boys this participation was 59 per cent higher than for the non-4-H boys. The 4-H boys of the junior class had a participation record 75 per cent higher than the non-4-H boys of the same class; freshmen 4-H boys were 54 per cent more active, sophomores 46 per cent and the senior 4-H boys 28 per cent. This is indisputable evidence that the 4-H boys, as a group, were more than one and a half times as active as the non-4-H club group in college activities.

Participation Record of the Girls in Activities.—Figure 6 shows

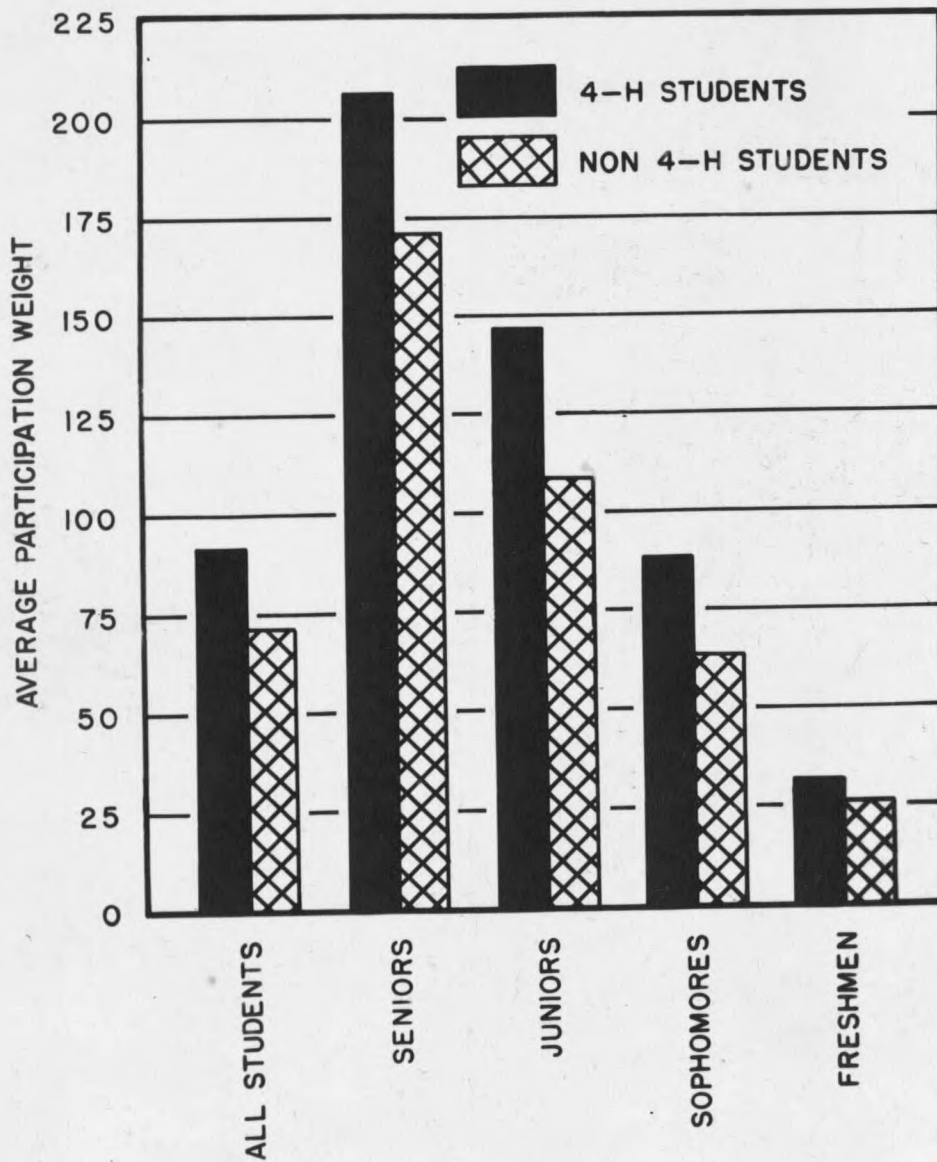


Figure 4.--Average participation record of 4-H and non-4-H students of Montana State College by class in college.
(Source: Table VII, Appendix A.)

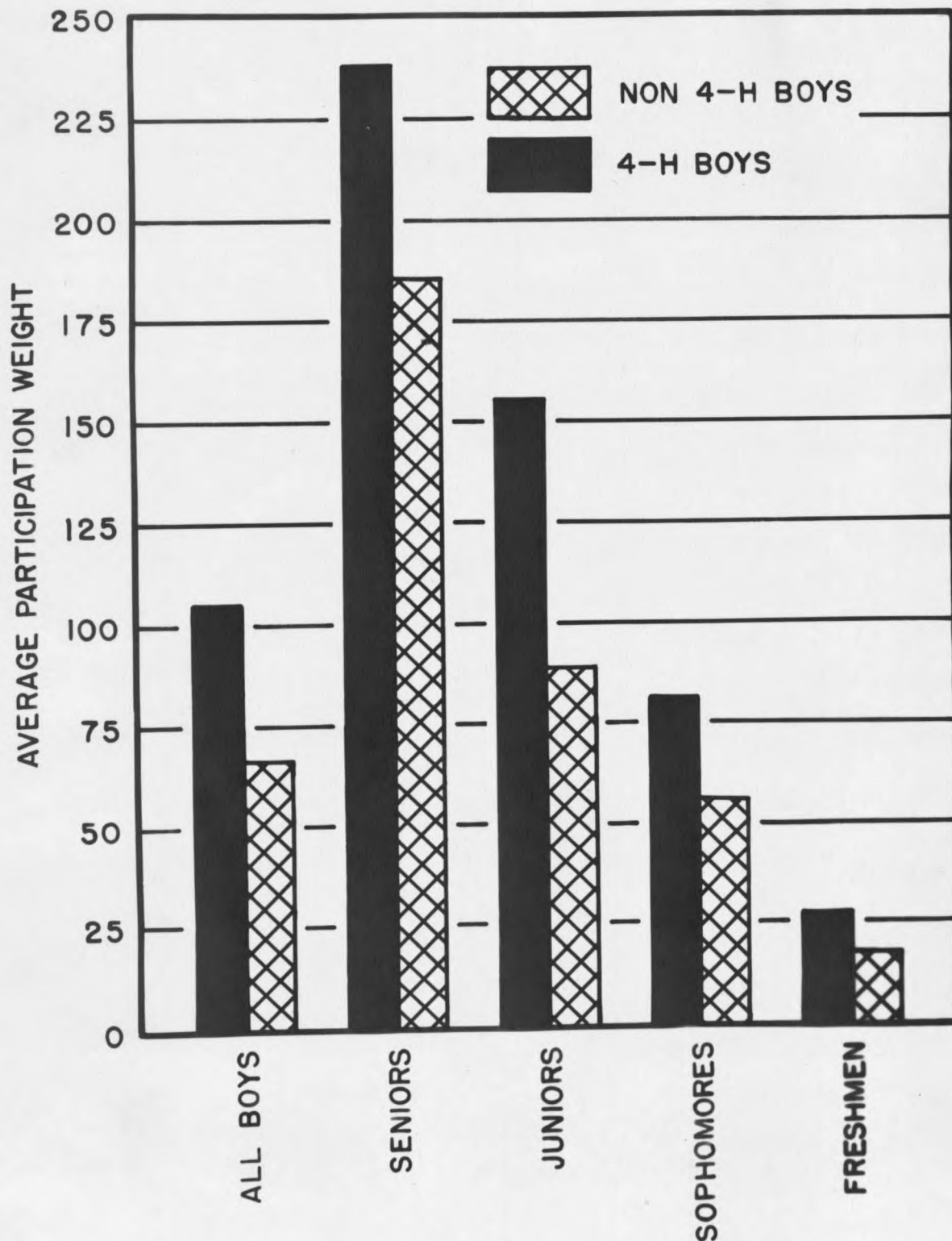


Figure 5.--Average participation of 4-H and non-4-H boys of Montana State College by class in college.
(Source: Table VIII, Appendix A.)

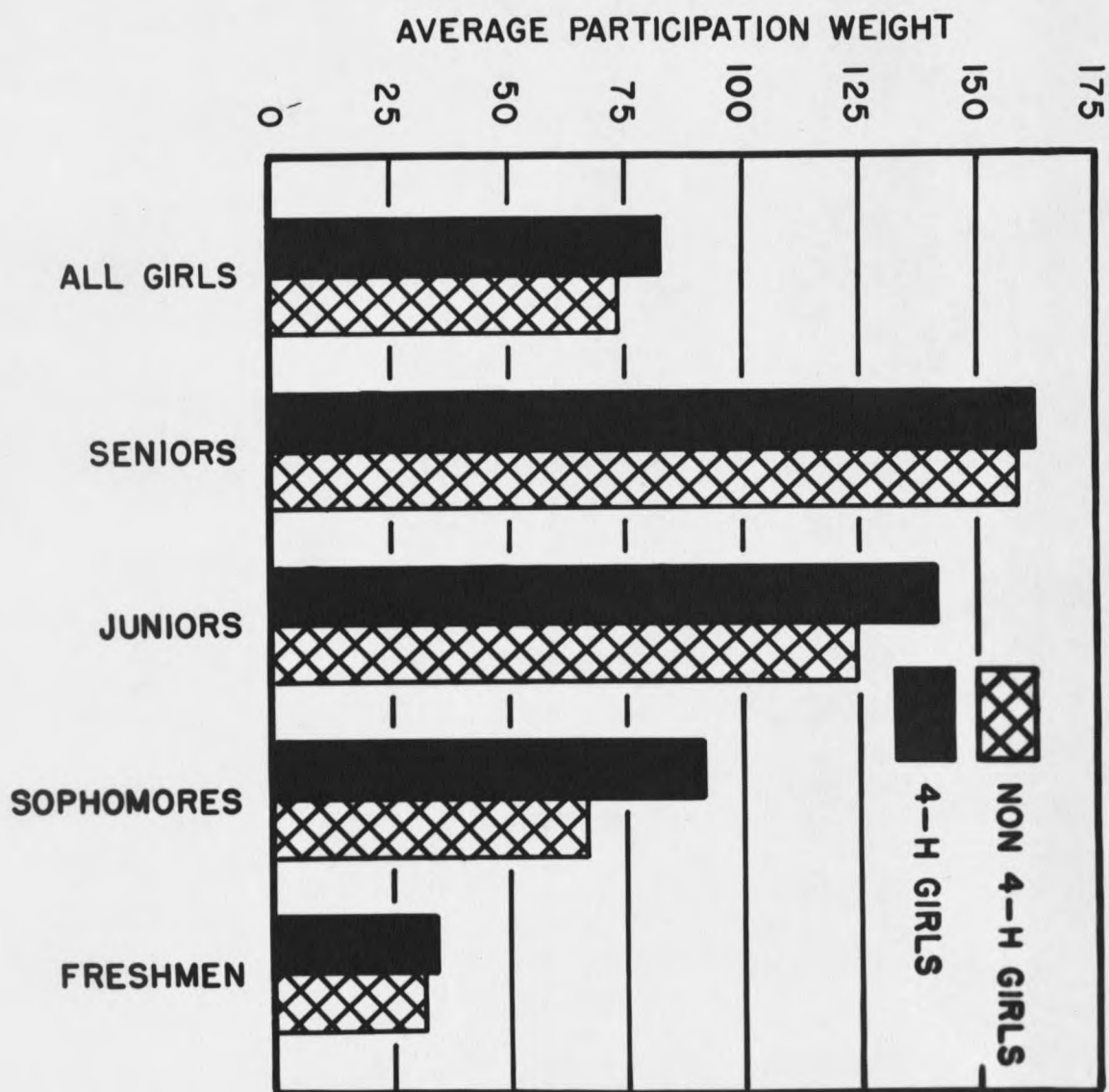


Figure 6.--Average participation of the 4-H and non-4-H girls of Montana State College by class in college.

(Source: Table VIII, Appendix A.)

the relationship between the activities of the girls of the two groups. There is less difference in their participation than in the case of the boys; however, in each of the four classes the 4-H club girls have higher average participation in college activities than the non-4-H girls. The participation of the average 4-H girl is 11 per cent higher than that of the non-4-H girl. Sophomore and junior 4-H girls have a participation 37 and 35 per cent greater, respectively, than do their classmates, the non-4-H girls. The participation of the freshmen and senior 4-H girls exceed by 10 and 3 per cent, respectively, their non-4-H classmates.

Participation of Fraternity and Non-Fraternity Students of the Two Groups in Activities.—All fraternity 4-H students had an average participation 44 per cent higher than that of the fraternity non-4-H club students (figure 7). The fraternity 4-H club boys had almost a 70 per cent higher participation than the fraternity non-4-H club boys. The 4-H fraternity girls had a participation 16 per cent higher than the girls of the check group.

All non-fraternity 4-H club students were 12 per cent more active on the average than the non-fraternity non-4-H students; the boys and girls of the former group were 15 per cent and 9 per cent more active, respectively, than those boys and girls of the latter group. Another interesting relationship (figure 7) is that between non-fraternity boys and girls. The non-fraternity 4-H girls and non-fraternity non-4-H girls had a higher participation than did the non-fraternity 4-H club boys.

This evidence shows conclusively that those students who belonged

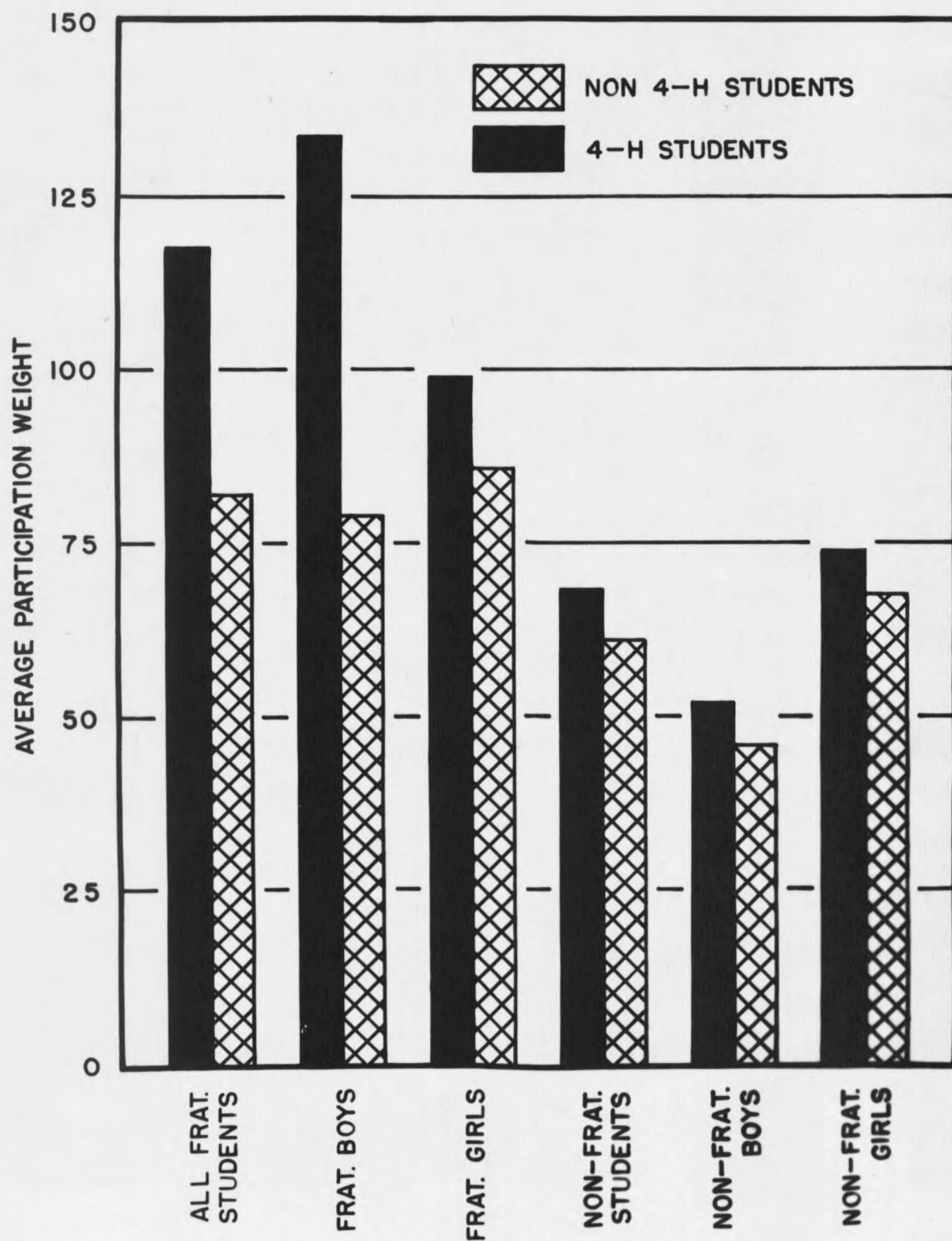


Figure 7.--Average participation of the fraternity and non-fraternity students of Montana State College by 4-H club membership.
(Source: Table IX, Appendix A.)

to fraternities, especially the boys, participated in activities to a greater extent than did the non-fraternity students. This was likely due to the fact that fraternities tend to "push" their members into as many activities as possible. It is also interesting to note that the 4-H club boys were able to utilize the fraternity to a greater extent than the non-4-H boys as is indicated by the large difference in participation of the 4-H and non-4-H fraternity boys.

Participation in Relation to Length of Membership in 4-H Club.

Does length of membership in 4-H club have any influence on a student's participation in college activities? The answer is that it does.

Approximately 58 per cent of the students who had been members of 4-H club for only one year had participated less than the "median participation" of their 4-H classmates.^{23/} With the exception of one group, students who were 4-H members for three years, there was an increase in participation of the students who were 4-H members for more than one year over that of those who were members for just one year. The per cent of 4-H students above the median participation by length of membership was:

One year membership in 4-H club.....	41.9 per cent
Two " " " "	55.2 per cent
Three " " " "	35.5 per cent
Four " " " "	50.0 per cent
Five " " " "	57.2 per cent
Six " " " "	53.9 per cent
Seven " " " "	69.3 per cent
Eight or more years " " "	60.0 per cent

In other, words, of those students who had been club members for

^{23/} See table X of Appendix A for explanation of "median participation".

7 years or more, there were 64.3 per cent of them who were above the median participation record as compared to 41.9 per cent of the one year 4-H club members (a difference of 22.4 per cent in favor of the former group). Figure 8 shows this relationship quite clearly also.

These data definitely show that those students who were members of 4-H the longest had the highest average participation (with the one exception previously mentioned). Therefore, it can be said that degree of participation is directly and closely related to length of membership in 4-H club.

Distribution of Participation in the Ten Activity Groups.—The total participation of the students was broken down into ten "activity groups" in order to get some idea of the activities students tend to enter into most. The activities were grouped into the following classes: (1) athletics, (2) church, (3) clubs, (4) councils and fraternity offices, (5) debate, dramatics and music, (6) honorary societies, (7) journalism, (8) judging teams, (9) service organizations, and (10) student senate.

4-H students had a higher average participation in eight of the groups of activities; those activities and the per cent higher participation the 4-H students had in them over the non-4-H students were:

Activity 1 - Athletics.....	24	per cent more
" 2 - Church.....	34	" "
" 3 - Clubs.....	34	" "
" 4 - Councils and Fraternity offices.....	24	" "
" 5 - Debate, Dramatics and Music.....	36	" "
" 6 - Honorary Societies.....	18	" "
" 8 - Judging Teams.....	64	" "
" 9 - Service Organizations.....	17	" "

Non-4-H students had a higher participation in journalism and the student

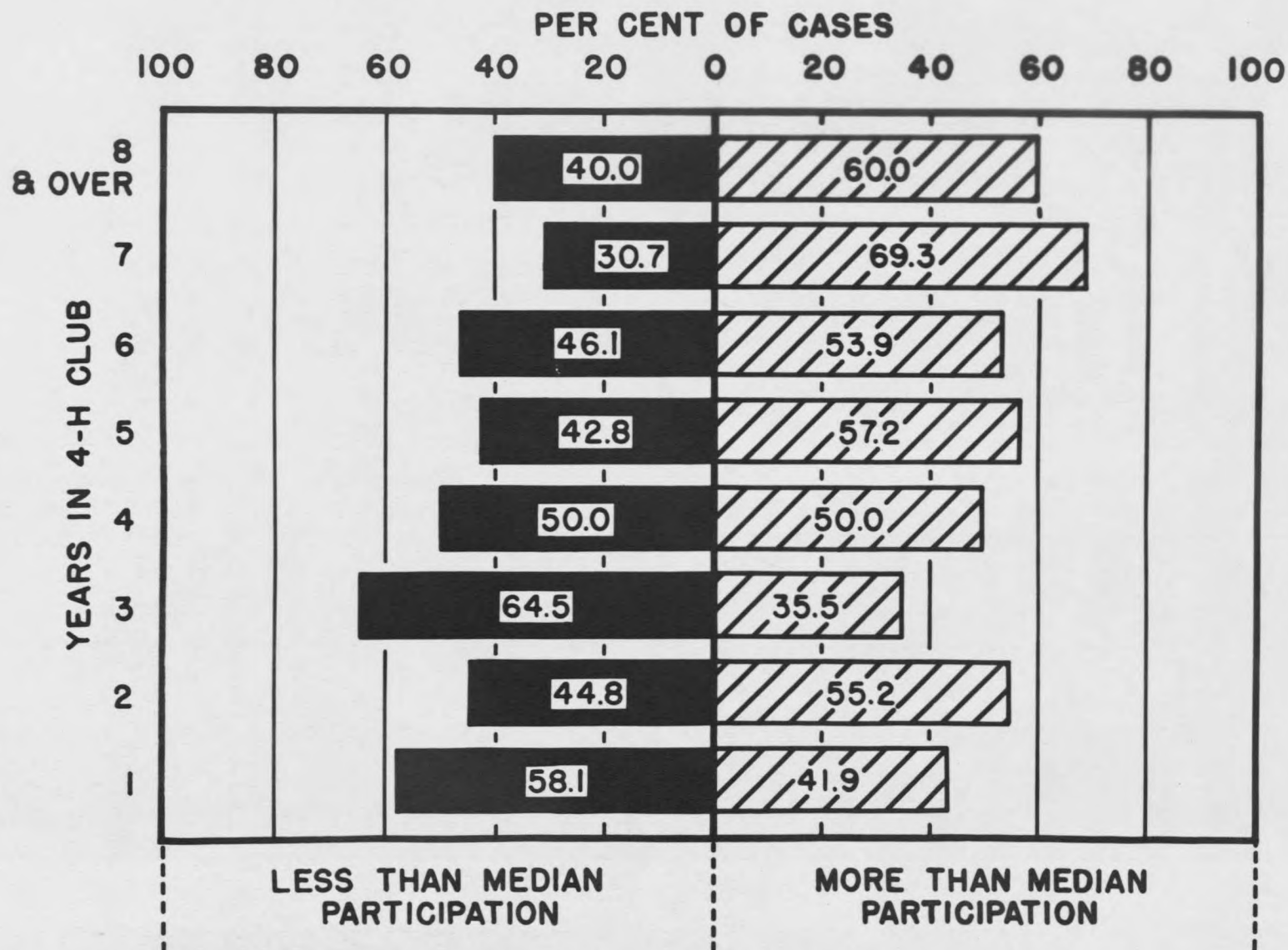


Figure 8.--Participation record of the 4-H club group by length of membership in 4-H clubs.
(Source: Table X, Appendix A.)

senate by 4 and 9 per cent, respectively (figure 9).

The fact that 4-H student participation was higher than that of non-4-H in most activities does not necessarily mean that more of the 4-H students participate in these activities than did students of the check group, although such may be the case. In many cases the 4-H students in these activities had a greater participation than did the non-4-H students because the 4-H students held the offices and were leaders.

Over two-thirds of the total average participation of the 4-H group was made in activities one, two, and three (figure 10). Activities four, five, six, and nine made up 26.5 per cent of the total participation; and activities seven, eight, and ten only made up 5.6 per cent of the average total activity record.

For the non-4-H students the percentage distribution of the total participation among the various activities was about the same as the distribution for 4-H students (figure 10). Almost two-thirds of their group activities were in the first three activity groups. Activities four, five, six and nine ranged from 6.6 to 7.1 per cent of the total participation, composing 27.5 per cent of it. The remaining three activities only composed 5.2 per cent of the total participation.

Figure 11 shows that girls are most interested in clubs and church activities and the boys are mainly interested in athletics (especially 4-H club boys). The 4-H and non-4-H boys tended to have the highest per cent of their participation in activities one, two, and three. The girls of the two groups tended to have higher percentages of their average total participation in activities two and three than did the boys of the two groups

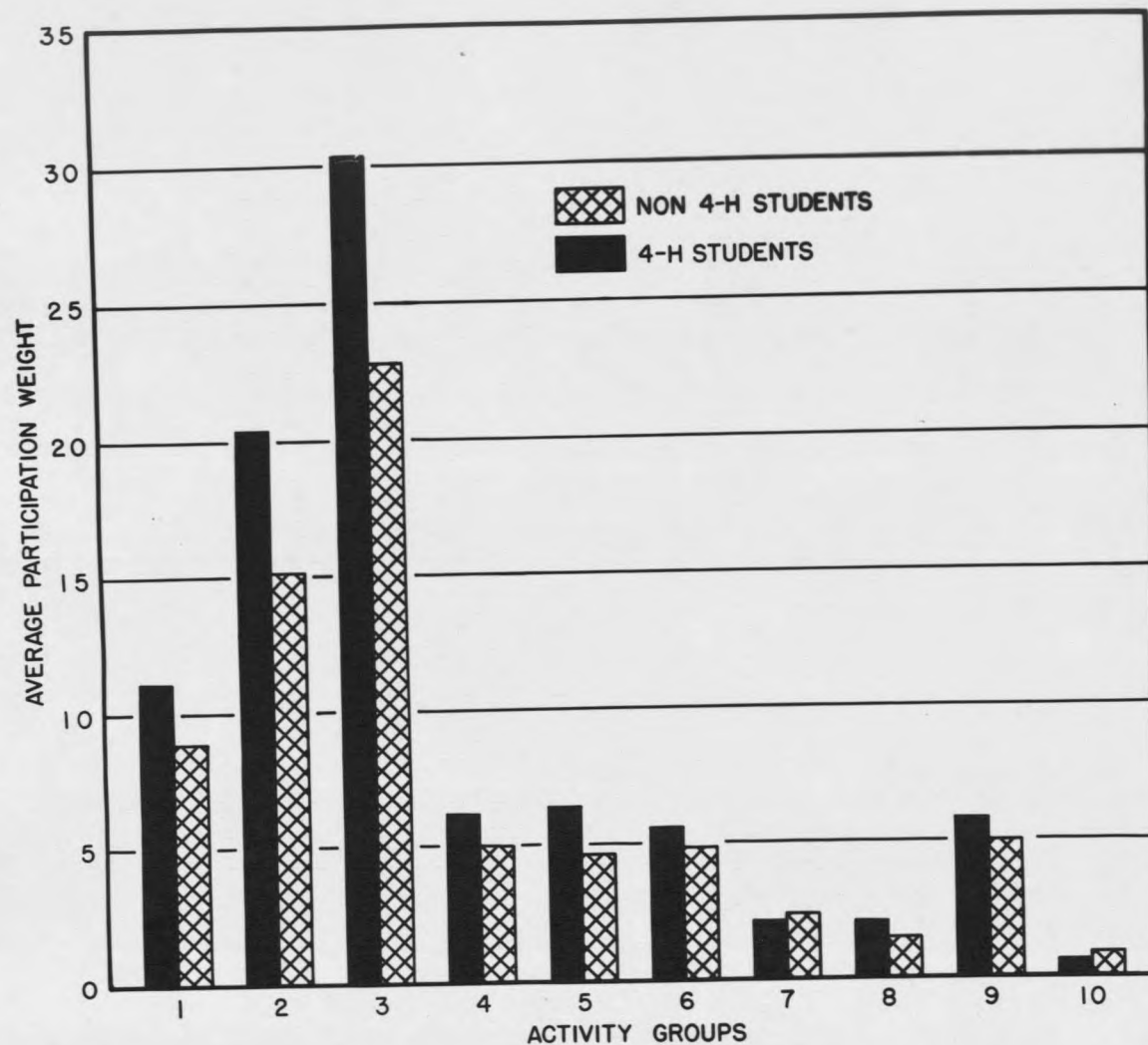
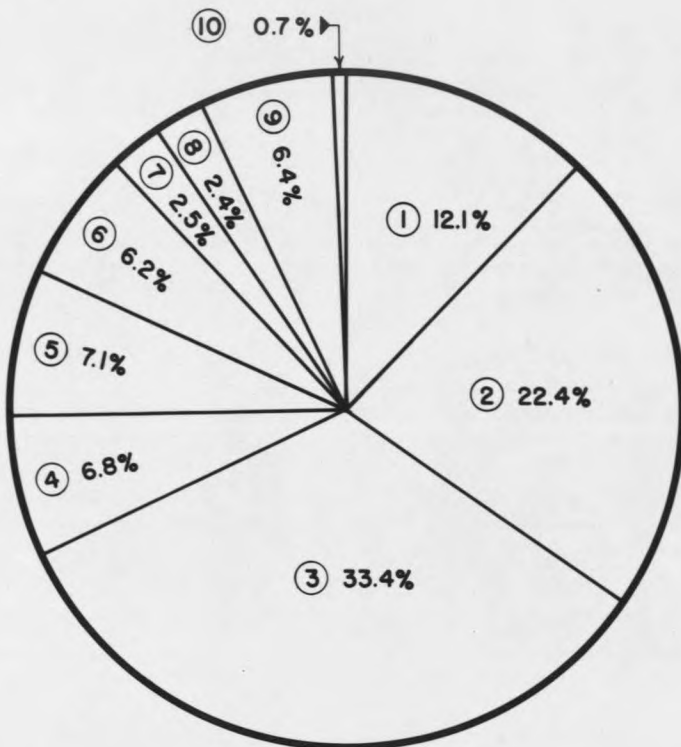
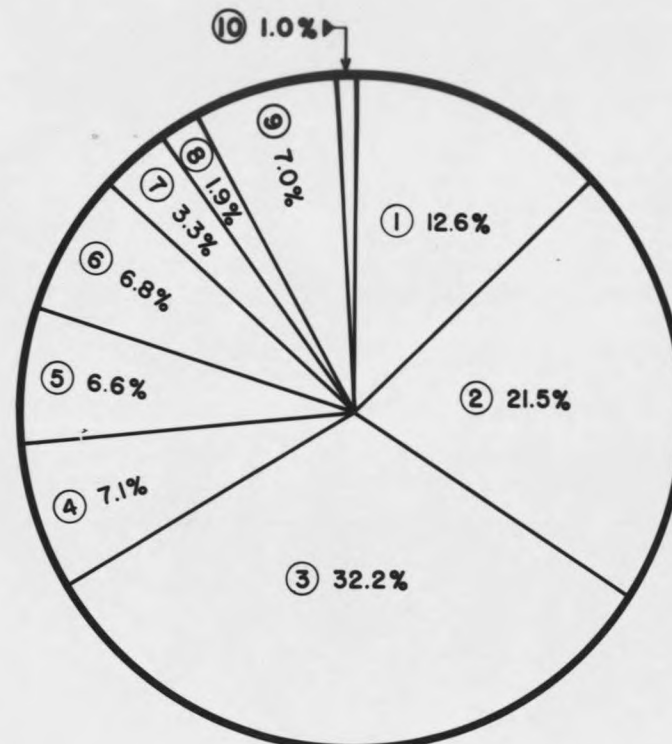


Figure 9.--Average participation in groups of activities of 4-H and non-4-H students of Montana State College
(Source: Table XI, Appendix A.)



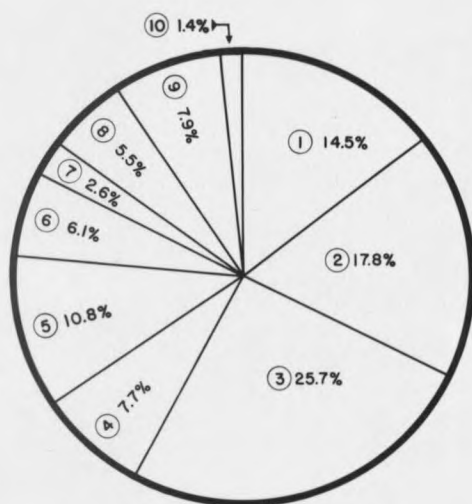
4-H STUDENTS



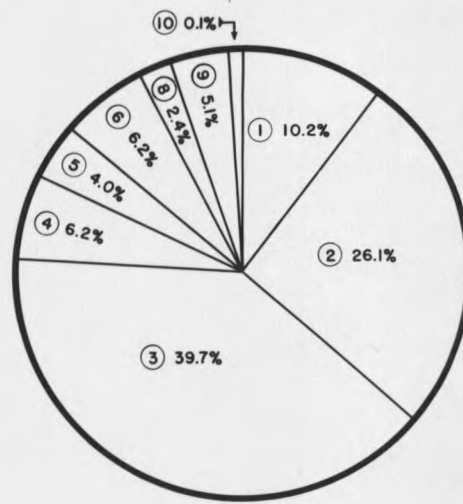
NON 4-H STUDENTS

① REPRESENTS THE NUMBER OF THE GROUP ACTIVITY
 0 REPRESENTS THE PER CENT OF THE TOTAL ACTIVITY

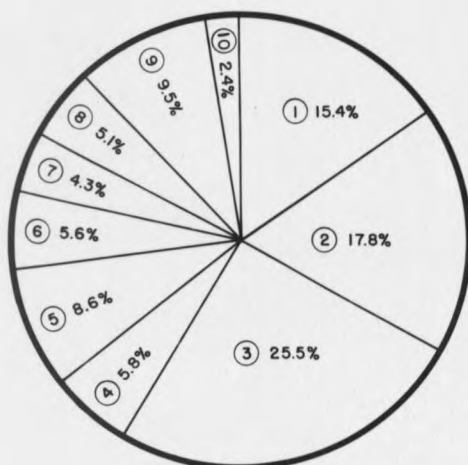
Figure 10.--Distribution of the participation of 4-H and non-4-H students of Montana State College by Groups of Activities
 (Source: Table XI, Appendix A.)



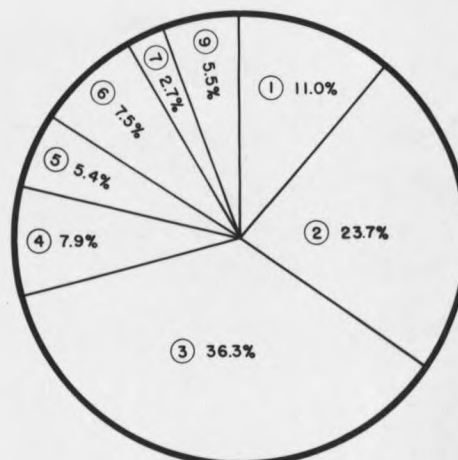
4-H BOYS



4-H GIRLS



NON 4-H BOYS



NON 4-H GIRLS

① REPRESENTS THE NUMBER OF THE GROUP ACTIVITY
 0 REPRESENTS THE PER CENT OF THE TOTAL ACTIVITY

Figure 11.--Distribution of participation of 4-H and non-4-H boys and girls of Montana State College by groups of activities.
 (Source: Table XI, Appendix A.)

and less in activity one.

From the same figure it can be seen that activities three, four, five, six, and eight compose a greater per cent of the average total activity record of the 4-H club boys than of the non-4-H boys. Both groups tend to participate in activity two to the same extent of their average total participation. However, the non-4-H boys are more interested in the other four activities than the 4-H boys. The 4-H girls are more interested in activities two, three and ten than are the non-4-H girls. Neither the 4-H nor non-4-H girls participated in activity eight, and the latter's participation in activity ten was less than 0.01 per cent. ^{24/}

Distribution of Students in the Groups of Activities.—Figure 12 shows that the per cent of 4-H students that enter into the ten activities was higher in all activities except journalism. The per cent the 4-H students were higher in each of the activities was 3.0, 0.6, 13.5, 1.8, 4.2, 1.8, 2.5, 3.8, and 1.5 per cent (in activities 1, 2, 3, 4, 5, 6, 8, 9, and 10, respectively). The per cent of non-4-H students that participated in activity 7 was 5.8 per cent higher than the 4-H students.

4-H and non-4-H girls tend to enter the same activities to about the same extent (figure 13). In only one case is the difference between the two groups more than 5 per cent; namely in clubs, in which 97.5 per cent of the 4-H girls participated as compared to 92.3 per cent of the non-4-H girls. It is interesting to note the high percentage of girls

^{24/} Activity 8 is judging teams; girls do not enter into this activity. However, girls are eligible to participate in activity 10, but neither the boys nor girls of this study participated much in this activity.

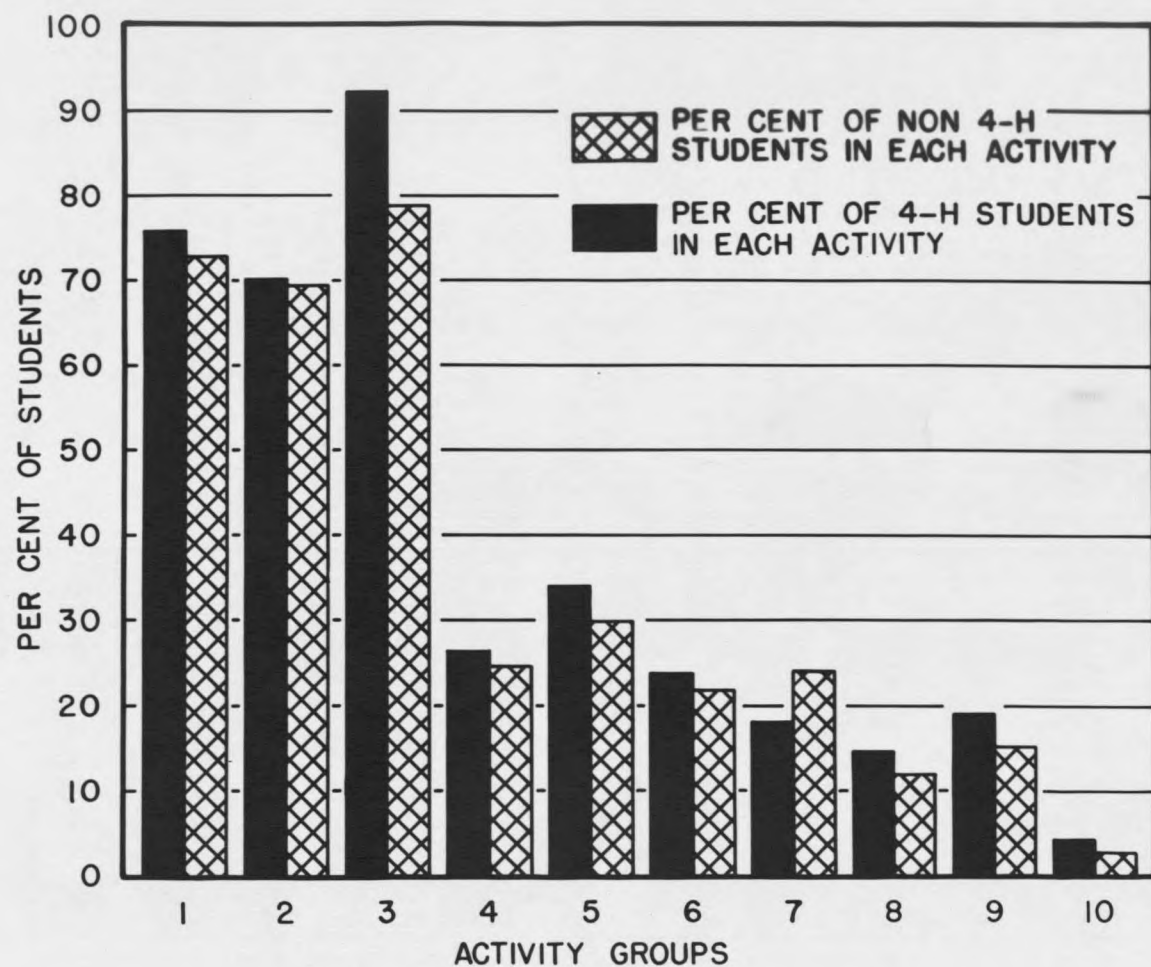


Figure 12.--Per cent of 4-H and non-4-H club students who enter into the ten activity groups.*
(Source: Table XII, Appendix A.)

*See table XII of Appendix A for explanation of how the percentage values were obtained.

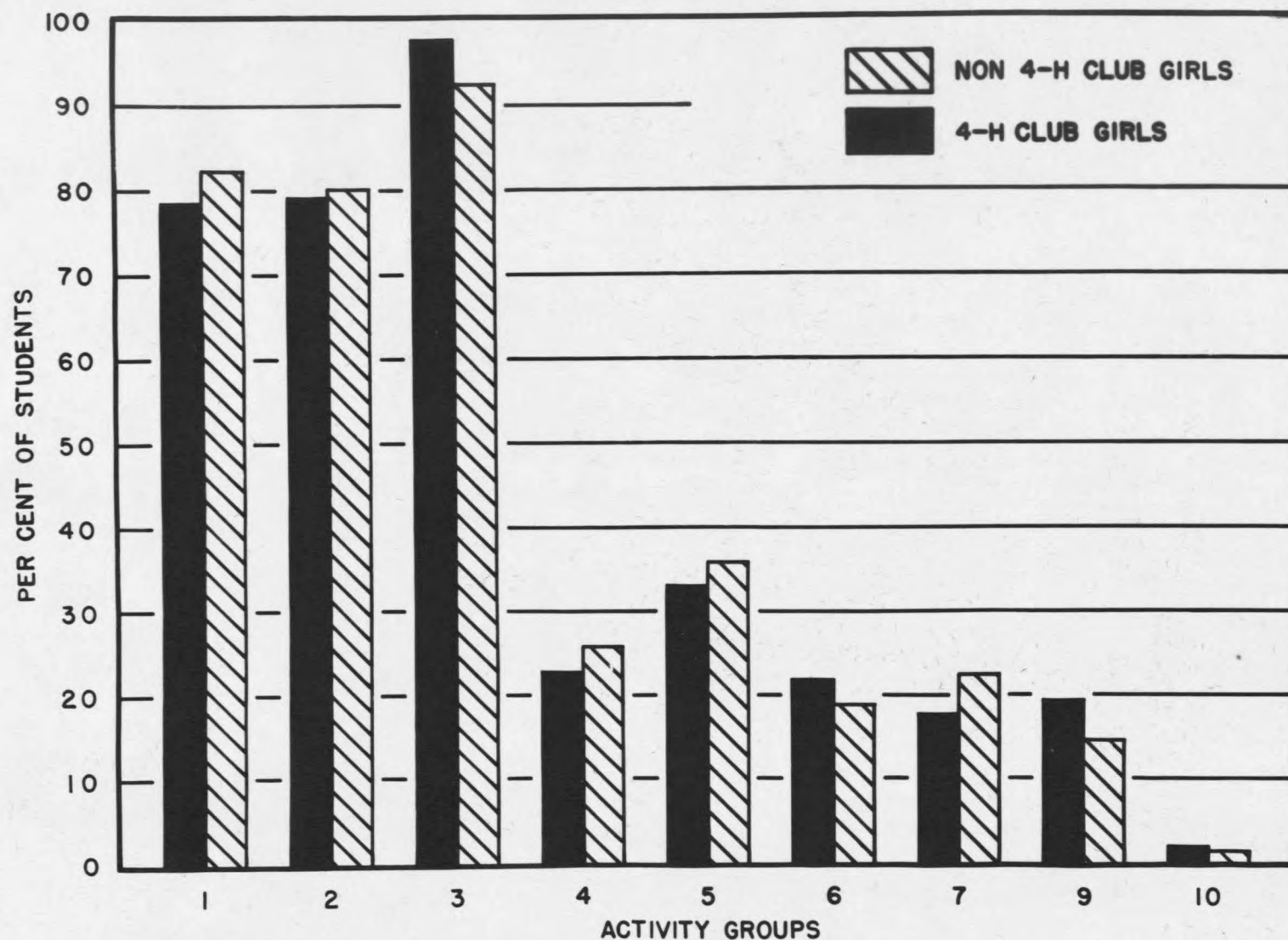


Figure 13.--Percentage of 4-H and non-4-H girls who participate in the ten activity groups.*
(Source: Table XII, Appendix A.)

*The percentages are based upon the number of 4-H and non-4-H girls, respectively, who enter into the ten activities, thus eliminating the differences in numbers between the two groups.

that enter into activities one, two, and three and the few girls that enter into the other six activity groups. The pie charts of figure 11 also show this relationship.

4-H boys have a higher percentage of activities in all of the activity groups, with the exception of activity seven (figure 14). The range of differences in these activities is from 1.9 per cent in activity two to 25 per cent in activity three. The per cent of the non-4-H boys that participated in activity seven was 26.6 as compared to only 18.7 per cent of the 4-H club boys.

It is interesting to note the relationship between figures 13 and 14. From these two figures it can be seen that the per cent of 4-H girls that participated in activities one, two, three and nine is higher than the per cent of 4-H boys. Non-4-H girls participated more in activities one, two, three, four, and five than do the non-4-H boys. The greatest differences between the per cent of boys and girls participating in activities are those in activities two and three (activity 8 is an activity for boys only so no comparison can be made there); these differences are in favor of the girls.

Summary of Participation Records.—4-H club students participated significantly more than the comparable non-4-H club students; this was especially true of the 4-H club boys. The greatest differences in participation records of the two groups shows up in the sophomore and junior classes. In these two classes both the 4-H boys and girls tend to participate much more than their classmates, the non-4-H boys and girls. The fraternity 4-H club boys participate about 70 per cent more in activities

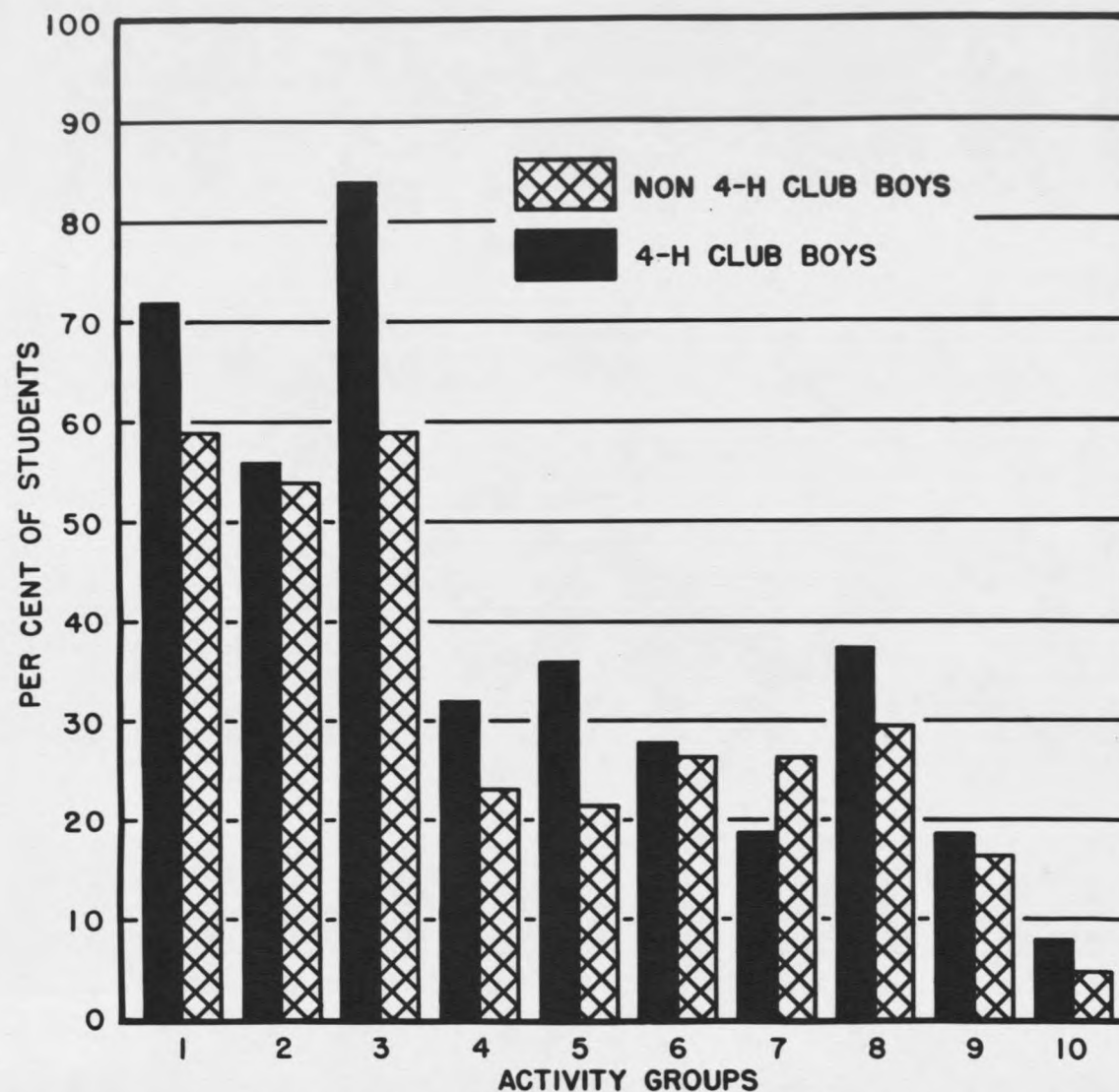


Figure 14.--Percentage of 4-H and non-4-H boys who participate in the ten activity groups.*
(Source: Table XII, Appendix A.)

* The percentages are based upon the number of 4-H and non-4-H boys, respectively, who entered into the activities, thus eliminating the difference in numbers between the two groups.

than do the fraternity non-4-H club boys. Journalism is the single activity in which non-4-H students participate more than the 4-H students.

Section II. Analysis of Scholarship

In the preceding chapter the relationship between the participation records of the two groups was analyzed. This section will be devoted to the analysis of the scholarship of the two groups.

The scholastic standing of individual students was obtained from the Registrar's office of the State College. This standing is worked out on the basis of credits and grade points per credit. 25/ In order to evaluate the scholastic records of the two groups arithmetic means were used to show the existing relationships. 26/

Average Scholastic Standing of the Two Groups.—The first comparison that will be made of these two groups is the average grade points per credit (figure 15). As was previously mentioned the average grade points per credit of the 4-H and non-4-H club students were almost identical. The 4-H club had 1.557 grade points per credit as compared to 1.551 points per credit for the non-4-H students. Of the four classes in college the 4-H club student, on the average, had more grade points per credit in the

25/ The grade points per credit are determined in the following way: for each credit of A, 3 grade points are allowed, 2 grade points for a credit of B, and 1 grade point for a credit of C. No grade points are allowed for a D, E, or F.

26/ An average grade point per credit was used because it tends to show the relationship more clearly than other methods. In this case an arithmetic average was used because it is most easily understood, it is easy to compute, there are no extreme values to greatly affect it, and there are not the same number of students in each group.

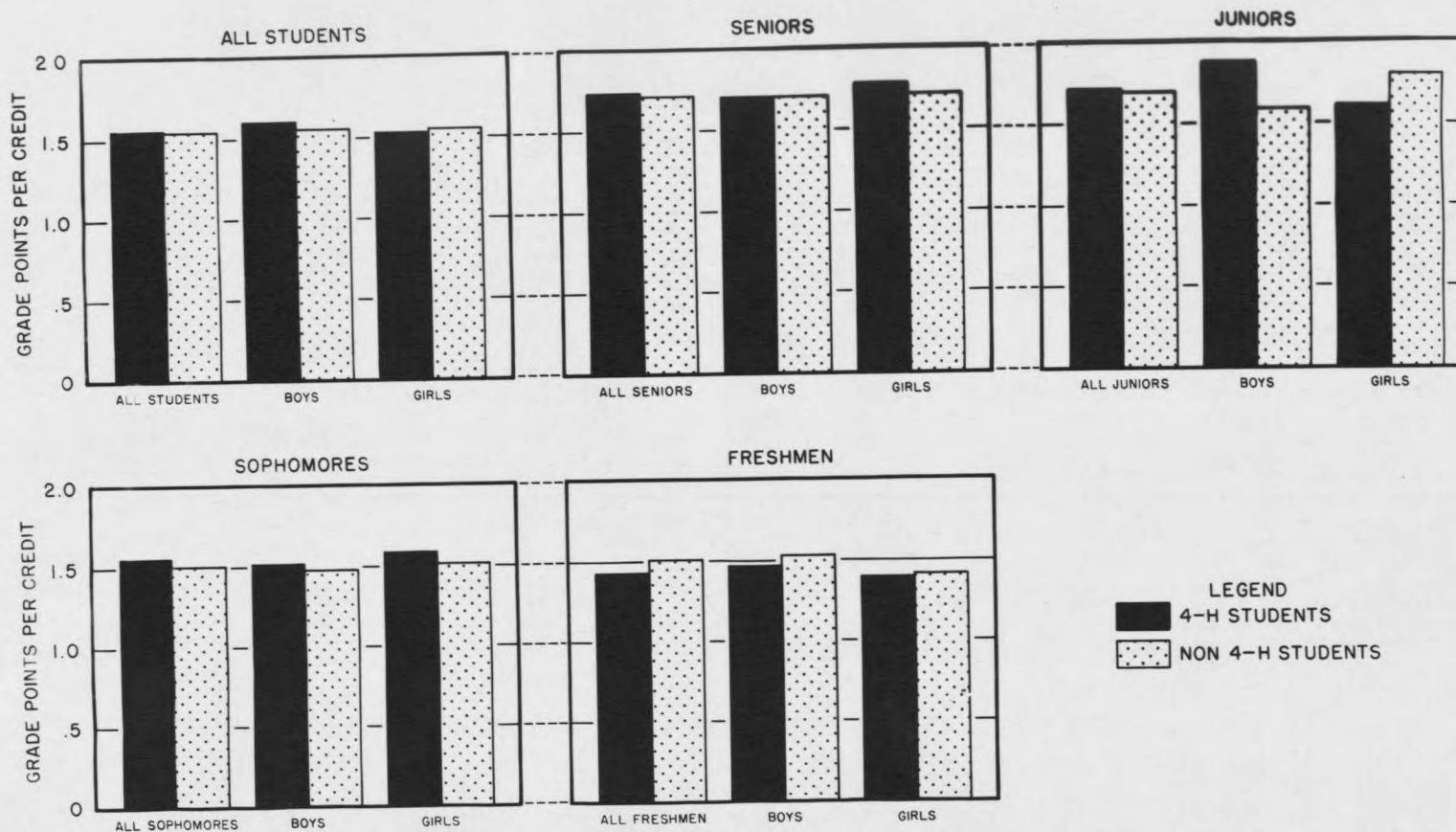


Figure 15.--Average scholarship of the 4-H and non-4-H students of Montana State College.
(Source: Table XIII, Appendix A.)

senior, junior, and sophomore classes, but not as many in the freshman class as the non-4-H group. The differences in per cent in favor of the 4-H students were 1.45 for the seniors, 1.35 for the juniors, and 3.85 for the sophomores; the freshmen non-4-H students were 5.43 per cent ahead of the 4-H students in average grade points per credit.

Average Scholastic Standing of the Boys.--The 4-H boys had an average of 3.2 per cent more grade points per credit than the non-4-H boys. The sophomore and junior 4-H boys had an average of 18.25 and 2.70 per cent higher than their classmates, the non-4-H boys. The freshmen non-4-H boys were ahead of the 4-H boys 4.08 per cent, whereas the senior boys of the two groups had the same scholastic standing.

Average Scholastic Standing of the Girls.--The 4-H girls scholastic record was not as good as that of the non-4-H girls (1.39 per cent less grade points per credit). The senior and sophomore 4-H girls had 3.48 per cent and 4.60 per cent higher than the non-4-H girls of these classes. However, the junior and freshmen non-4-H girls were 11.18 per cent and 1.41 per cent higher than their classmates, the 4-H girls in average grade points per credit.

The differences in scholastic standing that have been presented so far are very minute and are not, in most cases, significant differences. Analyzing the data further, however, there might be some significant relationships that have not been brought out by the comparison of all 4-H and non-4-H students by classes.

Scholastic Standing of the Fraternity and Non-Fraternity Students of the Two Groups.--The next comparison will be made in membership in 4-H

clubs and fraternity membership. Do fraternities have the same effect on students' grades as they did on their participation records, namely higher grades?

All fraternity 4-H students have about one per cent more grade points per credit on the average than do non-4-H students (figure 16). Fraternity 4-H boys had an average of 1.62 grade points per credit as compared to 1.53 for the fraternity non-4-H boys. This was a difference of about 6 per cent in favor of the 4-H boys. However, it was almost the opposite with the 4-H girls and non-4-H girls. In this case the latter group had 5.52 per cent more grade points per credit than the 4-H girls.

The non-fraternity 4-H and non-4-H students had almost the same average grade points per credit (figure 16). These figures tend to show that fraternities do have some though not a great effect on scholastic standing. Both the average fraternity 4-H student and the fraternity non-4-H student were ahead of the average non-fraternity student of the two groups.

Scholastic Standing in Relation to Length of Membership in 4-H Clubs.—In the previous section it was shown that participation records increased with increased length of membership in 4-H clubs. Does the same hold true for scholarship? Do those students who have been members of 4-H clubs for 4 or 5 years get higher grades than those students who were members of 4-H clubs for only one or two years? The answer to this question is shown in figure 17. In this comparison the average grade points per credit of the 4-H group were used as the arithmetic mean. Of

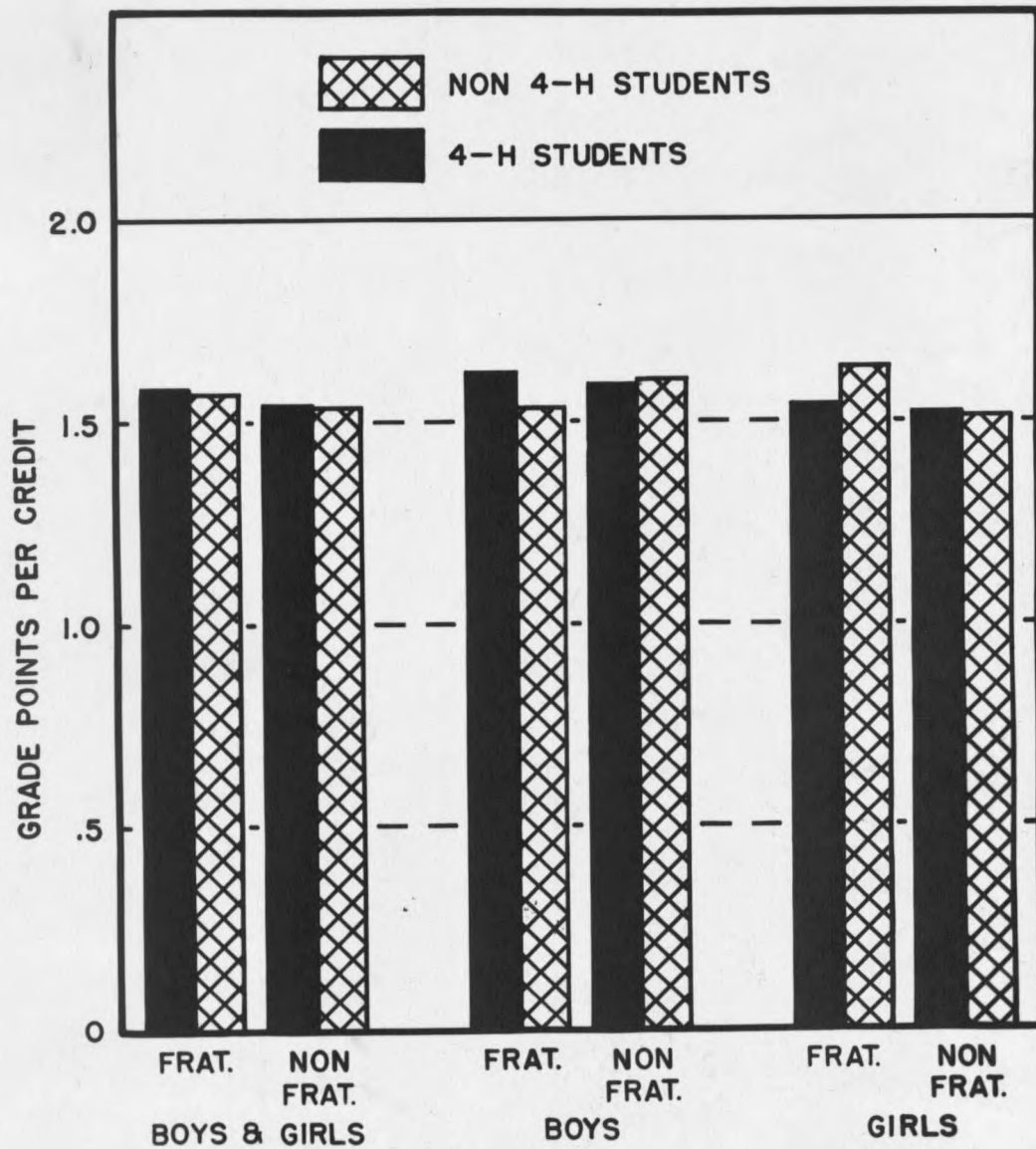


Figure 16.--Average grade points per credit of the fraternity and non-fraternity students by 4-H club membership.
(Source: Table XIV, Appendix A.)

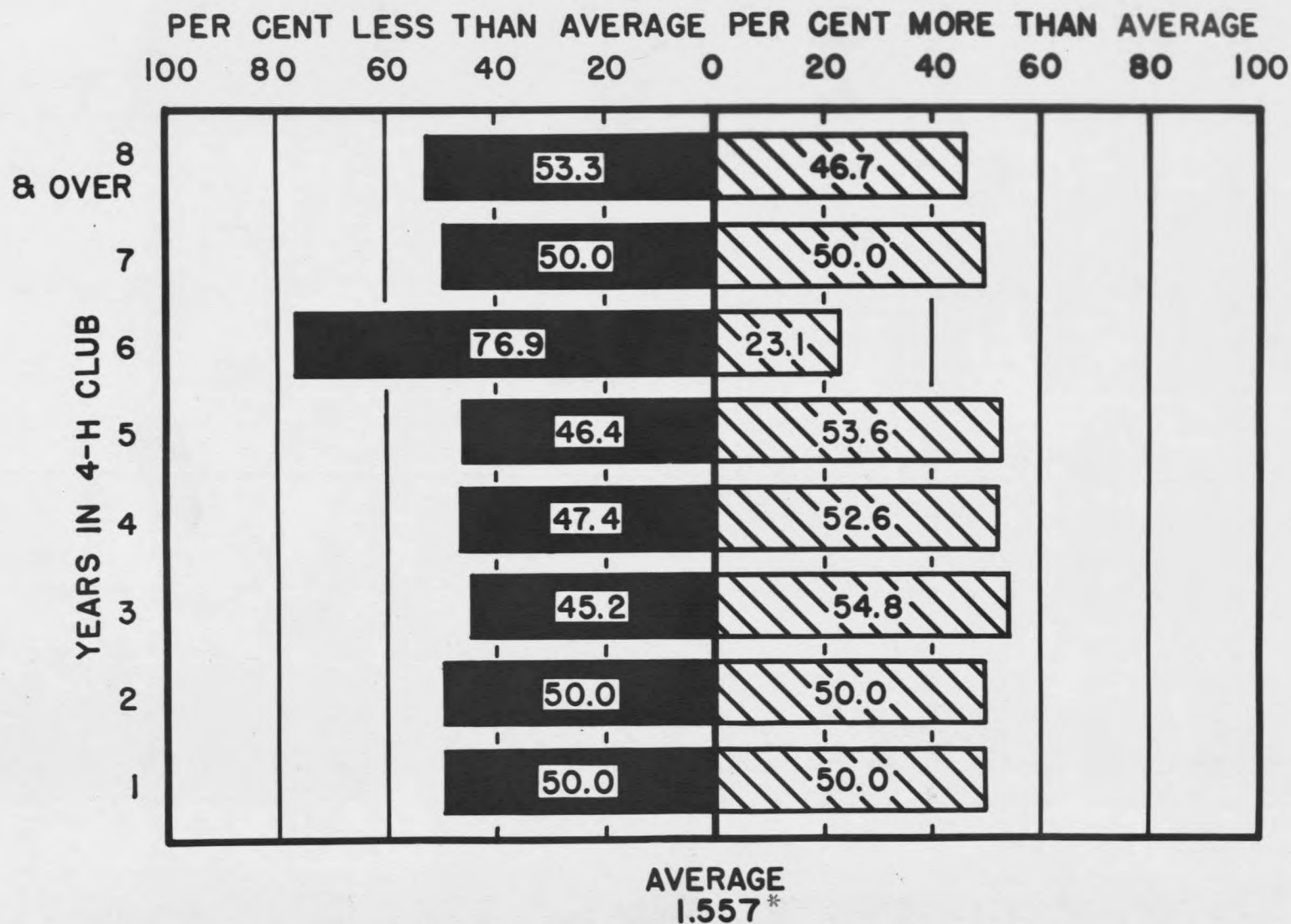


Figure 17.--Relationship of scholastic standing to length of membership in 4-H club.
(Source: Table XV, Appendix A.)

*Average grade points per credit.

those students who had been members of 4-H clubs for one or two years, 50 per cent of them had less than 1.557 grade points per credit (arithmetic mean) and 50 per cent had more than this. Those students who were members of 4-H clubs for three years averaged 55 per cent above the mean and only 45 per cent below the mean. The four and five year members of 4-H clubs averaged about 3 and 4 per cent, respectively, above the arithmetic average for all 4-H students. 27/

The most noticeable bar of figure 17 is the one that represents those students who have been members of 4-H clubs for six years. Over three-fourths of the students of this group had less than 1.557 grade points per credit. 28/ The scholastic standings of those students who were members of 4-H clubs for seven or eight years was about the same as that of those students who were members for only one or two years. (approximately average). From these data it can be said that there is a slight relationship between scholastic standing and length of membership in 4-H club. (This is especially true of those students who have been 4-H club members for 3, 4, or 5 years).

Per Cent of Students of the Two Groups Who Return to College.--

The scholastic standing of the two groups has now been analyzed and it has been found that the differences between the two groups in this respect

27/ There is little, if any, relationship between class in college and length of membership in 4-H according to the data used in this study. In other words, the relationship between higher scholastic standing and longer tenure in 4-H was not due to the fact that the students who were members of 4-H for 6 or 7 years were all seniors, but were about evenly distributed in all four classes.

28/ There were only 13 students in this group; they were not in just one class, but were divided among the 4 classes. The students of this group were just average in age and other characteristics; they were not abnormal but were quite similar to other students.

are very minute. Another measuring stick which might be applied to these two groups, however, is "which group tends to have the highest per cent of students return to college." Figure 18 shows that 82.2 per cent of the 4-H club students who were enrolled in college the winter or spring quarter of 1937 were enrolled in school the winter quarter of 1938 at Montana State College, as compared to only 72.14 per cent of the non-4-H students.

Breaking this relationship down by classes, it can be seen that there was a greater percentage of 4-H students in the freshman and sophomore classes who returned to college than of the non-4-H students of the same classes. There were 89.7 per cent of the non-4-H juniors who returned to Montana State College as compared to only 86.84 per cent of the 4-H students. This slight advantage of the non-4-H students was more than offset by the per cent of 4-H club freshmen and sophomores who returned to college.

There was a higher percentage of 4-H boys who returned to college in all classes than of the non-4-H boys. The per cents in favor of the 4-H club boys in the three classes, freshman, sophomore, and junior, were 10.3, 1.3, and 1.5 per cent, respectively. The per cent of junior non-4-H girls who returned to college was 6.9 per cent higher than the percent of junior 4-H girls. However, there were 13.9 per cent and 12.0 per cent more sophomore and freshman 4-H girls who returned to college than of the non-4-H girls of these classes. Of all the 4-H girls there were 79.3 per cent who returned to college as compared to only 69.8 per cent of all

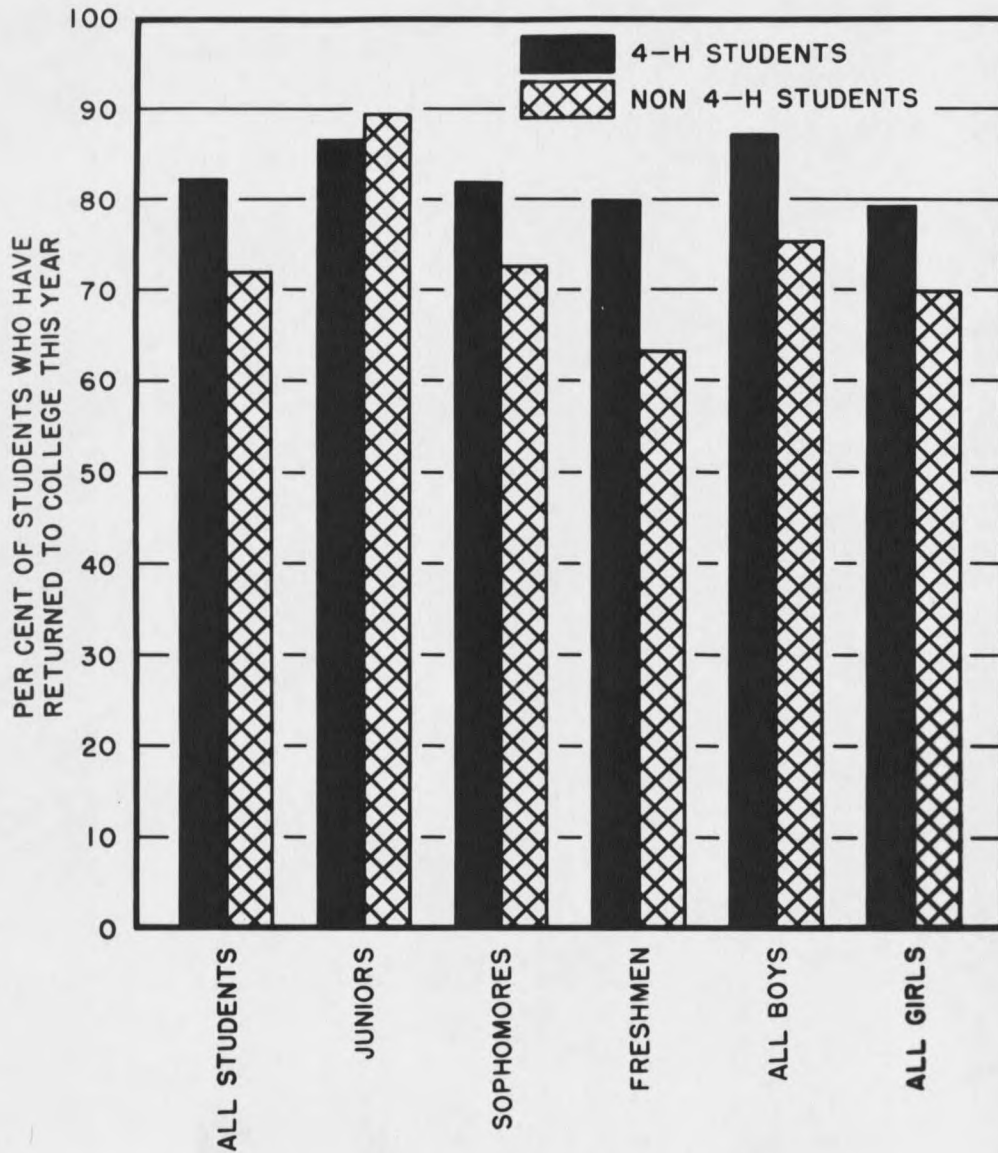


Figure 18.--Per cent of 4-H and non-4-H students of Montana State College who return to college.*
(Source: Table XVI, Appendix A.)

* The term "students who return to college" is explained in the footnote to table XVI of Appendix A.

the non-4-H girls. There were 87.5 per cent of all 4-H club boys who returned to college as compared to 75.4 per cent of all the non-4-H boys.

Summary of Scholarship.--Differences between the scholastic standing of the two groups are not significant. There is only 0.006 average grade points per credit difference between the two groups. The scholastic standing of the average of all 4-H boys is higher than that of the non-4-H boys. The scholastic standing of the non-4-H girls is slightly higher than that of the 4-H girls. Membership in fraternities seems to have some effect on raising the scholastic standing of the students; however, this effect is very slight, so not much importance should be given to it. From the data presented in this section, there does seem to be a direct relationship between length of membership in 4-H club and higher average scholastic standing. Another interesting relationship that is brought out by these data is that a greater percentage of the 4-H students of this study returned to college this year than of the non-4-H students.

PART IV: THE 4-H PROBLEM OF THE FUTURE

Age Distribution of 4-H Members and Resulting Problems

In 1930, less than 50 per cent of the 4-H boys and girls of the United States were 15 years of age or over. Less than 28 per cent of the 4-H girls and 33 per cent of the 4-H boys were over 14 years of age. ^{29/}

^{29/} Lloyd, William A., "The Relation of Age to Extension Work", a paper for presentation at the Western States Extension Conference, Logan, Utah, July 21 to 25, 1931.

Only 31.2 per cent of the 4-H boys and 24.9 per cent of the 4-H girls of Montana were over 14 years of age in 1930. These figures show one of the most important problems of 4-H club--that of maintaining the interest of the young people of the ages 15 to 20, inclusive, in 4-H club work.

This problem takes on a greater significance in view of the fact that there is a high percentage of the boys and girls of this age group who are not in school. According to the 1930 census there were 47,826 children between the ages of 14 and 20 in the rural districts of Montana. Of these, only 27,911, or 58.4 per cent, were attending school. This means that there were almost 20,000 rural boys and girls in Montana, who were just changing to manhood and womanhood, usually possessed with the idea they knew more than their father or mother, and who were receiving little, if any, guidance from any public agency, whatever. What is the best means of meeting the needs of this group in education and guidance?

Meeting the Needs of the Young People Who are Not Attending School

"The college has already shown one way of handling the matter, that is through 4-H club work. 4-H club work seeks to get hold of rural boys and girls and give them guidance, to bring them in contact with and to teach them how to work together, play together, cooperate and accomplish. It teaches them not out of books but out of living things of the fields, the yards, the orchard, the home.....It impresses the need of the trained mind and hand if one is to succeed, thus creating in them a desire to finish school, go to college, or otherwise fit themselves

for life's work." 30/

Our public school system is not filling the needs of these rural young people. There was an average of 356 rural boys and girls, 14 to 20 years of age, in Montana, per county, in 1930 who were not attending school. There is an average of one teacher for every 50 to 40 pupils in school. If the 356 young people were in school we would not hesitate to employ ten teachers at a cost of approximately \$10,000. Should we, then, hesitate to spend about a fifth of this sum for one teacher in addition to the county extension agent who will give his or her full time to the promotion of boys' and girls' club work in every rural county of our state that has over 500 boys and girls of this age who are not in school? 31/ This would only amount to a cost per pupil of about six or seven dollars a year. Can the state, as it faces its future, afford to do less?

Values of 4-H Club Training

The question might well arise, "Does the training the boy or girl receives in 4-H club work benefit him (or her) and if so, how?" In a study that was made in the states of Idaho, Washington, Oregon and Montana to determine what factors kept boys and girls in club work after they were 15 years of age, approximately 55 per cent of those young people from whom replies were received, indicated that it was because of the educational value that they were staying in 4-H club work. Does not this in

30/ Farrell, George E., op. cit, p. 49.

31/ The county extension agent has too many things to do now, with all of the government programs and needs of the farmers themselves, to devote much time to 4-H club work.

itself show that 4-H club work does furnish educational opportunities to the boy or girl who belongs to this organization?

The results of the work that 4-H club boys and girls are doing are also an index of the value they and the community are receiving from 4-H club work. In some of the mid-western states (Wisconsin, Minnesota, etc.) 4-H club boys have been carrying on projects in the conservation of and reforestation of the depleted forests. In other states 4-H club boys and girls have been carrying on projects in soil conservation, positive health programs, farm management, and in general improving farm and home practices, and the social life of their own communities. Besides this the 4-H club program served over 70,000 young men and women (of the United States) who were out of school during the year 1936.

It is quite evident, then, that 4-H club work has been effective in reaching the rural youth, in improving farm and home practices, in bringing about greater interest and participation in community affairs and in making the individual 4-H boy or girl a more useful citizen. It is also well known that rural youth need greater educational advantages than are in the offing for them now. "Thus, from whatever angle studied, rural youth are in need of education respecting those occupations which they as adults are to assume." ^{32/} Since our schools are not performing this function there must be some agency set up to meet this urgent need. What agency is better suited to meet the needs of our rural youth than the 4-H

^{32/} James, J. A. and Kolb, J. H., "Wisconsin Rural Youth--Education and Occupation", Agr. Exp. Sta. Bul. 347, November, 1936, p. 18.

club?

How the 4-H Club Program Can be Expanded and Broadened
to Meet the Needs of Rural Youth

Some of the more pressing needs of 4-H club work that will aid in expanding and broadening the program may be summarized as follows:

1. Improvements in the dissemination of information to the young people who are members of 4-H club by making more and better use of the trained specialists in extension departments of State Agricultural Colleges.
2. An increase in the professional personnel trained in agriculture and home economics, psychology and educational methods to devote full time to 4-H club work, with salaries commensurate with their training and experience.
3. Programs that will hold the interest of these young people who are over 14 years of age.
4. Further progress in the organization of clubs outside the school in order to keep the clubs in communities in which the club members live, to develop further the leadership in the community and to meet more adequately the needs of the out of school youth.
5. Further studies, tests and measurements of objectives, needs and interest of young people, of problems of local leaders, and of procedures and methods for the purpose of evaluating and adjusting the 4-H club program. 33/

33/ Potter, Charles E., "A Review of 4-H Club Work in 1936", U. S. D. A., 1937. This mimeographed release has listed some of the needs that are included in this list.

SUMMARY AND CONCLUSIONS

The 22nd anniversary of 4-H club work in Montana was celebrated by rural Montana youths during 1957. Records show that 107,389 club projects have been carried on by boys and girls of this state over this period of years. About 49,000 boys and girls have been members of this organization. The net profit to the boys and girls from their work over the 22-year period was approximately \$543,000; there was an average net return per member of \$7.93 in Montana in 1957. However, the financial gain represents but a small part of the lasting values that have accrued from the training in building citizens who are better able to live useful, happy lives. This benefit is shown by the following results of this study:

1. It was found that 4-H club students participated in college activities about 30 per cent more, on the average, than did non-4-H students. This was especially true of 4-H boys, who participated more than one and one-half times as much in activities as did the non-4-H boys.

2. This study shows that longer membership in 4-H club means increased participation in collegiate activities and higher scholastic standing. Those students who were members of 4-H clubs for four years or more had significantly higher participation records and also had a higher scholastic standing than those who were members less than four years.

3. 4-H students do not have a significantly higher scholastic

standing than non-4-H students when in college. The scholastic standing of the average 4-H student was 1.557 grade points per credit as compared with 1.551 grade points per credit for the average non-4-H student.

4. The effect of 4-H training is more pronounced in the sophomore and junior years of college than in the freshman and senior years. The sophomore and junior 4-H students participated 37 and 40 per cent more, respectively, than did their classmates, the non-4-H students. The freshmen and senior 4-H students participated 24 and 21 per cent more than the comparable non-4-H freshmen and senior students.

5. The percentage of 4-H students participating in nine of the ten groups of college activities was higher than the percentage of non-4-H students participating in the same activities. Those nine groups of activities were: (1) athletics, (2) church, (3) clubs, (4) councils and fraternity offices, (5) debate, dramatics and music, (6) honorary societies, (7) judging teams, (8) service organizations, and (9) student senate. The group of activities that the non-4-H students participated in more than 4-H students was journalism.

6. Fraternity affiliation apparently is a means whereby students participate more in activities; it also has some effect toward a higher scholastic standing. This is more true of 4-H than of non-4-H fraternity students. The average fraternity 4-H student participated about 44 per cent more in activities than a fraternity non-4-H student, whereas the non-fraternity 4-H student participated only about 12 per cent more than the non-fraternity non-4-H student. Fraternity 4-H students had 0.015 grade points more per credit than the fraternity non-4-H

students as compared with only 0.003 more grade points per credit for the non-fraternity 4-H students over the non-fraternity non-4-H students. These figures show that the fraternity 4-H student is able to make better use of the fraternity than the fraternity non-4-H student.

7. According to the 1930 census, there were, on the average, over 350 rural boys and girls per county in Montana between the ages of 14 to 20, inclusive, who were not attending school. Considerable money would be spent on these children if they were attending school. Is there any justification in the "American tradition" that says once a student is out of school (grade, high school or otherwise) he is ready to earn his living? Does rapid social change mean informal education? If such informal education is desirable, would it not be both wise and inexpensive to employ a man or woman, in addition to the county extension agent, to give his or her full time to the promotion of boy's and girl's club work in every rural county of the state? The improvements resulting from such a program, to the communities, counties, and the state, would likely be greater than the increased expenditures, as can be seen from past experiences of 4-H club work.

8. In conclusion it can be said that expenditures for 4-H club work are justifiable in that youths who participate in its program receive increased education through project activities. In addition, 4-H club students attending college make a far better showing than non-4-H college students in extra-curricular activities and have a slight advantage in scholarship. Thus, one of the specific advantages of

- 68c -

4-H club training, taking an active interest in outside activities,
does extend into later life.

APPENDIX A: SUPPLEMENTARY TABLES

TABLE I. DISTRIBUTION OF 4-H MEMBERSHIP IN MONTANA FOR 1937 BY COUNTIES
(Source: Summary of 4-H Club Work in Montana for 1937, p.12)

County	Total	Boys	Girls
THE STATE	7268	2439	4829
Beaverhead	30	7	23
Big Horn	232	79	153
Blaine	108	47	61
Broadwater	68	22	46
Carbon	267	100	167
Cascade	500	165	335
Choteau	145	49	96
Custer-Powder River	80	30	50
Daniels	76	18	58
Dawson	213	72	141
Fallon-Carter	232	82	150
Fergus	302	99	203
Flathead	227	76	151
Gallatin	234	88	146
Garfield-Petroleum	122	31	91
Glacier	12	5	7
Hill	130	23	107
Judith Basin	64	35	29
Lake	273	55	218
Lewis & Clark	100	26	74
McCone	211	31	106
Madison-Jefferson	137	85	126
Meagher	42	23	19
Mineral	9	3	6
Missoula	147	45	104
Musselshell-Golden Valley	279	74	205
Park	109	37	72
Phillips	85	18	67
Pondera	120	54	66
Prairie	75	35	42
Richland	210	94	116
Roosevelt	324	135	189
Rosebud	222	89	133
Sanders	139	22	117
Sheridan	162	11	151
Stillwater	244	72	172
Sweet Grass	83	41	42
Teton	367	186	181
Valley	219	71	148
Wheatland	38	0	38
Wibaux	211	107	104
Yellowstone	420	101	319

TABLE II. STUDENT PARTICIPATION RECORD IN COLLEGE ACTIVITIES
AT MONTANA STATE COLLEGE

In order to determine what influence training in 4-H Club work has upon a student's participation in activities at college, a study is being made of a selective group of 4-H club members and a comparable group of students who have had no 4-H club training. The participation records in church and college activities will be the basis of comparing the two groups.

Your name has been included in the sample for study; therefore, will you please fill out the questionnaire in the following manner:

Under the column entitled ACTIVITIES is a list of those activities in which a student may partake. In Column A, "Number of Quarters Activity" you are requested to fill in the number of school quarters you have participated in each of your activities (by participation is understood affiliation as indicated by membership in the organization or an active part by way of attendance, membership on the official rolls, or payment of dues.) In Columns B. and C, list the offices you have held in connection with your activity, such as President of Les Bouffons or captain of the football team. Enter also under the columns the number of quarters such office was held. Please do not list any activity for which you have received college credits for except chorus and band.

Please return this questionnaire, using the enclosed self-addressed envelope, by placing it in any campus mail box as soon as possible. Your continued cooperation in this study will be greatly appreciated.

TABLE II, sheet 2

NAME _____

ACTIVITY RECORD

The following is a list of college and church activities; please indicate by use of numerals the number of school quarters you participated in each of your activities and the name of office held in that activity.

ACTIVITIES:

	<u>A</u> No. of Quarters Activity	<u>B</u> Offices Held		<u>C</u> Offices Held	
		Name	No. of Quar- ters	Name	No. of Quar- ters
<u>Athletics</u>					
Basketball					
Boxing					
Football					
Golf					
Intramurals*					
Manager					
Swimming					
Tennis					
Track					
Wrestling					
Others					
<u>Church</u>					
Church**					
Chi Beta Alpha					
Christian Endeavor					
Epworth League					
Newman					
Young Peoples'					
Fellowship					
Choir					
Others					

* Intramural sports means any athletic program other than those mentioned.

** By church participation is meant attendance at church in Bozeman at least once a month on the average or if you are a paid up member in a church in Bozeman report this as a church activity.

TABLE II, sheet 3

	<u>A</u> No. of Quarters Activity	<u>B</u> Offices Held		<u>C</u> Offices Held	
		Name	No. of Quar- ters	Name	No. of Quar- ters
<u>Clubs</u>					
Agricultural					
Am. Society of Civil Engineers					
Am Soc. of Electrical Engineers					
Am. Soc. of Mech. Eng.					
Architecture					
Art					
Chemistry					
Engineering Physics					
Entomology					
Home Economics					
Independent					
M Club					
President's Club					
Secretarial					
Women's Athletic Ass'n.					
Others					
<u>Councils</u>					
Engineering					
House Manager					
Interfraternity					
Pan Hellenic					
Debate					
Dramatics*					
Fraternity Office					
<u>Honorary Societies</u>					
Alpha Chi Sigma					
Alpha Lambda Delta					

* Under dramatics put the number of major plays you have participated in.

TABLE II, sheet 4

	<u>A</u> No. of Quarters Activity	<u>B</u> Offices Held		<u>C</u> Offices Held	
		Name	No. of Quar- ters	Name	No of Quar- ters
Honorary Societies(Cont'd.)					
Alpha Zeta					
Delta Phi Delta					
Eurodelphian					
Kappa Kappa Psi					
Lambda Phi Kappa					
Les Bouffons					
Mortar Board					
Phi Eta Sigma					
Phi Kappa Phi					
Phi Sigma					
Phi Upsilon Omicron					
Pi Delta Nu					
Pi Kappa Delta					
Scabbard & Blade					
Septemviri					
Spartanians					
Tau Beta Pi					
Others					
<u>Journalism</u>					
<u>Exponent</u>					
Administrative*					
Reporter					
<u>Montanan</u>					
Administrative*					
Reporter					
<u>Judging Teams</u>					
<u>Little International</u>					

* Composed of Editor, Business Manager, and Managing Editor.

TABLE II, sheet 5

	<u>A</u> No. of Quarters Activity	<u>B</u> Offices Held		<u>C</u> Offices Held	
		Name	No. of Quar- ters	Name	No. of Quar- ters
<u>Music</u>					
Band					
Orchestra					
Chorus					
<u>Service Organization</u>					
Fangs					
Spurs					
<u>Student Body Officers</u>					
Freshman President					
Sophomore "					
Junior "					
Senior "					
Pres. of Assoc. Students					
Vice-Pres. Assoc. Students					
Pres. Assoc. Women Students					
Pres. Independents					
Comm. of Athletics					
" " Bookstore					
" " Demonstrations					
" " Dramatics					
" " Finance					
" " Forensics					
" " Music					
" " Publications					
" " Social Affairs					
<u>Yell King</u>					
Assistant Yell King					
High School Week Committee					
Others*					

* Under others please list any activity in which you have participated that was not listed in order that none of your activities will be left out.

TABLE III. DISTRIBUTION OF MONTANA STATE COLLEGE STUDENTS INCLUDED
IN THIS STUDY BY COUNTIES

County	Total	4-H Students			Non-4-H Students		
		Tot.	Boys	Girls	Tot.	Boys	Girls
TOTAL	359	198	76	122	161	67	94
Beaverhead	2	1	1	0	1	1	0
Big Horn	3	2	2	0	1	0	1
Blaine	3	2	2	0	1	1	0
Broadwater	4	2	1	1	2	1	1
Carbon	8	2	1	1	6	0	6
Cascade	33	24	5	19	9	2	7
Chouteau	13	10	6	4	3	3	0
Custer	1	0	0	0	1	0	1
Daniels	1	1	0	1	0	0	0
Dawson	9	3	1	2	6	1	5
Deer Lodge	4	0	0	0	4	2	2
Fallon	3	2	1	1	1	1	0
Fergus	28	25	11	14	3	2	1
Flathead	5	3	3	0	2	1	1
Gallatin	66	37	8	29	29	11	18
Garfield	3	0	0	0	3	1	2
Glacier	2	1	1	0	1	1	0
Golden Valley	2	2	0	2	0	0	0
Granite	4	0	0	0	4	0	4
Hill	1	0	0	0	1	1	0
Jefferson	5	2	2	0	3	2	1
Judith Basin	13	10	3	7	3	1	2
Lake	4	1	0	1	3	3	0
Lewis and Clark	8	3	2	1	5	2	3
Liberty	1	0	0	0	1	1	0
Lincoln	1	0	0	0	1	1	0
Madison	7	2	0	2	5	3	2
McCone	3	2	0	2	1	0	1
Meagher	1	0	0	0	1	0	1
Mineral	0	0	0	0	0	0	0
Missoula	4	2	2	0	2	2	0
Musselshell	5	3	0	3	2	1	1
Park	5	2	0	2	3	1	2
Petroleum	2	1	0	1	1	1	0
Phillips	3	1	0	1	2	0	2
Pondera	7	0	0	0	7	3	4
Powder River	1	1	0	1	0	0	0
Powell	6	0	0	0	6	2	4
Prairie	3	2	2	0	1	0	1
Ravalli	12	2	2	0	10	3	7

TABLE III, sheet 2

County	Total	4-H Students			Non-4-H Students		
		Tot.	Boys	Girls	Tot.	Boys	Girls
Richland	5	4	1	3	1	0	1
Rosebud	3	2	0	2	1	0	1
Roosevelt	3	2	1	1	1	1	0
Sanders	2	2	1	1	0	0	0
Sheridan	10	6	2	4	4	3	1
Silver Bow	4	0	0	0	4	0	4
Stillwater	3	2	1	1	1	1	0
Sweet Grass	4	2	1	1	2	1	1
Teton	8	6	2	4	2	1	1
Toole	0	0	0	0	0	0	0
Treasure	0	0	0	0	0	0	0
Valley	9	5	3	2	4	2	2
Wheatland	1	0	0	0	1	1	0
Wibaux	0	0	0	0	0	0	0
Yellowstone	21	16	7	9	5	2	3

TABLE IV. SCHEDULE ON STUDENT ACTIVITY STUDY

			Course _____
			Class _____
			Fraternity _____
Name _____			
Last		First	Middle
Give your home post office address _____			
		City or Town	County
Indicate by a cross (X) whether you live in a city (2500 or more people) _____, Village (50-100) _____, town (500-2500) _____, or rural (any place less than 50 people) _____.			
How many years were you in 4-H club work? _____			
If you live on a farm, how far is it from the nearest town or city? _____ miles.			
What kind of a farm is it? Indicate by underlining one of the following:			
Diversified		Grain	Stock Ranch
How many acres of the farm or ranch are irrigated? _____			
What is the total acreage of the farm? _____			
Are you an adopted child? _____			
Are you a step-child? _____			
Ages of all brothers _____			
Ages of all sisters _____			
Approximately how much money will you have spent by the end of this current school year (1936-37)? (The purpose of this question is to determine whether the size of your budget is a factor in determining the extent and degree of your participation in activities here; this information will not be used to your disadvantage—if you are earning your own way or living at home, include in your approximation an estimate for board earned (allow \$25.00 a month) and room earned (\$5.00 a month) received for work.) _____			
Approximately what per cent of your expenses do you earn while attending college? _____			

TABLE V. SUMMARY SHEET OF POPULATION, COLLEGE PARTICIPATION AND SCHOLASTIC
DATA OF 4-H AND NON-4-H STUDENTS

Classification of Students	Participation Record										Number of Students	Total Participation Record
	1	2	3	4	5	6	7	8	9	10		
All 4-H Students	2143	3960	5906	1209	1241	1090	432	431	1121	122	194	17655
4-H Boys	1145	1408	2026	603	852	485	201	431	620	109	75	7878
4-H Girls	998	2554	3880	606	389	605	231	0	501	13	119	9777
Average 4-H	11.05	20.41	30.44	6.23	6.40	5.62	2.23	2.22	5.78	0.63		91.01
All Non-4-H Students	1350	2296	3442	760	708	722	350	204	748	104	151	10684
Non-4-H Boys	621	719	1050	237	346	225	174	204	383	98	61	4037
Non-4-H Girls	729	1577	2412	523	362	497	176	0	365	6	90	6647
Average Non-4-H	8.94	15.21	22.79	5.03	4.69	4.78	2.32	1.35	4.95	0.69		70.75

TABLE V, sheet 2

Classification of Students	Total Age		Size of Family				Placement		Scholastic Stand.		No. of Years in 4-H Club	
	A*	Age	A	No. of Bros.	A	No. of Sister	A	Total	A	Points per Credit	A	Total Yrs.
All 4-H Students	195	3941	178	213	178	260	174	643	198	308.43	198	719
4-H Boys	75	1578	68	103	68	111	64	181	76	122.15	76	244
4-H Girls	120	2363	110	110	110	149	110	462	122	186.30	122	475
Average 4-H		20.21		1.20		1.46		3.70		1.557		3.63
All non-4-H Students	158	3246	145	213	143	188	128	488	161	249.87		
Non-4-H Boys	65	1362	62	87	62	87	53	170	67	104.30		
Non-4-H Girls	93	1884	81	126	81	101	75	318	94	145.57		
Average Non-4-H		20.54		1.49		1.31		3.81		1.551		

* Column A represents the number of students in each case.

TABLE VI. EDUCATION OF THE PARENTS OF THE 4-H AND NON-4-H STUDENTS OF MONTANA STATE COLLEGE*

Classification of Students	Total			Have not Completed 8th Grade			Through 8th Grade			Through High School			Above High School		
	A**	B***	C****	A	B	C	A	B	C	A	B	C	A	B	C
TOTAL	587	295	292	215	126	89	46	27	19	100	33	67	226	109	117
All 4-H	330	165	165	127	75	52	26	25	11	51	17	34	126	58	68
All Non-4-H	257	130	127	88	51	37	20	12	8	49	16	33	100	51	49
All Boys	217	108	109	65	37	28	46	27	19	37	9	28	69	35	34
4-H	113	56	57	34	20	14	26	15	11	19	6	13	34	15	19
Non-4-H	104	52	52	31	17	14	20	12	8	18	3	15	35	20	15
All Girls	370	187	183	150	89	61	0	0	0	63	24	39	157	74	83
4-H	217	109	108	93	55	38	0	0	0	32	11	21	92	45	49
Non-4-H	153	78	75	57	34	23	0	0	0	31	13	18	65	31	34

* Education of the parents of the two groups was not ascertainable in all cases.

** Column A - total parents.

*** Column B - Total Fathers

****Column C - Total Mothers.

TABLE VII. AVERAGE PARTICIPATION RECORD OF THE 4-H AND NON-4-H STUDENTS OF MONTANA STATE COLLEGE BY CLASS IN COLLEGE

Classification by 4-H Club Membership and Class in College	Total Ave. Part.	Average Participation in Activities*									
		1	2	3	4	5	6	7	8	9	10
All 4-H Club Students	91.01	11.05	20.41	30.44	6.23	6.40	5.62	2.23	2.22	5.78	0.63
Seniors	206.5	18.83	46.87	59.17	15.62	19.83	16.62	4.29	11.08	11.33	2.87
Juniors	147.0	16.76	26.08	42.62	15.24	12.62	15.00	2.75	2.59	12.46	0.86
Sophomores	88.0	12.70	22.17	32.26	4.37	3.39	2.33	2.93	0.72	6.98	0.17
Freshmen	31.7	4.87	8.52	14.77	0.43	1.46	0.13	0.89	0.38	0.14	0.15
All Non-4-H Students	70.8	8.94	15.21	22.79	5.03	4.69	4.78	2.32	1.35	4.95	0.69
Seniors	170.7	18.60	28.80	45.00	20.10	14.55	20.60	3.10	5.60	11.10	3.25
Juniors	108.0	12.11	19.86	36.18	7.89	5.04	9.25	5.82	1.79	10.04	0
Sophomores	63.1	9.19	15.12	23.42	2.35	3.95	0.81	1.98	0.63	4.72	0.91
Freshmen	25.6	4.07	8.57	8.70	0.60	1.77	0.27	0.67	0.25	0.70	0

* Column 1--Athletics, 2--Church, 3--Clubs, 4--Councils and Fraternity Offices, 5--Debate, Dramatics and Music, 6--Honorary Societies, 7--Journalism, 8--Judging teams, 9--Service Organizations, High School Week Committee and Others, 10--Student Senate.

TABLE VIII. AVERAGE PARTICIPATION RECORD OF THE 4-H AND NON-4-H STUDENTS OF MONTANA STATE COLLEGE BY SEX AND CLASS IN COLLEGE

Classification by Class, Total 4-H Membership and by Sex		Ave. Par.	Average Participation in Activities									
			1	2	3	4	5	6	7	8	9	10
All 4-H Students		91.01	11.05	20.41	30.44	6.23	6.40	5.62	2.23	2.22	5.78	0.65
All 4-H Boys		105.04	15.27	18.75	27.01	8.04	11.36	6.47	2.68	5.75	8.27	1.45
Seniors		237.8	27.4	46.9	55.9	20.2	31.7	12.7	5.0	19.0	16.7	4.3
Juniors		155.5	23.9	18.4	34.4	14.4	21.0	16.7	3.3	6.4	14.8	2.1
Sophomores		81.2	15.2	16.5	25.1	4.6	2.8	2.8	2.7	2.2	9.1	0.3
Freshmen		27.0	4.6	6.3	10.9	0.8	1.5	0.2	1.2	1.1	0	0.4
All 4-H Girls		82.1	8.39	21.46	32.61	5.09	3.27	5.08	1.94	0	4.21	0.11
Seniors		162.8	6.9	46.8	66.6	9.2	3.2	22.1	3.3	0	3.8	0.9
Juniors		141.1	11.9	31.3	48.2	15.8	6.9	13.8	2.3	0	10.9	0
Sophomores		91.4	11.5	25.0	35.8	4.3	3.7	2.1	3.1	0	5.9	0.1
Freshmen		34.4	5.0	9.8	16.9	0.3	1.4	0.1	0.7	0	0.2	0
All Non-4-H Students		70.75	8.94	15.21	22.79	5.03	4.69	4.78	2.32	1.35	4.95	0.69
All Non-4-H Boys		66.18	10.18	11.77	16.69	3.89	5.67	3.69	2.85	3.34	6.28	1.61
Seniors		185.3	23.0	29.1	37.8	14.7	22.8	15.2	5.00	12.4	18.1	7.2
Juniors		88.8	15.6	9.2	28.4	6.2	3.7	5.8	6.0	3.9	10.0	0
Sophomores		55.5	10.1	10.6	18.6	0.4	4.9	0.4	2.3	1.9	3.9	2.4
Freshmen		17.5	2.8	7.5	2.4	0.7	1.00	0.3	0.8	0.6	1.4	0
All Non-4-H Girls		73.9	8.10	17.52	26.80	5.81	4.02	5.52	1.96	0	4.06	0.7
Seniors		158.7	15.0	28.6	50.9	24.6	7.8	25.0	1.6	0	5.4	0
Juniors		124.6	9.1	29.1	42.9	9.3	6.2	12.3	5.7	0	10.1	0
Sophomores		66.7	8.7	17.3	25.8	3.3	3.5	1.0	1.8	0	5.1	0.2
Freshmen		31.3	5.0	9.3	13.2	0.5	2.3	0.3	0.6	0	0.2	0

TABLE IX. AVERAGE PARTICIPATION RECORDS OF THE FRATERNITY AND NON-FRATERNITY STUDENTS
OF MONTANA STATE COLLEGE BY 4-H CLUB MEMBERSHIP

Classification by Frat., 4-H Membership and Sex	Total Ave. Part.	Average Participation in Activities									
		1	2	3	4	5	6	7	8	9	10
All Frat. 4-H Students	117.6	15.77	19.20	31.71	12.26	10.53	8.29	4.03	4.59	9.97	1.26
All Frat. 4-H Boys	133.3	19.8	20.2	30.6	12.1	15.3	9.5	3.6	8.4	11.6	2.2
All Frat. 4-H Girls	99.0	11.0	18.1	33.1	12.4	5.0	6.9	4.5	0	8.0	1.0
All Non-Frat. 4-H Students	68.0	6.96	21.46	29.35	1.02	2.78	3.31	0.66	0.17	2.15	0.09
All Non-Frat 4-H Boys	51.9	6.8	16.1	20.4	0.3	4.0	0.8	0.9	0.7	1.9	0
All Non-Frat 4-H Girls	73.5	7.0	23.3	32.4	1.3	2.4	4.2	0.6	0	2.2	0.1
All Frat. Non-4-H Students	81.9	11.69	13.58	22.00	8.73	4.34	5.25	4.21	2.62	8.17	1.38
All Frat Non-4-H Boys	78.9	15.1	10.4	17.7	6.2	3.4	4.7	4.3	4.9	8.7	2.6
All Frat. Non-4-H Girls	85.5	7.8	17.2	25.8	11.7	5.4	5.8	4.2	0	7.6	0
All Non-Frat Non-4-H Students	60.8	6.50	16.65	23.50	1.75	5.00	4.39	0.64	0.23	2.10	.08
All Non-Frat Non-4-H Boys	45.2	2.1	14.0	13.9	0.1	9.4	2.0	0.5	0.8	2.4	0
All Non-Frat Non-4-H Girls	67.1	8.3	17.7	27.4	2.4	5.2	5.4	0.7	0	2.0	.1

TABLE X. RELATIONSHIP OF PARTICIPATION RECORD TO LENGTH OF MEMBERSHIP
IN 4-H CLUB OF STUDENTS OF MONTANA STATE COLLEGE

Years Membership in 4-H Club	Students Below the Median*		Students Above the Median Participation	
	Number**	Per cent	Number	Per Cent
1	25	58.1	18	41.9
2	13	44.8	16	55.2
3	20	64.5	11	35.5
4	9	50.0	9	50.0
5	12	42.8	16	57.2
6	6	46.1	7	53.9
7	4	30.7	9	69.3
8 and over	6	40.0	9	60.0

* The 4-H club students' participation records were arranged according to magnitude (arrayed) within classes (all the senior 4-H students participation records were arrayed, all the juniors, etc.); from this one can obtain the median by recording the size of the middle value in an odd number of items or in an even number of items, the arithmetic mean of the two items is taken as the median. This type of average was used in this case because: (1) the median is not affected by the size of extreme values; (2) it may be calculated even when the distribution is open ended as it is in this case.

** In cases where there were an uneven number of students in the class, the median number had to be left out. Hence, although there were participation records for 194 students, only 190 records were used in compiling this table.

TABLE XI. DISTRIBUTION OF PARTICIPATION RECORDS OF 4-H AND NON-4-H STUDENTS OF MONTANA STATE COLLEGE BY GROUPS OF ACTIVITIES

Groups of Activities	4-H STUDENTS								
	All 4-H Students			4-H Boys			4-H Girls		
	Part. Record	% of Total	Deg.	Part. Record	% of Total	Deg.	Part. Record	% of Total	Deg.
TOTAL	91.01	100.0	360.0	105.05	100.0	360.0	82.16	100.0	360.0
1	11.05	12.1	45.6	15.27	14.5	52.2	8.59	10.2	36.7
2	20.41	22.4	80.6	18.75	17.8	64.1	21.46	26.1	94.0
3	30.44	33.4	120.0	27.01	25.7	92.5	32.61	39.7	142.9
4	6.23	6.8	24.5	8.04	7.7	27.7	5.09	6.2	22.3
5	6.40	7.1	25.6	11.37	10.8	38.9	5.27	6.4	14.4
6	5.62	6.2	22.3	6.47	6.1	22.0	5.08	6.2	22.3
7	2.23	2.5	9.0	2.68	2.6	9.4	1.94	2.4	8.6
8	2.22	2.4	8.7	5.75	5.5	19.8	0	0	0
9	5.78	6.4	23.0	8.27	7.9	28.4	4.21	5.1	18.4
10	0.63	0.7	2.5	1.45	1.4	5.0	0.11	0.1	0.4
NON-4-H STUDENTS									
TOTAL	70.75	100.0	360.0	66.17	100.0	360.0	73.86	100.0	360.0
1	8.94	12.6	45.5	10.18	15.4	55.4	8.10	11.0	39.6
2	15.21	21.5	77.4	11.77	17.8	64.1	17.52	23.7	85.3
3	22.79	32.2	115.9	16.89	25.5	91.8	26.80	36.3	130.7
4	5.03	7.1	25.6	3.89	5.8	20.9	5.81	7.9	28.4
5	4.69	6.6	23.8	5.67	8.6	31.0	4.02	5.4	19.4
6	4.78	6.8	24.5	3.69	5.6	20.2	5.52	7.5	27.1
7	2.32	3.3	11.9	2.85	4.3	15.5	1.96	2.7	9.7
8	1.35	1.9	6.8	3.34	5.1	18.3	0	0	0
9	4.95	7.0	25.2	6.28	9.5	34.2	4.06	5.5	19.8
10	0.69	1.0	3.5	1.61	2.4	8.6	.07	0	0

TABLE XII. NUMBER AND PER CENT OF 4-H AND NON-4-H STUDENTS OF MONTANA STATE COLLEGE WHO ENTER THE TEN GROUPS OF ACTIVITIES*

Classif. of Students	Groups of Activities									
	1**	2	3	4	5	6	7	8	9	10
	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B
4-H Students with Part. Records	194 100	194 100	194 100	194 100	194 100	194 100	194 100	194 100	194 100	194 100
4-H Students	147 75.8	136 70.1	179 92.3	51 26.3	66 34.0	46 23.7	35 18.0	28 14.4	37 19.0	8 4.1
Boys	54 72.0	42 56.0	63 84.0	24 32.0	27 36.0	20 27.7	14 18.7	28 37.3	14 18.7	6 8.0
Girls	93 78.2	94 79.0	116 97.5	27 22.7	39 32.8	26 21.8	21 17.8	0 0	23 19.3	2 1.7
Non-4-H Students with Part. Records	151 100	151 100	151 100	151 100	151 100	151 100	151 100	151 100	151 100	151 100
Non-4-H Stu.	110 72.8	105 69.5	119 78.8	37 24.5	45 29.8	33 21.9	36 23.8	18 11.9	23 15.2	4 2.6
Boys	36 59.0	33 54.1	56 59.0	14 23.0	13 21.3	16 26.2	18 26.2	18 29.5	10 16.4	3 4.9
Girls	74 82.2	72 80.0	83 92.2	23 25.6	32 35.6	17 18.9	20 22.2	0 0	13 14.4	1 1.1

* Column A represents the number of students that participated in that activity and Column B represents the per cent of the 4-H or non-4-H boys and girls that participated in the activity.

** There were 345 students from whom participation records were obtained. Of these, 194 records were obtained from 4-H students and 151 from non-4-H students. After determining the number of 4-H and non-4-H students who participated in each of the ten groups of activities, the number of students participating was put on a percentage basis; in other words, if there were 147 4-H club students who participated in activity 1, this number (147) would be divided by 194 (the total number of 4-H students who turned in their participation in activities) to determine what per cent of the students had participated in activity one.

TABLE XIII. AVERAGE SCHOLARSHIP OF THE 4-H AND NON-4-H STUDENTS
OF MONTANA STATE COLLEGE

Classification of Students	Average Grade Points Per Credit				
	All Classes	Seniors	Juniors	Sophomores	Freshmen
All 4-H Students	1.557	1.740	1.719	1.564	1.428
4-H Boys	1.61	1.71	1.88	1.52	1.47
4-H Girls	1.53	1.78	1.61	1.59	1.40
All Non-4-H Students	1.551	1.715	1.696	1.506	1.510
Non-4-H Boys	1.56	1.71	1.59	1.48	1.53
Non-4-H Girls	1.55	1.72	1.80	1.52	1.42

TABLE XIV. AVERAGE SCHOLASTIC STANDING OF THE FRATERNITY AND
NON-FRATERNITY STUDENTS OF MONTANA STATE COLLEGE
BY 4-H CLUB MEMBERSHIP

Classification by Fraternity and 4-H Membership	Average Grade Points Per Credit		
	All Students	Boys	Girls
All Frat. 4-H Students	1.582	1.62	1.54
All Frat. Non-4-H Students	1.567	1.53	1.63
All Non-Frat. 4-H Students	1.536	1.59	1.52
All Non-Frat., Non-4-H Students	1.533	1.60	1.51

TABLE XV. RELATIONSHIP OF SCHOLASTIC STANDING OF 4-H CLUB STUDENTS OF MONTANA STATE COLLEGE TO LENGTH OF MEMBERSHIP IN 4-H CLUB

Years Membership in 4-H Club	Students with less than 1.557 grade points per credit*		Students with more than 1.557 grade points per credit	
	Number	Per cent	Number	Per cent
1	22	50.0	22	50.0
2	15	50.0	15	50.0
3	14	45.2	17	54.8
4	9	47.4	10	52.6
5	13	46.4	15	53.6
6	10	76.9	3	23.1
7	7	50.0	7	50.0
8 and over	8	53.3	7	46.7

* 1.557 represents the arithmetic mean of all 4-H students grades and as such can be used as a base for measuring the relationship between scholastic standing (grade points per credit) and length of membership in 4-H club.

TABLE XVI. NUMBER AND PER CENT OF 4-H AND NON-4-H STUDENTS OF MONTANA STATE COLLEGE WHO RETURNED TO COLLEGE*

Classification of Students	All Students			Freshmen			Sophomores			Juniors		
	A**	B***	C****	A	B	C	A	B	C	A	B	C
All 4-H Club Students	82.18	174	143	80.0	80	64	82.14	56	46	86.84	38	33
Boys	87.3	63	55	85.7	28	24	89.5	19	17	87.5	16	14
Girls	79.3	111	88	76.9	52	40	78.4	37	29	86.4	22	19
All Non-4-H Club Students	72.14	140	101	63.49	63	40	72.92	48	35	89.66	29	26
Boys	75.4	57	43	75.4	26	16	88.2	17	15	85.7	14	12
Girls	69.8	83	58	64.9	37	24	64.5	31	20	93.3	15	14

* By returned is meant those students in this study who were enrolled in college during the winter or spring quarter of 1937 who were also enrolled during the winter quarter of 1938. This only includes those students who were enrolled in the freshmen, sophomore and junior classes the winter quarter of 1937 who were still attending school the winter quarter of 1938.

** Column A - Per cent of Students who returned to college.

***Column B - Number of students in study.

**** Column C - Number of students who returned to college.

TABLE XVII. 1937 PROJECT SUMMARY OF 4-H CLUB WORK FOR MONTANA*

Project	Enrollment		Completion		Per cent Completion	Units	Quantity
	Boys	Girls	Boys	Girls			
TOTAL	2666	4995	2263	4421	87.5		
Clothing	11	3042	9	2668	87.9		11,905, articles
Food Preparation	84	1356	76	1211	89.3	16,987 meals	76,598 dishes prepared
Food Preservation	5	154	5	151	98.1	7,789# stored	22,111 quarts canned, 1,388 gl. jelly
Room Improvement	24	98	22	90	91.8	98 rooms	779 articles or improvements
Small Grains	55	0	52	0	94.5	467 acres	1992 bushels
Corn	292	17	243	17	84.1	408 3/20 acres	3411 bushels
Crested Wheat	236	3	213	2	90.0	221.75 acres	150 pounds
Sugar Beets	18	0	15	0	83.3	39 1/2 acres	418 1/2 tons
Entomology	78	30	72	26	90.7		
Farm Records	42	1	34	1	81.4		
Potato	359	13	326	11	90.5	156 acres	16,502 bushels
Garden	463	108	375	83	79.8	173 acres	
Beef	190	52	143	29	77.5	236 animals	
Range Management	82	1	63	1	77.1		
Dairy	163	27	153	25	93.6	206 animals	
Sheep	134	18	120	17	90.1	642 animals	
Swine	112	13	107	13	96.0	439 animals	
Poultry	221	41	184	37	84.4	14,439 birds	523 improvements - 61 animals
Miscellaneous	97	41	73	39	81.1	4 1/2 acres	

* Taken from Summary of 4-H Club Work in Montana for 1937, p. 11.

APPENDIX B. NOTES ON METHODOLOGY

Determination of the Participation Record

Participation records of individual students were determined by use of a questionnaire (see Appendix A, table II) and by use of a rating scale of individual activities. The questionnaire contained all of the activities a student could enter while attending this college and provision was made to designate the number of quarters a student had participated in each activity, the number of offices he had held in the organization and the number of quarters the student had held each office.

The rating scale was constructed as follows: a rating designed to determine the relative importance of each activity was obtained from 25 undergraduate students (chosen from the entire student body), 8 graduate students, and fifteen faculty members. Each person of this group was given a list of the complete activities that were listed by the students of this study. Then each person rated every activity on the basis of his own personal convictions. This rating of any one particular activity in relation to any or all others, represented the value of that particular activity, taking into consideration such things as the amount of time the activity takes, the degree of selective admission and the responsibility connected with the activity. Each person rated only those activities with which he or she was familiar.

The individual ratings for each activity were arranged in a frequency table; a simple arithmetic mean was obtained to represent the value of the activity. In a few cases the modal number was used when there

was a definite grouping around one number and when there were a few widely scattered scores. In this way it was hoped to obtain an evaluation for each activity that was free of any personal bias of any one person, since it was, as a rule, a well represented average of the evaluation of each person, and as such, this rating scale was used to represent the true value of the various activities.

The participation weight per activity for each student was then determined by multiplying the rating of the activity (as given by the rating scale) times the number of quarters the students participated in the activity. If the student held an office in an activity, an additional weight of one, two, or three points per quarter's activity, depending upon the office held and the organization, was given to him. Every student's activity was weighted in this manner; then the total of each of the ten group activities was obtained by adding the individual weights per activity of each group. The total participation weight of the student was obtained by summing the totals for each of the grouped activities.

The following is an example of how the total participation weight of a given student was computed: In the group, athletics, the student participated in intramural sports for 5 quarters (rating per quarter 4 points), he also participated in wrestling for one quarter (rating per quarter 4 points). He did not participate in church activities. He was a member of the agricultural and independent clubs for five quarters (rating per quarter being 5 and 4 points, respectively). He was not a member of a council nor a fraternity officer; he did not participate in debate, dramatics or music, did not belong to an honorary society and has done nothing

in Journalism. He has been a member of one judging team for one quarter (8 points per quarter's activity). He was a member of the Fang organization for four quarters (8 points per quarter's activity), and was a minor officer in this organization for one quarter (one point per quarter's activity). He was not a member of the student senate.

His total participation record was:

Group I - Athletics.....	24
Intramural Sports (5 * 4 =)	20
Wrestling (1 * 4 =)	4
Group II - Church (no participation).....	0
Group III - Clubs.....	45
Agricultural club (5 * 5 =)	25
Independent club (5 * 4 =)	20
Group IV - Councils and Fraternity Offices (no participation).....	0
Group V - Debate, Dramatics and Music (no participation)	0
Group VI - Honorary Societies (no participation).....	0
Group VII - Journalism (no participation).....	0
Group VIII - Judging Teams.....	8
Dairy Judging (8 * 1 =)	8
Group IX - Service Organizations.....	33
Fangs	33
Member (8 * 4 =)	32
Office holder (1 * 1 =)	1
Group X - Student Senate (no participation).....	0
	110
Total Participation Weight	

This system of obtaining the participation records for each student of the group was only one of the several methods that could have been used. The advantages of this method are: (1) it is simple to calculate and is

easy to understand; (2) it is an objective method of obtaining a student's participation record; (3) the participation record per group of activities can also be determined by this method; and (4) it represents a campus view of participation in that the individuals who were asked to evaluate the various activities might be thought of as persons who had to go through the process of eliminating various possible activities they did not wish to belong to and selecting others they wished to belong to or enter. Each student must go through this same process of selection.

TABLE I. RATING SCALE OF PARTICIPATION RECORDS OF THE STUDENTS
OF MONTANA STATE COLLEGE

Activities	Average Rating	Total Rating	No. of Ratings Given
Basketball	8	329	42
Boxing	4	94	24
Football	8	324	41
Golf	3	70	24
Intramurals	4	166	39
Manager	3	220	27
Swimming	4	116	29
Tennis	4	98	25
Track	6	154	26
Wrestling	4	102	25
Church	3	118	37
Chi Beta Alpha	2	59	27
Christian Endeavor	4	144	37
Epworth League	4	148	37
Newman	4	126	31
Y. P. Fellowship	4	132	33
Choir	4	140	35
<u>Clubs</u>			
Agricultural	5	158	32
Am. Soc. Civil Eng.	3	87	28
Am. Soc. Elec. Eng.	3	87	28
Am. Soc. Mech. Eng.	3	91	29
Architecture	3	90	29
Art	4	121	30
Chemistry	4	105	28
Eng. Physics	3	80	27
Entomology	4	96	25
Home Economics	4	128	31
Independent*	3-5	101	31
M Club	1	40	31
President's	1	30	22
Secretarial	3	86	29
Women's Ath. Assoc.	2	50	24
Alumni 4-H	3	93	31
R.O.T.C. Spon.	2	62	30
B.O.C.T.	1	28	29

* The ratings varied in these cases, because of different importance to various elements of activity within the activity listed.

TABLE I, sheet 2.

Activities	Average Rating	Total Rating	No. of Ratings Given
<u>Councils and Frat.</u>			
<u>Offices</u>			
Eng. Council	6	128	22
House Mgr. Council	8	180	23
Inter. Frat. Council	8	173	22
Pan Hell. Council	8	174	22
Debate	8	197	25
Dramatics*	4-8	210	34
Frat. Offices*	4-8	168	29
<u>Honorary Societies</u>			
Alpha Chi Sigma	4	82	21
Alpha Lambda Delta	3	61	20
Alpha Zeta	4	99	24
Delta Phi Delta	5	133	27
Eurodelphian	2	41	19
Kappa Kappa Psi	2	43	21
Lambda Phi Kappa	4	81	19
Les Bouffons	3	75	26
Mortar Board	7	178	26
Phi Eta Sigma	3	74	24
Phi Kappa Phi	5	154	31
Phi Sigma	5	134	27
Phi Upsilon O.	5	139	27
Pi Delta Nu	3	62	20
Pi Kappa Delta	2	37	18
Scabbard & Blade	3	69	23
Septemviri	6	169	29
Spartanians	4	86	21
Tau Beta Pi	5	119	24
<u>Journalism</u>			
<u>Exponent</u>			
Administrative	10	330	34
Reporter*	2-4	100	32
<u>Montanan</u>			
Administrative	10	331	34
Reporter*	2-4	94	31
Literati	3	76	25
Judging Team	8	225	28
Little International	4	99	25
Band	7	274	39

* The ratings varied in these cases because of different importance to various elements of activity within the activity listed.

TABLE I. sheet 3.

Activities	Average Rating	Total Rating	No. of Ratings Given
Orchestra	5	189	37
Chorus	3	92	31
Verse Choir	3	90	29
Fangs	8	313	39
Spurs	8	314	39
<u>Student Senate</u>			
Freshman President	4	158	40
Sophomore President	4	167	40
Junior President	5	198	40
Senior President	6	239	40
Pres. Assoc. Students	10	397	41
V. Pres. Assoc. Students	5	192	40
Pres. Assoc. Women	9	348	39
Pres. Independents	8	315	38
Comm. Athletics	5	186	36
Comm. Bookstore	5	177	36
Comm. Demonstration	5	191	37
Comm. Dramatics	5	179	35
Comm. Finance	5	189	37
Comm. Forensics	5	180	36
Comm. Music	5	170	35
Comm. Publications	5	179	35
Comm. Social Affairs	5	172	35
Yell King	6	233	39
Assis. Yell King	5	194	39
Gen. High School			
Week Committee	8	313	40
<u>Others</u>			
R.O.T.C. Band	2	44	21
Rifle Team	3	94	31

From the rating scale for participation records one can see that all of the 48 persons did not weight each activity. This was because each person was not acquainted with every activity listed and hence refrained from giving a rating to those activities he or she was not familiar with. Some of the activities such as reporter for the Exponent or Montanan have a varied rating such as from 2 to 4. This meant that there was little agreement as to the value of the activity and also that two people might not do the same amount of work in the two activities. The higher rating in this case was determined by use of the awards the Exponent and Montanan editors made to their staff in the spring of 1937 (only a few cases had to be treated this way).

BIBLIOGRAPHY

Miscellaneous Publications

1. Duthie, Mary Eva, "4-H Club Work in the Life of Rural Youth", a thesis submitted at the University of Wisconsin, 1936, pp. 124, illus.
2. Farrell, George E., "Boys and Girls 4-H Club Work Under the Smith-Lever Act, 1914-1924", U. S. Dept. of Agr., Misc. Circ. No. 85, December, 1926, pp. 55, illus.
3. Hypes, J. L., Rapport, Victor A., and Kennedy, Eileen M., "Connecticut Rural Youth and Farming Occupations", Conn. Agr. Exp. Sta. Bul. 182, November, 1932, pp. 47, illus.
4. James, J. A. and Kolb, J. H., "Wisconsin's Rural Youth - Education and Occupation", Wisconsin Agr. Exp. Sta. Bul. 347, November, 1936, pp. 25, illus.
5. Lloyd, William A., "The Relation of Age to Extension Work", a paper presented at the Western States Extension Conference, Logan, Utah, July, 1931.
6. Potter, Charles E., "Over a Million 4-H Club Members - A Review of 4-H Club Work in 1936", U. S. Dept. of Agr., Ext. Service Circ. No. 274, December, 1937, pp. 18.
7. Smith, C. B., "Boys and Girls 4-H Club Work", U. S. Dept. of Agr., Misc. Circ. No. 77 (slightly revised), November, 1935, pp. 14, illus.
8. Turner, R. A., "4-H Goes to College - A Statistical Study of Former 4-H Club Members Enrolled as Students in Agricultural and Home Economics Courses at the State Colleges of Agriculture in the Central States, 1936-37", Mimeographed release, 1937, p. 4.
9. Webb, Edith J., "Boys' and Girls' 4-H Club Work in the United States", a selected list of references, U. S. Dept. of Agr., January, 1932.
10. Wilson, M. C., Warren, Gertrude L., and Farley, George L., "The Effectiveness of 4-H Club Work", November 1, 1925, pp. 31.

Montana State College Extension Service Publications

1. "4-H Club Guide for Local Leaders", February, 1936, pp. 14.

2. "4-H Club Work in Montana for 1937" - Summary prepared for 23rd annual conference of Montana Extension Staff, January, 1938, pp. 13.
3. "4-H Club Work in Review", November, 1934, pp. 8.
4. Galpin, C. J., "4-H Club Work - Old and New Objectives", Ext. Service Circ. No. 127, July, 1930.
5. "Memorandum of Understanding Relative to Smith-Hughes and Smith-Lever Relationships for Montana", February, 1930, pp. 11.
6. "Some Fundamentals in 4-H Clubs", September, 1933, pp. 10.
7. True, A. C., "The Place of 4-H Clubs in the American System of Public Education", Ext. Service Circ. 71, March, 1928.

Magazines

1. "Extension Service Review", issued monthly by the Extension Service U. S. Dept. of Agri., Washington, D. C.
2. "National 4-H Club News", published bi-monthly by The National Committee on Boys' and Girls' Club Work, Inc., Chicago, Ill.
3. "Montana 4-H Club News", published monthly by Montana State 4-H Club Office.

MONTANA STATE UNIVERSITY LIBRARIES



3 1762 10015184 2

N378

60033

P45f

cop.2

Peterson, W.H.

4-H club students in
college activities.

DATE

ISSUED TO

N378

60033

P45f

cop.2

No Econ Dept