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To the Graduate Council:

I am submitting herewith a thesis written by Shao-hong Chu entitled "Relations Between Junior 4-H Enrollment and Selected Characteristics of Tennessee's County 4-H Extension Programs." I recommend that it be accepted for nine quarter hours of credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Agricultural Extension.

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RELATIONS BETWEEN JUNIOR 4-H ENROLLMENT AND SELECTED CHARACTERISTICS OF TENNESSEE'S COUNTY 4-H EXTENSION PROGRAMS

A Thesis

Presented to

the Graduate Council of

The University of Tennessee

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

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by

Shao-hong Chu

June 1969

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ABSTRACT

The study was concerned with the problem of decreasing county junior 4-H enrollment in Tennessee. It was designed to determine the association between selected variables concerning county 4-H programs and the total junior 4-H enrollment. More specifically, the major purposes of this study were: (1) to determine the relations between the total number of junior 4-H members enrolled per county and selected variables concerning 4-H leadership, organization, participation, enrollment-related, place of member residence, and number of Extension staff member per county, and (2) to determine which of the six groups of county 4-H programs or independent variables (i.e., 4-H leadership, organization, participation, enrollment-related, place of residence, and number of Extension staff per county variables) accounted for the largest percent of variation in the number of junior 4-H members per county.

Data were obtained from the 1965-67 Tennessee 4-H Club Enrollment Reports and the 1960 Census of Population for Tennessee Counties. Twenty-one county 4-H program variables and six junior 4-H enrollment variables were studied. The zero order correlation coefficient (r) and the multiple correlation coefficient (R) were used to analyze the data.

Correlation analysis revealed that the number of junior 4-H members enrolled in Tennessee's 95 counties tended to increase when there was an increase in the number of (1) adult 4-H leaders; (2) junior 4-H leaders; (3) 4-H all star numbers; (4) 4-H honor club members; (4) basic

four 4-H organizations; (5) 4-H clubs; (6) members attending 4-H camp; (7) members participating in judging; (8) potential junior 4-H members; (9) junior 4-H members residing on rural non-farms; (10) Extension agents, and (11) full-time Extension 4-H staff equivalent. It was also revealed that each of these eleven variables tended to decrease with an increase in the percent of potential junior 4-H members enrolled full-time Extension 4-H staff equivalent.

Multiple correlation analysis disclosed that: (1) of the six 4-H leadership variables studied, the number of junior 4-H leaders per county accounted for the largest percent of variation (42.6 percent) in the number of junior 4-H members per county; (2) of the four 4-H organization variables studied, the number of 4-H clubs per county accounted for the largest percent of variation (69 percent) in the number of junior 4-H members per county; (3) of the three 4-H participation variables studied, the number of 4-H members participating in 4-H camp accounted for the largest percent of variation (32.0 percent) in the number of junior 4-H members enrolled per county; (4) of the three places of 4-H member resident variables, the number 4-H members residing on rural nonfarms accounted for the largest percent of variation (59.0 percent) in the number of junior 4-H members enrolled per county, and (5) of the two number of Extension 4-H staff variables, the number of full-time Extension 4-H staff equivalent per county accounted for the largest percent of variation (54.0 percent) in the number of junior 4-H members enrolled per county.

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CHAPTER I

INTRODUCTION

Four-H Club work is an Extension activity cooperatively conducted by the United States Department of Agriculture, Land-grant College and local people. The major goal of Extension 4-H work is to provide learning opportunities through practical experiences in real situations. In other words, the major purpose of 4-H Club work is to help the youth help themselves prepare for future economic, social and leadership responsibilities (9:11)*. To achieve this goal, maximum participation in a wide variety of 4-H events and activities is highly desirable.

The total 4-H enrollment in the United States achieved its peak of 2,338,582 boys and girls in 1967. However, since 1959 the general trend in 4-H enrollment has been downward in spite of the increased number of 4-H Club age youth in the United States. National decrease in 4-H enrollment is also reflected by recent enrollment data for the state of Tennessee.

I. STATEMENT OF THE PROBLEM

Four-H Club work's tremendous success in the United States is indicated by its large enrollment. However, the enrollment trend has been downward in recent years. Table I shows the total number of 4-H members in the United States from 1960 through 1967. This table shows a decrease in 4-H enrollment each year except the years 1964 and 1967.

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* Numbers in parentheses refer to alphabetically listed items in the Bibliography; numbers after the colon are page numbers.

TABLE I

NATIONAL 4-H ENROLLMENT TRENDS 1960-67[a]

Year	Total Number of 4-H Enrollment	Number of Increase or Decrease in 4-H Enrollment	Percent of Increase or Decrease in 4-H Enrollment
1960	2,296,735		
1961	2,285,592	-11,143	-0.5
1962	2,193,384	-92,208	-4.0
1963	2,190,721	-2,663	-0.1
1964	2,221,119	+30,398	+1.4
1965	2,185,514	-35,605	-1.3
1966	2,047,452	-38,062	-1.4
1967	2,338,582	+291,130	+14.1

[a]United States Department of Agriculture, Federal Extension Service, MO-98 (5-68); ER&E-66 (5-67); ER&T-69 (4-66); ER&T-82 (6-65); ER&T-50 (3-64); ER&T-150 (6-63); ER&T-51 (3-62); ER&T-74 (4-61); ER&T-86 (5-60).

Between 1960 and 1961, the total number of 4-H members enrolled decreased 11,143 or 0.5 percent. Between 1961 and 1962, total 4-H enrollment decreased 92,208 or 4.0 percent. Between 1963 and 1964, there was an increase of 30,398 members or 1.4 percent. The years 1965 and 1966 showed a slight decrease, but by the year 1967 the 4-H enrollment achieved its peak with 2,338,582 members.

Table II shows the total number of 4-H Club members in the state of Tennessee from 1960 to 1968. These data also indicate a decrease in the number of 4-H members enrolled each year except the years of 1962 and 1968. Between 1960 and 1961 total number of 4-H members in Tennessee dropped 3,360 or 2.5 percent. Between 1961 and 1962 there was a total decrease of 91 members. When 1962 and 1963 are compared a loss of 5,838 members or 4.7 percent was evident. Enrollment decreased each year between 1961 and 1967. However, between 1967 and 1968 total 4-H enrollment increased by 7,958 members or 6.5 percent (19).

Junior 4-H enrollment in Tennessee between 1960 and 1968 is shown in Table III. This table shows an increase of 18,821 members (11.3 percent) between 1960 and 1961. But, between 1961 and 1962 there was a loss of 15,025 (12.2 percent) members. Enrollment continued to decline in 1963, 1964, and 1965. Although there was an increase of 761 members (0.8 percent) in 1966 and a slight decrease in 1967 (362 or 0.4 percent), an obvious increase was shown in 1968. However, as shown in Table III, the general trend in junior 4-H enrollment in Tennessee between 1960 and 1968 was downward (19).

TABLE II

TENNESSEE'S TOTAL 4-H ENROLLMENT TRENDS, 1960-68[a]

Year	Total Number of 4-H Enrollment	Number of Increase or Decrease in 4-H Enrollment	Percent of Increase or Decrease in 4-H Enrollment
1960	134,643		
1961	131,283	-3,360	-2.5
1962	131,192	-91	0.0
1963	125,354	-5,838	-4.7
1964	122,295	-3,059	-2.4
1965	117,561	-4,734	-3.8
1966	117,352	-109	0.0
1967	114,460	-2,892	-1.7
1968	122,418	+7,958	+6.5

[a]United States Department of Agriculture, Federal Extension Service, MO-98 (5-68); ER&E-66 (5-67); ER&T-69 (4-66); ER&T-82 (6-65); ER&T-50 (3-64); ER&T-150 (6-63); ER&T-51 (3-62); ER&T-74 (4-61); ER&T-86 (5-60).

TABLE III

TENNESSEE'S JUNIOR 4-H ENROLLMENT TRENDS, 1960-68[a]

Year	Total Number of Junior 4-H Enrollment	Number of Increase or Decrease in Junior 4-H Enrollment	Percent of Increase or Decrease in Junior 4-H Enrollment
1960	108,914		
1961	122,735	+13,821	+11.3
1962	107,710	-15,025	-12.2
1963	102,078	-5,632	-5.2
1964	97,793	-4,285	-4.2
1965	95,393	-2,500	-2.5
1966	96,154	+761	+0.8
1967	95,792	-362	-0.4
1968	102,198	+5,306	+5.2

[a]United States Department of Agriculture, Federal Extension Service, MO-98 (5-68); ER&E-66 (5-67); ER&T-69 (4-66); ER&T-82 (6-65); ER&T-50 (3-64); ER&T-150 (6-63); ER&T-51 (3-62); ER&T-74 (4-61); ER&T-86 (5-60).

Among the 95 counties of Tennessee, the number of junior 4-H members decreased in some counties but increased in others during the same years. This suggests a relationship between the junior 4-H enrollment and county 4-H Extension programs. Thus, this study attempted to identify relations between the characteristics of county 4-H programs and Junior 4-H enrollment in Tennessee.

II. STATEMENT OF PURPOSES

The purpose of this study was to ascertain the relationship between variables concerning the characteristics of Tennessee's county 4-H programs and Junior 4-H enrollment. The following questions were used to guide the study:

1. What is the relation between number of 4-H leaders and the total number of junior 4-H members enrolled per county?

2. What is the relation between variables concerning the organization of 4-H club work and the total number of Junior 4-H members enrolled per county?

3. What is the relation between the number of 4-H members participating in 4-H events and activites and the total number of Junior 4-H members enrolled per county?

4. What is the relation between the number of potential Junior 4-H members and the total number of Junior 4-H members enrolled per county?

5. What is the relation between place of member residence and total number of Junior 4-H members enrolled per county?

6. What is the relation between number of Extension staff members and total number of Junior 4-H members enrolled per county?

7. What percent of variation in the number of Junior 4-H members per county is accounted for by each of the following groups of independent variables: (1) number of 4-H leaders; (2) number of 4-H organizations; (3) number of 4-H members participating in 4-H events and activities; (4) number of potential 4-H members; (5) number of Junior 4-H members living on farms, in urban and rural nonfarm areas; and (6) number of Extension staff members per county.

III. NEED FOR STUDY

Generally speaking, Tennessee's 4-H Junior enrollment has decreased in recent years while the potential number of 4-H members was increasing during the same period of time. It was believed that a study of some selected variables concerning 4-H leadership, organization, participation, place of member residence, and number of Extension members per county would be helpful in clarifying the enrollment problem.

IV. VARIABLES AND SOURCES OF DATA

This study was concerned with six 4-H junior enrollment variables (dependent variables) and 21 4-H program variables (independent variables) dealing with 4-H leadership, organization, participation, place-of-residence, potential 4-H enrollment, and number of Extension staff members. The data relating to these variables were obtained from the

1965, 1966, and 1967 Tennessee 4-H Club Enrollment Reports (19) and the 1960 Census of Population (24).

Data for the following 21 independent variables were obtained for each of the 95 counties in Tennessee: (1) Total number of adult leaders; (2) total number of junior 4-H Club leaders; (3) total number of junior and adult 4-H Club leaders; (4) total number of basic four organizations; (5) total number of 4-H all stars; (6) total number of honor club members; (7) total number of senior 4-H Clubs; (8) total number of junior 4-H Clubs; (9) total number of 4-H Clubs; (10) average number of senior 4-H members per senior club; (11) total number of senior district winners; (12) total number of 4-H members participating in judging (crop, dairy, forestry, home economics, land, livestock, and poultry); (13) total number of 4-H members participating in 4-H camp; (14) total number of potential senior 4-H members; (15) total number of potential junior 4-H members; (16) total number of 4-H members enrolled; (17) total number of 4-H members residing on farms; (18) total number of 4-H members residing on rural nonfarms; (19) total number of 4-H members residing in urban areas; (20) total number of Extension full-time staff equivalents responsible for 4-H work; and (21) total number of Extension staff workers (see Appendix, Table XXXVIII).

Data for the following six junior 4-H enrollment, or dependent variables, were collected for each of the 95 counties in Tennessee: (1) Total number of junior 4-H members enrolled; (2) total number of junior 4-H members enrolled per full-time staff equivalent; (3) total number of junior 4-H members enrolled per Extension staff member;

(4) percent of total potential junior 4-H members enrolled in junior 4-H; (5) percent of potential junior 4-H members enrolled in junior 4-H per full-time staff equivalent responsible for 4-H work; and (6) percent of potential junior 4-H members enrolled in 4-H per Extension staff member.

Data for independent variables numbered 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 15, 16, 17, 18, and 19 were obtained from the Tennessee 4-H Club Enrollment Reports for the years 1965, 1966, and 1967. Data for each of the three years were obtained and the resulting totals were divided by three to determine the average for the years 1965, 1966, and 1967. Variables 11 and 14 also were three-year averages for the years 1965, 1966, and 1967. Data for variable number 25 were obtained from the Reports of the Tennessee 4-H Round-up Program; number 24 was obtained from the 1960 Census of Population, Vol. 1. The reamining variables, numbers 20 and 21, were obtained from the Tennessee Extension Agent's Guide for Five-Year Planning, 1966, and the Directory of Tennessee Institute of Agriculture, Agricultural Extension Service, August, 1968, respectively.

Data for dependent variables numbered 4, 5, and 6 were derived from the combination of other variables. Dependent variables number 1, 2, and 3 were obtained from Tennessee 4-H Club Enrollment Reports of the years 1965, 1966, and 1967, and Tennessee Extension Agent's Guide for Five-Year Planning, 1966.

V. ANALYSIS OF DATA

This study was designed to identify the relation between selected variables concerning the 4-H program and the total number of junior 4-H members enrolled in each of the 95 Tennessee counties. The data were punched on cards and computations were made by The University of Tennessee Computing Center. Two major types of statistics were used in analyzing the data: The correlation coefficient (r) was used to determine the relation between each of the 21 county 4-H programs (independent) variables and each of the six 4-H junior enrollment (dependent) variables; the multiple correlation coefficient (R) was used to determine the multiple relation between each group of independent variables and each 4-H junior enrollment or dependent variable.

The correlation matrix showed the relation between each of the 27 variables (Appendix). The significance level of the correlation and the multiple correlation coefficients at the various degrees of freedom were read from a statistical table (11). The coefficients achieving the .01 or .05 levels were shown in a footnote to each table.

VI. DEFINITION OF TERMS

Coefficient of correlation (r)--A single number that tells to what extent two things are related, to what extent variations in the one go with variations in the other. It can vary from a value of +1.00, which means perfect positive correlation, through zero, which means

complete independence or no correlation whatever, on down to -1.00, which means perfect negative correlation.

Coefficient of multiple correlation (R)--A number indicating the strength of relationship between one variable and two or more others taken together.

Coefficient of multiple determination (R^2)--The square of coefficient of multiple correlation. It is the interpretation of a multiple R, indicates the proportion of variance in one dependent variable that is dependent upon, or associated with, or accounted for by the independent variables combined with the regression weight used.

Degree of freedom--The number of independent comparisons available for calculating variance.

County Extension program--It is the sum total of all Extension work done in county, including planning and plans, carrying out of five-year and annual plans, evaluation and reporting of progress made toward objective. There is one county Extension program in each county consisting of everything done in all appropriate work areas and/or with all appropriate audiences.

Full-time staff equivalent--The total percent of county staff time devoted to youth work.

Total 4-H enrollment--All the boys and girls who hold membership in a county 4-H Club.

Junior 4-H members--Boys and girls who are enrolled in a county 4-H Club between the ages of 9 and 13.

Senior 4-H members--Boys and girls who enrolled in county 4-H Club between the ages of 14 and 19.

Leadership variables--This term was used to refer to six independent variables dealing with 4-H Club leadership in a county. These variables include total number of adult leaders, total number of junior 4-H Club leaders, total number of junior and adult 4-H Club leaders, total number of basic four organizations, total number of 4-H all stars, and total number of honor club members.

Organization variables--This term was used to refer to the four independent variables: total number of senior 4-H Clubs, total number of junior 4-H Clubs, total number of 4-H Clubs, and average number of senior 4-H members per senior clubs.

Participation variables--This term was used to refer to the three independent variables dealing with the 4-H members taking part in 4-H events and activities. These variables were: Total number of senior district winners; total number of members participating in 4-H judging; and total number of members attending 4-H camp.

Enrollment-related variables--This term was used to refer to the total number of potential junior 4-H population, total number of junior 4-H members enrolled, and total number of 4-H members enrolled.

Place of members residence variables--This term was used to refer to the 4-H members residing on farm, in rural nonfarm, and in urban areas.

Extension staff per county variable--This term was used to refer to the total number of full-time Extension staff equivalents and total number of Extension staff members doing 4-H work per county.

VII. REVIEW OF LITERATURE

The following studies seemed to be either directly or indirectly concerned with the relation between factors of county 4-H programs and 4-H enrollment.

Leadership and 4-H Enrollment

Studies showed that members of 4-H Clubs visited by either leaders or Extension agents generally reenrolled in 4-H the following year (5:13). One of the main reasons for failure to reenroll is lack of help with project work from leader, agent, and/or parents (3:75). Findings indicated that 4-H service leaders--presumably lay leaders--trained new leaders as effectively as did the agent. In many counties, 4-H service leaders were the only persons available to give new 4-H leaders the training they needed when they needed it most--early in their first years of leadership. The more training sessions the new leader attended, the more likely he was to remain a 4-H leader. Thus, the author recommended that greater efforts be made to promote attendance at new 4-H leader training meeting (3:75). A 1956 study made in Connecticut, Massachusetts, and Vermont showed that the leaders with whom the members remained longest after entering high school had the following characteristics: the leaders were likely to be farmers; they tended to

have been 4-H Club members themselves; they planned programs with the members; they had been leaders for three years or longer; and they tended to visit the projects of first-year members more often (14:115). Slocum found, in 1951, a relationship between 4-H reenrollment and the members having experienced 4-H organization leaders (7:5).

Organization and 4-H Enrollment

Why 4-H leaders drop out after short periods of service was studied in 1966 by F. D. Alexander. Six factors were found to be associated with dropping out: (1) small club, (2) no leader in club, (3) short service as leader, (4) expectation of short tenure as leader, and (5) nonattendance at county-wide training meetings. Thus, small clubs had a higher rate of failure (1). A 1959 study be D. E. Lindstrum and W. M. Dawson, attempted to ascertain some of the factors which influenced boys and girls to become and remain members of 4-H Clubs. One of the major findings was that boys and girls whose parents participated actively in various organizations and social activities were attracted in greater numbers to 4-H Clubs (12:21). Esbeck reported a 1960 study of the "holding power" of 4-H Club work which indicated that larger clubs tended to have better trained officers and had greater "hold power" than smaller clubs (21:50). Sabrosky in 1952 reported that both the county and local organization affected the success of 4-H work (22:28). Boys and girls did not drop out because they had joined some other organization. Boys and girls who belonged to FFA and FHA tended to stay in 4-H longer (3:78).

Participation and 4-H Enrollment

Several studies report a relation between 4-H member participation in projects, events, and activities and their enrollment. W. F. Rouse, 1964, found that the following factors appeared to be related to loss in 4-H Club membership: (1) lack of sufficient interest in 4-H Club projects and activities; (2) participation in activities other than 4-H; (3) interference of high school work and (4) teasing by nonmembers. A 1956 study of tenure of Missouri 4-H members suggests that members who participated in 4-H events stay for a longer period than those who did not (15). A 1963 study by Frank W. Stowe, Jr., found that primary factors associated with dropouts were activities other than 4-H, and high school activities and home work (17). A 1961 study by E. E. Letlow showed that there were negative relationships between drop-out rate and (1) attendance at local club and (2) participation in club events (25). Other studies by Copp and Clark, Campbell, Crile, Cummings, Graham, Harmon, Howes, Joy, Lindstrom and Dawson, Sabrosky and Sandstead, reported that the degree of member participation in the 4-H program and activities were associated with 4-H member reenrollment. Boys and girls who are active in the 4-H program reenrolled at a higher rate (12:20).

Place of Residence and 4-H Enrollment

Few studies were found which dealt with the relation between place of member residence and 4-H enrollment. A 1959 study by Lindstrom and Dawson showed that boys and girls who were more appreciative of farm life tended to join 4-H Clubs in relatively greater numbers than those

who disliked farm life (12:21). Copp and Clark noted that farm residence favors successful performance of membership expectations (23:32). A study by E. E. Letlow indicated that there was a positive relationship between dropout rate and nonfarm residence (25).

CHAPTER II

PRESENTATION AND ANALYSIS OF DATA

This chapter was divided into two major sections according to the type of statistic used in analyzing the data. The first section deals with the correlation between selected factors of Tennessee's county 4-H Extension programs and the total number of junior 4-H members enrolled per county. The last major section deals with the multiple correlation between selected groups of factors concerning Tennessee's county 4-H Extension programs and the number of junior 4-H members enrolled per county.

Significance levels of .01 and .05, achieved by the correlation coefficient were reported in footnotes to each table. At the .01 level of significance, the Pearsonian correlation coefficients had to equal or exceed .27, and at the .05 level of significance the correlation coefficient had to equal or exceed .21. The degrees of freedom was constant at ninety-three (93), since the total number of counties studied (N) was 95. Significance levels of the correlation coefficients which did not achieve at least the .05 level were not reported in the tables.

I. CORRELATIONS BETWEEN SELECTED FACTORS OF TENNESSEE'S COUNTY 4-H EXTENSION PROGRAMS AND TOTAL JUNIOR 4-H ENROLLMENT

The correlations between selected county 4-H program factors and the total number of junior members enrolled per county are described in this section. Twenty-seven independent variables (selected factors of Tennessee county 4-H Extension programs) were classified into the following six groups: 4-H leadership; organization; participation; enrollment-related; place-of-member residence; and number of Extension staff members per county. Correlation analysis was between variables within each of these six groups of independent variables and each of the following dependent or enrollment variables: total number of junior 4-H members; number of junior 4-H members per full-time staff equivalent; number of junior 4-H members per Extension staff member; percent of potential junior 4-H members enrolled; percent of junior 4-H members enrolled per full-time staff equivalent; and percent of potential junior 4-H members enrolled per Extension staff member. One group of independent variables was shown in each of the six tables presented in this section.

Relation Between Number of 4-H Leaders and Total Number of Junior 4-H Members Enrolled Per County

The six dependent variables concerning county 4-H leadership were: total number of adult leaders; total number of junior 4-H leaders; total number of junior and adult 4-H leaders; total number of basic four

organizations; total number of 4-H all stars; and total number of honor club members.

Total number of junior 4-H members. Table IV showed that each of the six 4-H Club leadership variables had a significant (.01) positive association with the total number of junior 4-H members enrolled per Tennessee county. The obtained correlation coefficient between the total number of junior 4-H members and each of the leadership variables were as follows: total number of adult leaders .55; total number of junior 4-H Club leaders .65; total number of junior and adult 4-H leaders .63; total number of basic four organizations .36; total number of 4-H all stars .41; and total number of honor club members .55.

These significant positive correlation coefficients indicated that the total number of junior members increased or decreased with an increase or a decrease in either the number of junior leaders, adult leaders, basic four organizations, all star members or honor club members. Counties with a large number of 4-H leaders tended also to have a large number of junior 4-H members.

Total number of junior members enrolled per full-time staff equivalent. Three leadership variables, total number of adult leaders, total number of junior 4-H Club leaders, total number of junior and adult 4-H leaders, showed a significant (.01 level) positive association with the total number of junior 4-H members enrolled per full-time staff equivalent. Thus, counties with a greater number of junior 4-H members enrolled per full-time staff equivalent tended to have more 4-H leaders.

TABLE IV

CORRELATION BETWEEN NUMBER OF 4-H LEADERS AND JUNIOR 4-H ENROLLMENT IN TENNESSEE'S 95 COUNTIES, 1965-1967

4-H Leadership Variables	Junior 4-H Enrollment Variables					
	Number of Junior 4-H Members Enrolled Per County r	Number of Junior 4-H Members Per Full-Time Staff Equivalent r	Number of Junior 4-H Members Per Extension Staff Member r	Percent of Potential Junior 4-H Members Enrolled r	Percent of Potential Junior 4-H Members Enrolled Per Full-Time Staff Member r	Percent of Potential Junior 4-H Members Enrolled Per Full-Time Staff Member r
Total number of adult leaders	.55[a]	.34[a]	.13	.11	-.25[b]	-.08
Total number of junior 4-H Club leaders	.65[a]	.30[a]	.13	-.07	-.35[a]	-.14
Total number of junior and adult 4-H Club leaders	.63[a]	.37[a]	.15	.08	-.31[a]	-.10
Total number of basic four organizations	.36[a]	-.27[a]	-.01	-.22[b]	-.43[a]	-.19
Total number of 4-H all stars	.41[a]	.08	.12	-.05	-.30[a]	-.10
Total number of honor club members	.55[a]	.21[b]	.19	-.09	-.35[a]	-.20

[a]Significant at the .01 level.

[b]Significant at the .05 level.

The total number of basic four organizations showed a significant (.01 level) negative association (-.27) with total number of junior 4-H members enrolled per full-time staff equivalent. Thus, counties with more of the basic four organizations tended to have fewer junior 4-H members enrolled per full-time staff equivalent.

Total number of junior 4-H members enrolled per Extension staff member. The total number of junior 4-H members enrolled per Extension staff members per county was not significantly related (.05 level) to any of the six leadership variables.

Percent of potential junior 4-H members enrolled in 4-H. The percent of the potential junior 4-H members enrolled in 4-H was significantly related (.05 level) to only one of the six leadership variables, total number of basic four organizations (-.22). This indicated that the counties in Tennessee with a large number of basic four organizations tended to enroll a small percent of the total potential junior 4-H members. Neither the number of adult leaders, junior leaders, 4-H all stars nor honor club members was significantly related to the percent of the potential number of junior 4-H members enrolled per county.

Percent of potential junior members enrolled in 4-H per full-time staff equivalent. Each of the six leadership variables was significantly and inversely related (.01 or .05 level) to the percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work. Correlation coefficients of -.35, -.31, -.43, -.30, -.35,

respectively, were obtained when the percents of potential junior 4-H members enrolled per full-time Extension staff equivalent were correlated with the total number of adult leaders; total number of junior 4-H Club leaders; total number of basic four organizations; total number of 4-H all stars; and total number of honor club members. Thus, it was quite evident that counties with a large number of leaders were also enrolling a small percent of the potential junior 4-H members per full-time Extension staff equivalent responsible for 4-H work.

Percent of potential junior members enrolled per Extension staff member. The percent of potential junior 4-H members enrolled per Extension staff member was not significantly related to any of the six leadership variables. However, it was interesting to note the negative direction of these nonsignificant correlations.

Relation Between Organization of 4-H Club and Total Number of Junior 4-H Members Enrolled Per County

Four independent variables were classified as organization variables: the total number of senior 4-H Clubs per county; total number of junior 4-H Clubs per county; total number of 4-H Clubs; and average number of senior 4-H members per senior club. Table V shows the correlation coefficient between each of these four organization variables and each of the six junior 4-H enrollment variables.

Total number of junior 4-H members enrolled. Each of the organization variables showed significant positive association with the

TABLE V

CORRELATION BETWEEN NUMBERS OF 4-H CLUBS AND JUNIOR 4-H ENROLLMENT IN TENNESSEE'S 95 COUNTIES, 1965-1967

Organization Variables	Enrollment Variables					
	Number of Junior 4-H Members Enrolled Per County r	Number of Junior 4-H Members Per Full-Time Staff Equivalent r	Number of Junior 4-H Members Per Extension Staff Member r	Percent of Potential Junior 4-H Members Enrolled r	Percent of Potential Junior 4-H Members Enrolled Per Full-Time Staff Equivalent r	Percent of Potential Junior 4-H Members Enrolled Per Extension Staff Member r
Total number of senior 4-H Clubs	.48[a]	.22[b]	-.02	-.07	-.25[b]	.09
Total number of junior 4-H Clubs	.82[a]	.44[a]	.13	.06	-.35[a]	-.20
Total number of 4-H Clubs	.83[a]	.43[a]	.11	.04	-.37[a]	-.19
Average of senior 4-H members per senior club	.25[b]	.26[b]	.10	.26[b]	-.01	.10

[a]Significant at the .01 level.

[b]Significant at the .05 level.

total number of junior 4-H members enrolled per county in Tennessee. Correlation coefficients for three of the organization variables were as follows: total number of senior 4-H Clubs, .48; total number of junior 4-H Clubs, .82; and total number of 4-H Clubs, .83. Each of these coefficients was significant at the .01 level. The remaining organization variable, average number of senior 4-H members per senior club, had a correlation of .25 which was significant at the .05 level. Thus, junior 4-H enrollment increased as the number of 4-H Clubs increased.

Total number of junior 4-H enrollment per full-time Extension staff equivalent. Two of the organization variables, the total number of junior 4-H Clubs and total number of 4-H Clubs showed a significant (.01 level) positive association with the total number of junior 4-H members enrolled per full-time staff equivalent. The correlation coefficients were .44 and .43, respectively. The other two organization variables, total number of senior 4-H Clubs and average number of senior 4-H members per senior club, also showed a positive relationship with the total number of junior 4-H members enrolled per full-time staff equivalent but at the .05 level of significance. The correlation coefficients were .22 and .26, respectively. These correlation coefficients indicated that the total number of junior 4-H members enrolled per full-time staff equivalent per county in Tennessee increased with an increase in either of the four organization variables. Counties with

a large number of 4-H Clubs tended to have a large number of junior 4-H members per full-time Extension staff equivalent.

Junior 4-H enrollment per Extension staff member. None of the organization variables was significantly associated with the total number of junior 4-H members enrolled per Extension staff member.

Percent of potential junior 4-H members enrolled. Only one of the organization variables, average number of senior 4-H members per senior club, was significantly (.05 level) related (.26) to the percent of the potential junior 4-H members enrolled in 4-H. Thus, the number of senior 4-H members per senior club tended to increase as the percent of potential junior 4-H members enrolled increased.

Percent of potential junior 4-H members enrolled per full-time staff equivalent. The percent of potential junior 4-H members enrolled in 4-H per full-time staff equivalent was inversely related to the total number of senior 4-H Clubs (-.25), total number of junior 4-H Clubs (-.35), and total number of 4-H Clubs (-.37). Each coefficient was significant at either the .01 or .05 level. This suggested that as each of these three organization variables increased, there was a decrease in the percent of potential junior 4-H members enrolled in 4-H per full-time staff equivalent.

Percent of potential junior 4-H members enrolled per Extension staff member. The percent of potential junior 4-H members enrolled in 4-H per Extension staff member was not significantly associated with

any of the four organization variables. Thus, counties with a large potential junior 4-H enrollment per Extension staff member did not have a significantly large number of 4-H Clubs.

Relation Between Participation of 4-H Members and Total Junior 4-H Enrollment

Table VI shows the relationship between three junior 4-H participation variables and each of the six junior 4-H enrollment variables. The three participation variables were: Total number of senior district winners; total number of 4-H members participating in 4-H judging; and total number of 4-H members participating in 4-H camp.

Total number of junior members enrolled in 4-H. Table VI reveals that each of the participation variables was significantly related (.01 level) to the total number of junior 4-H members enrolled per county. Correlation coefficients of .45, .35, .57, respectively, were obtained between the total number of junior 4-H members enrolled per county and: total number of senior district winners; total number of 4-H members participating in 4-H judging; and total number of 4-H members participating in 4-H camp. This suggested that counties with a large junior 4-H enrollment also had more members participating in 4-H events and activities.

Junior 4-H enrollment per full-time staff equivalent. The total number of junior 4-H members enrolled per full-time staff equivalent per county in Tennessee showed a significant positive correlation with the

TABLE VI

CORRELATION BETWEEN MEMBER PARTICIPATION IN 4-H EVENTS AND ACTIVITIES AND JUNIOR 4-H ENROLLMENT IN TENNESSEE'S 95 COUNTIES, 1965-1967

Participation Variables	Enrollment Variables					
	Number of Junior 4-H Members Enrolled Per County r	Number of Junior 4-H Members Per Full-Time Staff Equivalent r	Number of Junior 4-H Members Per Extension Staff Member r	Percent of Potential Junior 4-H Members Enrolled r	Percent of Potential Junior 4-H Members Enrolled Per Full-Time Staff Equivalent r	Percent of Potential Junior 4-H Members Enrolled Per Extension Staff Member r
Total number of senior district winners	.45[a]	.13	.11	-.12	-.33[a]	-.17
Total number of 4-H members participating in 4-H judging	.35[a]	.31[a]	.15	.10	-.05	.14
Total number of 4-H members participating in 4-H camp	.57[a]	.26[b]	.13	-.08	-.35[a]	-.20

[a]Significant at .01 level.

[b]Significant at .05 level.

total number of 4-H members participating in 4-H judging (.31) and the total number of members participating in 4-H camp (.26). This indicated that participation in 4-H events and activities increased as the number of 4-H members enrolled per full-time staff equivalent per county increased.

Junior 4-H enrollment per Extension staff member. The total number of junior 4-H members enrolled per Extension staff member was not significantly related to the number of 4-H members participating in 4-H events and activities.

Percent of junior 4-H population enrolled in 4-H. The percent of potential junior 4-H population enrolled in 4-H was not significantly related to the number of 4-H members participating in 4-H events and activities.

Percent of junior 4-H members enrolled per full-time Extension staff equivalent. The percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work was significantly and inversely related (.01 level) to two of the participation variables. The total number of senior district winners showed a correlation coefficient of -.33, and the total number of 4-H members participating in 4-H camp had a correlation coefficient of -.35. This indicated that as the percent of potential junior 4-H members enrolled per full-time staff equivalent increased, the number of senior district winners and the number of 4-H members participating in 4-H camp decreased.

Percent of potential junior 4-H members enrolled per Extension staff member. The number of 4-H members participating in 4-H events and activities was not significantly related to the percent of potential junior 4-H members enrolled per Extension staff member.

Relation Between Place of Member Residence and Total Number of Junior 4-H Members Enrolled Per County

Table VII shows the correlation coefficients between the place of members residence variables and each of the six 4-H enrollment variables.

Total number of junior 4-H members enrolled. Table VII shows that the total number of junior 4-H members enrolled had a significant (.01) positive association with: Total number of 4-H members residing on farms (.68); total number of 4-H members residing on rural nonfarm (.77); and total number of 4-H members residing in urban areas (.74). It was interesting to note that the highest correlation was between total number of junior 4-H members enrolled per county and total number of members residing in rural nonfarm areas. Counties with the largest junior enrollment also had more members living in rural nonfarm areas.

Number of junior members enrolled per full-time staff equivalent. The total number of junior 4-H members enrolled per full-time staff equivalent was significantly related (.01 level) to the total number of 4-H members residing on farms (.41); the total number of 4-H members residing on rural nonfarm (.49); and the total number of 4-H members

TABLE VII

CORRELATION BETWEEN PLACE OF MEMBER RESIDENCE AND JUNIOR 4-H ENROLLMENT

Place of Member Residence Variables and Potential Enrollment	Enrollment Variables: Number of Junior 4-H Members Enrolled Per County r	Number of Junior 4-H Members Per Full-Time Staff Equivalent r	Number of Junior 4-H Members Per Extension Staff Member r	Percent of Potential Junior 4-H Members Enrolled r	Percent of Potential Junior 4-H Members Enrolled Per Full-Time Staff Equivalent r	Percent of Potential Junior 4-H Members Enrolled Per Extension Staff Member r
Total number of 4-H members residing on farm	.68[a]	.41[a]	.17	.18	-.28[a]	-.11
Total number of 4-H members residing on rural nonfarm	.77[a]	.49[a]	.21[b]	-.16	-.36[a]	-.26[b]
Total number of 4-H members residing in urban areas	.74[a]	.32[a]	.18	-.13	-.35[a]	-.11
Enrollment-Related Variable						
Total number of potential Junior 4-H members	.50[a]	.12	.00	-.46[a]	-.31[a]	-.23[b]

[a]Significant at .01 level.

[b]Significant at .05 level.

residing in urban areas (.32). Counties with the higher enrollment per full-time staff equivalent tended to have more members living in rural nonfarm and urban areas.

Junior 4-H enrollment per Extension staff member. The total number of 4-H members residing on rural nonfarm had a significant (.05 level) positive correlation (.21) with the total number of junior 4-H members enrolled per Extension staff memeber. Numbers of junior 4-H members residing on farms or in urban areas was not significantly related to the number of junior 4-H members per staff member.

Percent of potential junior 4-H members enrolled. The place of 4-H member residence was not significantly related to the percent of potential junior members enrolled in 4-H.

Percent of potential 4-H members enrolled per full-time staff equivalent. The percent of potential junior 4-H members enrolled in 4-H per full-time staff equivalent responsible for 4-H work had a significant (.01 level) negative correlation coefficient with: The total number of 4-H members residing on farms (-.28); total number of 4-H members residing in rural nonfarm areas (-.36); and total number of 4-H members residing in urban areas (-.35). As the percent of potential junior 4-H members enrolled in 4-H per full-time staff equivalent increased, the numbers of 4-H members residing on farms, in rural nonfarm and urban areas decreased.

Percent of potential junior 4-H members enrolled per Extension staff member. The percent of potential junior 4-H members enrolled per Extension staff member was significantly (.05 level) related only to the total number of 4-H members residing on rural nonfarms (-.26). Counties with a high percent of potential junior members enrolled had fewer members residing in rural nonfarm areas.

Number of potential junior 4-H members. Table VII also shows a significant positive correlation (.50) between numbers of potential junior 4-H members and total number of junior 4-H members enrolled per county. The potential number of 4-H members was inversely related to each of the following enrollment variables: the percent of total potential junior 4-H members enrolled (-.46); the percent of potential junior 4-H population enrolled in 4-H per full-time staff equivalent responsible for 4-H work (-.31); and the percent of potential junior 4-H members enrolled in 4-H per Extension staff member (-.23). These correlations indicated that counties with a high potential junior 4-H enrollment tended to have a larger number of junior members enrolled but were enrolling a smaller percent of the potential members.

Relation Between Number of Extension Staff Members and Total Number of Junior 4-H Members Enrolled Per County

Table VIII shows the relationship between two Extension staff member variables and each of the six junior 4-H enrollment variables. The two Extension staff member variables were: total number of

TABLE VIII

CORRELATION BETWEEN NUMBER OF EXTENSION STAFF MEMBERS AND JUNIOR 4-H ENROLLMENT IN TENNESSEE'S 95 COUNTIES, 1965-1967

Extension Staff Variables	Enrollment Variables					
	Number of Junior 4-H Members Enrolled Per County r	Number of Junior 4-H Members Per Full-Time Staff Equivalent r	Number of Junior 4-H Members Per Extension Staff Member r	Percent of Potential Junior 4-H Members Enrolled r	Percent of Potential Junior 4-H Members Enrolled Per Full-Time Staff Equivalent r	Percent of Potential Junior 4-H Members Enrolled Per Extension Staff Member r
Total number of full-time staff equivalent responsible for 4-H work per county	.74[a]	-.03	-.09	-.22[b]	-.71[a]	-.40[a]
Total number of Extension staff members per county	.70[a]	.09	-.16	-.28[a]	-.61[a]	-.34[a]

[a]Significant at the .01 level.

[b]Significant at the .05 level.

full-time staff equivalent responsible for 4-H work per county, and total number of Extension staff members per county.

Total number of junior 4-H members enrolled. The total number of junior 4-H members enrolled showed a significant (.01 level) positive association with the total number of full-time staff equivalent responsible for 4-H work per county (.74); and total number of Extension staff members per county (.70). Counties with larger enrollment had more Extension staff members.

Junior 4-H enrollment per full-time staff equivalent. The Extension staff member variables were not significantly related to the number of junior 4-H members enrolled per full-time staff equivalent. Thus, counties with a high enrollment per full-time staff equivalent did not have either a high or low number of staff members.

Junior 4-H members enrolled per Extension staff member. The number of Extension staff member variables were not significantly related to the number of junior 4-H members enrolled per Extension staff member. Thus, counties with a large staff do not enroll a larger number of junior 4-H members per full-time staff equivalent members.

Percent of junior 4-H members enrolled. The percent of potential junior 4-H members enrolled in 4-H was significantly (.01 and .05 level) and inversely related to two of the Extension staff member variables. The total number of full-time staff equivalent reaponsible for 4-H work per county showed a correlation coefficient of -.22, and the total

number of Extension staff members per county had correlation coefficient of 0.28. This indicated that counties with larger staffs tend to enroll a smaller percent of the potential junior 4-H members.

Percent of potential junior 4-H members enrolled. The percent of potential junior 4-H members enrolled was significantly and inversely related (.01 level) to the total number of full-time staff equivalent responsible for 4-H work per county (-71), and total number of Extension staff member per county (-.61). This suggested that as each of these two Extension staff member variables increased, there was a decrease in the percent of potential junior 4-H members enrolled per full-time staff equivalent.

Percent of potential junior 4-H members enrolled per Extension staff member. The percent of potential junior 4-H members enrolled per Extension staff member was significantly and ivnersely related (.01 level) to the total number of full-time staff equivalent responsible for 4-H work per county (-.40), and the total number of Extension staff members per (-.34). Thus, counties with larger full-time staff equivalent or greater number of staff members were enrolling a smaller percent of the potential junior 4-H members per Extension agent.

II. THE MULTIPLE CORRELATION BETWEEN SELECTED FACTORS OF TENNESSEE'S COUNTY 4-H EXTENSION PROGRAMS AND THE NUMBER OF JUNIOR 4-H MEMBERS ENROLLED PER COUNTY

Results of multiple correlation between each of the six groups of county 4-H program variables (independent variables) and each of the six junior 4-H enrollment variables (dependent variables) were reported in this section. The county 4-H program variables which accounted for the largest percent of variation in each of the six junior 4-H enrollment variables were also reported in this section.

The six groups of 4-H program variables (independent variables) were 4-H leadership, organization, participation, enrollment, place of 4-H member residence, and number of Extension staff members per county. The six junior 4-H enrollment variables (dependent variables) were as follows: total number of junior 4-H members enrolled; total number junior 4-H members enrolled per full-time staff equivalent; total number of junior 4-H members enrolled per Extension staff member; percent of total potential junior 4-H members enrolled in 4-H; percent of potential junior 4-H members enrolled in 4-H per full-time staff equivalent responsible for 4-H work; and percent of potential junior 4-H members enrolled in 4-H per Extension staff member.

The correlation coefficient (r) and the multiple correlation coefficient (R) between the junior 4-H enrollment or dependent variables and the 4-H program or independent variables were reported in tables.

The coefficient of multiple determination (R^2) and the percent increase in R^2 were also shown in the tables presented in this section.

Multiple Correlation Between Total Number of 4-H Members Per County and Each of the Six Groups of County 4-H Program Variables

Table IX shows the multiple correlation coefficient of the six 4-H leadership variables with the total number of junior 4-H members enrolled per county. Each of the coefficients achieved the .01 significance level. The six leadership variables accounted for 53 percent of the variation in the total number of junior 4-H members enrolled per county. Of the total variation in the number of junior 4-H members enrolled per county, 42.6 percent, 4.9 percent, and 3.6 percent, respectively, was accounted for by the following variables: Total number of junior 4-H leaders; total number of junior and adult 4-H leaders; and total number of honor club members. The variable, total number of junior 4-H leaders was the best predictor of the total number junior 4-H members enrolled per county.

Table X shows the multiple correlation coefficients of the three organization variables with the total number of junior 4-H members enrolled per county. Each of these multiple correlation coefficients achieved the .01 level of significance. The three organization variables accounted for 73 percent of the variation in total number of junior 4-H members enrolled per county. Of the 73 percent of variation in junior 4-H enrollment accounted for, 69.1 percent was accounted for by the variable, total number of 4-H Clubs. Thus, of the 4-H

TABLE IX

MULTIPLE CORRELATION BETWEEN THE TOTAL NUMBER OF JUNIOR 4-H MEMBERS PER COUNTY AND SIX 4-H LEADERSHIP VARIABLES (N=95)

Independent Variables--Leadership	Dependent Variable--Total Number of Junior 4-H Members Enrolled[b]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of junior 4-H leaders	.65[a]	.65[a]	.43	42.6
Total number of junior and adult 4-H leaders	.63[a]	.69[a]	.48	4.9
Total number of honor club members	.55[a]	.71[a]	.51	3.6
Total number of basic four organizations	.36[a]	.72[a]	.52	1.1
Total number of all stars	.41[a]	.72[a]	.52	0.2
Total number of adult leaders	.55[a]	.72[a]	.53	0.0

[a]Significant at .01 level.

[b]Fifty-three percent of the variation in total number of junior 4-H members enrolled per county was accounted for by the six leadership variables.

TABLE X

MULTIPLE CORRELATION BETWEEN THE TOTAL NUMBER OF JUNIOR 4-H MEMBERS ENROLLED PER COUNTY AND THREE ORGANIZATION VARIABLES (N=95)

Independent Variables--Organization	Dependent Variable--Total Number of Junior 4-H Members Per County[c]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of 4-H Clubs	.83[a]	.83[a]	.69	69.1
Average number of senior 4-H members per senior club	.25[b]	.85[a]	.63	3.6
Total number of senior 4-H Clubs	.48[a]	.85[a]	.73	0.3

[a]Significant at .01 level.

[b]Significant at .05 level.

[c]Seventy-three percent of the variation in total number of junior 4-H members enrolled per county was accounted for by the three place-of-residence variables.

organization variables, the total number of 4-H Clubs was the best predictor of the total number of junior 4-H members per county.

Multiple Correlation Between the Total Number of Junior 4-H Members Enrolled Per County and Each of Six Groups of County 4-H Program Variables

Table XI shows the multiple correlation coefficient of the three participation variables, with the total number of junior 4-H members enrolled per county. Each of these multiple correlation coefficients achieved the .01 level of significance. The three participation variables accounted for 44 percent of the variation in the total number of junior members enrolled per county. Of the total variation in the number of junior 4-H members enrolled per county, 32.1 percent, 8.8 percent, and 3.2 percent, respectively, was accounted for by the variables, total number of 4-H members participating in 4-H camp, total number of senior district winners, and total number of 4-H members participating in 4-H judging. Of the three 4-H member participation variables, total number of 4-H members participating in 4-H camp was the best predictor of the total number of junior 4-H members per county.

Table XI also shows the correlation between the potential and the actual number of junior 4-H members per county. This correlation coefficient achieved the .01 level of significance. The variable, total number of potential junior 4-H members per county accounted for 25 percent of the variation in total number of junior 4-H members enrolled per county.

TABLE XI

MULTIPLE CORRELATION BETWEEN THE TOTAL NUMBER OF JUNIOR 4-H MEMBERS ENROLLED PER COUNTY AND THREE PARTICIPATION VARIABLES (N=95)

Independent Variables--Participation	Dependent Variable--Total Number of Junior 4-H Members Enrolled Per County[b] Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of 4-H members participating in 4-H camp	.57[a]	.57[a]	.32	32.1
Total number of senior district winners	.45[a]	.64[a]	.41	8.8
Total number of 4-H members participating in 4-H judging	.35[a]	.66[a]	.44	3.2
Independent Variable--Enrollment-Related				
Total number of potential junior 4-H members	.50[a]	.50[a]	.25	25.1

[a]Significant at .01 level.

[b]Forty-four percent and 25 percent of the variation in total number of junior 4-H members enrolled per county was accounted for by the three participation variables and one enrollment-related variable, respectively.

Table XII shows the multiple correlation coefficients of the three place of 4-H member resident variables, with the total number of junior 4-H members enrolled per county. Each of these multiple correlation coefficients achieved the .01 level of significance. The three place of member residence variables accounted for 96 percent of the variation in the number of junior 4-H members enrolled per county. Of the total variation in the number of junior 4-H members enrolled per county 59.2 percent, 24.0 percent, and 12.7 percent, respectively, was accounted for by the variables, total number of 4-H members residing on rural nonfarm, total number of 4-H members residing on farm, and total number of 4-H members residing in urban areas. The variable, total number of 4-H members residing on rural nonfarm was the best predictor of the total number of junior 4-H members enrolled per county.

Table XIII shows the multiple correlation coefficients of the two Extension staff per county variables, with the total number of junior 4-H members enrolled per county. Both of these multiple correlation coefficients achieved the .01 level of significance. These two Extension staff per county variables accounted for 56 percent of the variation in the number of junior 4-H members enrolled per county. Of the total variation in the number of junior 4-H members enrolled per county, 54.2 percent, 1.8 percent, respectively, was accounted for by the variables, total number full-time staff equivalent responsible for 4-H work per county, and total number of Extension staff members per county.

TABLE XII

MULTIPLE CORRELATION BETWEEN THE TOTAL NUMBER OF JUNIOR 4-H MEMBERS ENROLLED PER COUNTY AND THREE PLACE OF RESIDENCE VARIABLES (N=95)

Independent Variables--Place of Residence	Dependent Variable--Total Number of Junior 4-H Members Enrolled[b]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of 4-H members residing on rural nonfarms	.77[a]	.77[a]	.59	59.2
Total number of 4-H members residing on farms	.68[a]	.91[a]	.83	24.0
Total number of 4-H members residing in urban areas	.74[a]	.98[a]	.96	12.7

[a]Significant at .01 level.

[b]Ninety-six percent of the variation in total number of junior 4-H members enrolled per county was accounted for by the three place of residence variables.

TABLE XIII

MULTIPLE CORRELATION BETWEEN THE TOTAL NUMBER OF JUNIOR 4-H MEMBERS ENROLLED AND TWO EXTENSION STAFF PER COUNTY VARIABLES (N=95)

Independent Variables--Extension Staff Per County	Dependent Variable--Total Number of Junior 4-H Members Enrolled Per County[b]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of full-time staff equivalent responsible for 4-H work per county	.74[a]	.74[a]	.54	54.2
Total number of total Extension staff members per county	.70[a]	.75[a]	.56	1.8

[a]Significant at .01 level.

[b]Fifty-six percent of variation in the total number of junior 4-H members enrolled per county was accounted for by the two Extension staff per county variables.

Multiple Correlation Between the Percent of Junior 4-H Members Enrolled Per Full-Time Staff Equivalent and Each of the Six Groups of County 4-H Program Variables

Table XIV shows that the multiple correlation coefficients of the five leadership variables with the total number of junior 4-H members enrolled per full-time staff equivalent per county achieved the .01 level of significance. The five leadership variables accounted for 19 percent of variation in total number of junior 4-H members enrolled per full-time staff equivalent per county. Of the 19 percent of variation accounted for, 13.4 percent was accounted for by the total number of junior and adult 4-H Club leaders. The remaining 5.9 percent was accounted for by the total number of basic four organizations, total number of honor club members, total number of 4-H all stars, and total number of junior 4-H Club leaders. Thus, the total number of adult and junior leaders was the best predictor of the total number of junior 4-H members per full-time staff equivalent. Counties having more leaders also have more junior 4-H members per full-time staff member.

Table XV shows the multiple correlation coefficients of three organization variables, with the total number of junior 4-H members enrolled per full-time staff equivalent per county. Each of these multiple correlation coefficients achieved the .01 level of significance. The three organization variables accounted for 24 percent of the variation in the total number of junior 4-H members enrolled per full-time staff equivalent per county. Of the percent of variation in the total number of junior 4-H members enrolled per full-time staff equivalent per

TABLE XIV

MULTIPLE CORRELATION BETWEEN THE TOTAL NUMBER OF JUNIOR 4-H MEMBERS ENROLLED PER FULL-TIME STAFF EQUIVALENT AND FIVE LEADERSHIP VARIABLES (N=95)

	Dependent Variable--Total Number of Junior 4-H Members Enrolled Per Full-Time Staff Equivalent[c]			
Independent Variables--Leadership	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of junior and adult 4-H Club leaders	.37[a]	.37[a]	.13	13.4
Total number of basic four organizations	-.27[a]	.38[a]	.15	1.2
Total number of honor club members	.21[b]	.40[a]	.16	1.1
Total number of 4-H all stars	.08	.43[a]	.19	2.8
Total number of junior 4-H Club leaders	.30[a]	.43[a]	.19	0.8

[a]Significant at .01 level.

[b]Significant at .05 level.

[c]Nineteen percent of variation in the total number of junior 4-H members enrolled per full-time staff equivalent was accounted for by five leadership variables.

TABLE XV

MULTIPLE CORRELATION BETWEEN THE TOTAL NUMBER OF JUNIOR 4-H MEMBERS ENROLLED PER FULL-TIME STAFF EQUIVALENT AND THREE ORGANIZATION VARIABLES (N=95)

Independent Variables--Organization	Dependent Variable--Total Number of Junior 4-H Members Enrolled Per Full-Time Staff Equivalent[c]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of junior 4-H Clubs	.44[a]	.44[a]	.19	19.2
Average number of senior 4-H members per senior club	.26[a]	.48[a]	.23	3.8
Total number of senior 4-H Clubs	.22[b]	.49[a]	.24	1.5

[a]Significant at .01 level.

[b]Significant at .05 level.

[c]Twenty-four percent of variation in total number of junior 4-H members enrolled per full-time staff equivalent was accounted for by three organization variables.

county, 19.2 percent, 3.8 percent, and 1.5 percent, respectively, was accounted for by the variables, total number of junior 4-H Clubs, average number of senior 4-H members per senior club, and total number of senior 4-H Clubs. This indicated that the variable, total number of junior 4-H Clubs, was the best predictor of the total number of junior 4-H members enrolled per full-time staff equivalent per county. As the number of 4-H Clubs increased the number of members per full-time staff equivalent also increased.

Table XVI shows the multiple correlation coefficient of the three participation variables with total number of junior 4-H members enrolled per full-time staff equivalent per county. Of the three participation variables, one achieved at .05 level of significance and two achieved at .01 level of significance. Three participation variables accounted for 13 percent of the variation in total number of junior 4-H members enrolled per full-time staff equivalent. The variable, total number of 4-H members participating in judging accounted for 9.5 percent of the variation in percent of the total number of junior 4-H members enrolled per full-time staff equivalent. The remaining two participation variables, total number of 4-H members participating in camp and total number of senior district winners accounted for less than 4 percent of the variation in total number junior 4-H members enrolled per full-time staff equivalent per county. Thus, the participation variables were not a good predictor of the total number of junior 4-H members enrolled per full-time staff equivalent.

TABLE XVI

MULTIPLE CORRELATION BETWEEN THE TOTAL NUMBER OF JUNIOR 4-H MEMBERS ENROLLED PER FULL-TIME STAFF EQUIVALENT AND THREE PARTICIPATION VARIABLES (N=95)

	Dependent Variabel--Total Number of Junior 4-H Members Enrolled Per Full-Time Staff Equivalent[c]			
Independent Variables--Participation	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of 4-H participating in judging	.31[a]	.31[b]	.10	9.5
Total number of 4-H members participating in camp	.26[b]	.35[a]	.12	2.9
Total number of senior district winners	.13	.36[a]	.13	0.3
Independent Variable--Enrollment-Related				
Total number of potential 4-H members	.12	.12	.02	.02

[a]Significant at .01 level.

[b]Significant at .05 level.

[c]Thirteen percent and 0.2 percent of the variation in total number of junior 4-H members enrolled per full-time staff equivalent was accounted for by three participation variables and one enrollment-related variable, respectively.

Table XVI also shows a multiple correlation coefficient for the enrollment-related variable, total number of potential junior 4-H members per county, with total number of junior 4-H members enrolled per full-time staff equivalent per county. These variables were not significantly (.05 level) related. Thus, potential enrollment was not related to actual enrollment per full-time staff equivalent.

Table XVII shows the multiple correlation coefficient of the three place of residence variables with the total number of junior 4-H members enrolled per full-time staff equivalent per county. Each of these multiple correlation coefficients achieved the .01 level of significance. The three place of residence variables accounted for 32 percent of the variation in the total number of junior 4-H members enrolled per full-time staff equivalent per county. Of the percent of variation in the total number of junior 4-H members enrolled per full-time staff equivalent per county, 23.6 percent, 8.2 percent, and 0.5 percent, respectively, was accounted for by the place-of-residence variables, total number of 4-H members residing on rural nonfarm, total number of 4-H members residing on farm, and total number of 4-H members residing in urban areas. The variable, total number of 4-H members residing on rural nonfarm was the best predictor of the total number of junior 4-H members enrolled per full-time staff equivalent per county.

Table XVIII shows the multiple correlation coefficients of the two Extension staff per county variables with the total number of junior 4-H members enrolled per full-time staff equivalent per county. These coefficients did not achieve the .05 level of significance. Thus,

TABLE XVII

MULTIPLE CORRELATION BETWEEN THE TOTAL NUMBER OF JUNIOR 4-H MEMBERS ENROLLED PER FULL-TIME STAFF EQUIVALENT AND THREE PLACE OF RESIDENCE VARIABLES (N=95)

Independent Variables--Place of Residence	Dependent Variable--Total Number of Junior 4-H Members Enrolled Per Full-Time Staff Equivalent[b]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of 4-H members residing on rural nonfarms	.49[a]	.49[a]	.24	23.6
Total number of 4-H members residing on farm	.41[a]	.56[a]	.32	8.2
Total number of 4-H members residing in urban	.32[a]	.57[a]	.32	0.5

[a]Significant at .01 level.

[b]Thirty-two percent of variation in total number of junior 4-H members enrolled per full-time staff equivalent was accounted for by three place of residence variables.

TABLE XVIII

MULTIPLE CORRELATION BETWEEN THE TOTAL NUMBER OF JUNIOR 4-H MEMBERS ENROLLED PER FULL-TIME STAFF EQUIVALENT

Independent Variables--Extenstion Staff Per County	Dependent Variable--Total Number of Junior 4-H Members Enrolled Per Full-Time Staff Equivalent			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of total Extension staff members per county	.09	.09	.01	.87
Total number of full-time staff equivalent responsible for 4-H work per county	-.03	.22	.05	4.1

[a]Five percent of variation in total number of junior 4-H members enrolled per full-time staff equivalent was accounted for by two Extension staff per county variables.

junior 4-H enrollment per full-time staff equivalent does not increase with either an increase in total number of staff members per county or an increase in total number of full-time staff equivalent per county.

Multiple Correlation Between Total Number of Junior 4-H Members Enrolled Per Extension Staff Member Per County and Each of the Six Groups of County 4-H Program Variables

Table XIX shows the multiple correlation coefficients of the six 4-H leadership variables with the total number of junior 4-H members enrolled per Extension staff members per county. These coefficients did not achieve the .05 level of significance. The six leadership variables accounted for only 6 percent of the variation in the total number of junior 4-H members enrolled per Extension staff member per county. Therefore, these findings indicate that the number of junior 4-H members per Extension staff member did not increase with an increase in either the number of honor club members, number of basic four organizations, number of adult and/or junior leaders, or number of all star members.

Table XX shows a nonsignificant multiple correlation coefficient for each of the three organization variables with total number of junior 4-H members enrolled per Extension staff member per county. The three organization variables accounted for only 3 percent of the variation in total number of junior 4-H members enrolled per Extension staff member per county. Thus, the number of junior 4-H members per Extension staff member did not increase with an increase in either the total number of

TABLE XIX

MULTIPLE CORRELATION BETWEEN TOTAL NUMBER OF JUNIOR 4-H MEMBERS ENROLLED PER EXTENSION STAFF MEMBER PER COUNTY AND SIX LEADERSHIP VARIABLES (N=95)

Independent Variables--Leadership	Dependent Variable--Total Number of Junior 4-H Members Enrolled Per Extension Staff Member Per County[a]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of honor club members	.19	.19	.03	3.5
Total number of basic four organizations	-.01	.22	.05	1.5
Total number of junior and adult 4-H Club leaders	.15	.24	.06	0.6
Total number of 4-H all stars	.12	.24	.06	0.3
Total number of junior 4-H Club leaders	.13	.24	.60	0.1
Total number of adult leaders	.13	.25	.06	0.1

[a]Six percent of variation in total number of junior 4-H members enrolled per Extension staff member per county was accounted for by six leadership variables.

TABLE XX

MULTIPLE CORRELATION BETWEEN THE TOTAL NUMBER OF JUNIOR 4-H MEMBERS ENROLLED PER EXTENSION STAFF MEMBER PER COUNTY AND THREE ORGANIZATION VARIABLES (N=95)

Independent Variables--Organization	Dependent Variable--Total Number of Junior 4-H Members Enrolled Per Extension Staff Member Per County[a]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of junior 4-H Clubs	.13	.13	.02	1.6
Total number of senior 4-H Clubs	-.02	.15	.02	0.8
Average number of senior 4-H members per senior clubs	.10	.16	.03	0.3

[a]Three percent of variation in total number of junior 4-H members enrolled per Extension staff member per county was accounted for by three organization variables.

junior or senior 4-H Clubs or the average number of senior 4-H members per senior 4-H Club.

Table XXI shows a nonsignificant multiple correlation coefficient for each of the three participation variables with total number of junior 4-H members enrolled per Extension staff member per county. The three participation variables accounted for only 4 percent of the variation in total number of junior 4-H members enrolled per Extension staff member per county. Therefore, the number of junior 4-H members enrolled per county Extension staff member did not increase with an increase in the number of members participating in 4-H events and activities.

Table XXII shows the multiple correlation coefficient of the three place-of-residence variables with the total number of junior members enrolled per Extension staff member per county. Only the total number of 4-H members residing on rural nonfarms was significantly related to junior enrollment per staff member. The three place-of-residence variables accounted for only 6 percent of the variation in the total number of junior 4-H members enrolled per Extension staff member per county.

Table XXIII shows the multiple correlation coefficients of the two Extension staff per county variables with the total number of junior 4-H members enrolled per Extension staff member per county. Neither of these Extension staff per county variables reached the 0.5 level of significance. Only 3 percent of the variation in enrollment per staff member was accounted for by the two Extension staff variables. Thus, junior enrollment per staff member did not increase with an increase in

TABLE XXI

MULTIPLE CORRELATION BETWEEN THE TOTAL NUMBER OF JUNIOR 4-H MEMBERS ENROLLED PER EXTENSION STAFF MEMBER PER COUNTY AND THREE PARTICIPATION VARIABLES (N=95)

Independent Variables--Participation	Dependent Variable--Total Number of Junior 4-H Members Enrolled Per Extension Staff Member Per County[a]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of 4-H members participating in 4-H judging	.15	.15	.02	2.2
Total number of senior district winners	.11	.18	.03	1.0
Total number of 4-H members participating in 4-H camp	.13	.19	.04	0.4

[a]Four percent of variation in total number of junior 4-H members enrolled per Extension staff member per county was accounted for by three participation variables.

TABLE XXII

MULTIPLE CORRELATION BETWEEN THE TOTAL NUMBER OF JUNIOR 4-H MEMBERS ENROLLED PER EXTENSION STAFF MEMBER PER COUNTY AND THREE PLACE OF RESIDENCE VARIABLES (N=95)

Independent Variables--Place of Residence	Dependent Variable--Total Number of Junior 4-H Members Enrolled Per Extension Staff Member Per County[b]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of 4-H members residing on rural nonfarm	.21[a]	.21[a]	.05	4.6
Total number of 4-H members residing in urban areas	.18	.24	.06	1.1
Total number of 4-H members residing on farms	.17	.25	.06	0.5

[a]Significant at .05 level.

[b]Six percent of variation in total number of junior 4-H members enrolled per Extension staff members per county was accounted for by three place of residence variables.

TABLE XXIII

MULTIPLE CORRELATION BETWEEN THE TOTAL NUMBER OF JUNIOR 4-H MEMBERS ENROLLED PER EXTENSION STAFF MEMBER PER COUNTY AND TWO EXTENSION STAFF PER COUNTY VARIABLES (N=95)

Independent Variables--Extension Staff Per County	Dependent Variable--Total Number of Junior 4-H Members Enrolled Per Extension Staff Member Per County[a]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of Extension staff members per county	-.16	.16	.02	2.4
Total number of full-time staff equivalent responsible for 4-H work per county	-.09	.18	.03	0.7

[a]Three percent of variation in total number of junior 4-H members enrolled per Extension staff member per county was accounted for by two Extension staff per county variables.

either the total number of staff members or of full-time staff equivalent per county.

Multiple Correlation Between Percent of Potential Junior 4-H Members Enrolled Per County and Each of the Six Groups of County 4-H Program Variables

Table XXIV shows the multiple correlation coefficient of the five leadership variables with the percent of the potential junior 4-H members enrolled in 4-H. Three of these multiple correlation coefficients achieved the .05 level of significance. These five leadership variables accounted for only 9 percent of the variation in the percent of potential junior 4-H members enrolled per county. Most of the variation accounted for by the leadership variables was due to the variable, total number of basic four organizations. The negative direction of the correlation indicated that counties reaching a high percent of the potential junior 4-H members had fewer of the basic four organizations in their county.

Table XXV shows the multiple correlation of two organization variables with the percent of potential junior 4-H members enrolled. Each of these multiple correlation coefficients achieved the .05 level of significance. The two organization variables accounted for only 7 percent of the variation in the percent of potential junior 4-H members enrolled per county.

Table XXVI shows the multiple correlation coefficient of the three participation variables with the percent of potential junior 4-H

TABLE XXIV

MULTIPLE CORRELATION BETWEEN PERCENT OF POTENTIAL JUNIOR 4-H MEMBERS ENROLLED IN 4-H AND FIVE LEADERSHIP VARIABLES (N=95)

Independent Variables--Leadership	Dependent Variable--Percent of Potential Junior 4-H Members Enrolled in 4-H[b]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of basic four organizations	-.22[a]	.22[a]	.05	4.7
Total number of adult leaders	.11	.27[a]	.07	2.5
Total number of junior 4-H Club leaders	-.07	.29[a]	.09	1.4
Total number of honor club members	-.09	.29	.09	.09
Total number of junior and adult 4-H Club leaders	.08	.30	.09	.05

[a]Significant at .05 level.

[b]Nine percent of variation in percent of potential junior 4-H members enrolled in 4-H was accounted for by five leadership variables.

TABLE XXV

MULTIPLE CORRELATION BETWEEN PERCENT OF POTENTIAL JUNIOR 4-H MEMBERS ENROLLED IN 4-H AND TWO ORGANIZATION VARIABLES (N=95)

Independent Variables--Organization	Dependent Variable--Percent of Potential Junior 4-H Members Enrolled in 4-H[b]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Average number of senior 4-H members per senior clubs	.26[a]	.26[a]	.07	6.7
Total number of 4-H Clubs	.04	.26[a]	.07	.04

[a]Significant at .05 level.

[b]Seven percent of variation in percent of potential junior 4-H members enrolled in 4-H was accounted for by two organization variables.

TABLE XXVI

MULTIPLE CORRELATION BETWEEN PERCENT OF POTENTIAL JUNIOR 4-H MEMBERS ENROLLED IN 4-H AND THREE PARTICIPATION VARIABLES (N=95)

Independent Variables--Participation	Dependent Variable--Percent of Potential Junior 4-H Members Enrolled in 4-H[b]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Correlation R^2	Percent Increase in R^2
Total number of senior district winners	-.12	.12	.01	1.5
Total number of 4-H members participating in 4-H judging	.10	.16	.03	1.2
Total number of 4-H members participating in 4-H camp	-.08	.18	.03	0.7
Independent Variable--Enrollment-Related				
Total number of potential junior 4-H members	-.46[a]	.46[a]	.21	21.1

[a]Significant at .01 level.

[b]Three percent and 21 percent of variation in percent of potential junior 4-H members enrolled in 4-H were accounted for by three participation variables and one enrollment-related variable, respectively.

members enrolled per county. Neither of these multiple correlation coefficients achieved the .05 level of significance. The three participation variables accounted for only 3 percent of the variation in the percent of potential junior 4-H members enrolled per county. Thus, counties with greater participation in 4-H events and activities were not enrolling a higher percent of the potential junior 4-H members.

Table XXVII shows the multiple correlation coefficient of the three place-of-residence variables with the percent of potential junior 4-H members enrolled per county. Although a significant multiple correlation was shown, only 9 percent of the variation in potential enrollment was accounted for by the three place-of-member-residence variables. None of the place-of-residence variables were independently and significantly related to percent of potential members enrolled. Thus, the percent of potential members enrolled does not increase with an increase in either the number of members residing on farms, rural nonfarm or urban areas.

Table XXVIII shows the multiple correlation coefficients of the two Extension staff variables with the percent of potential junior 4-H members enrolled per county. Although each of these coefficients showed either .01 or .05 level of significance, only 8 percent of the variation in percent of potential junior 4-H members enrolled was accounted for by the number of staff member variables. Thus, the number of Extension staff members is not an accurate predictor of the percent of potential junior members enrolled.

TABLE XXVII

MULTIPLE CORRELATION BETWEEN PERCENT OF POTENTIAL JUNIOR 4-H MEMBERS ENROLLED IN 4-H AND THREE PLACE-OF-RESIDENCE VARIABLES (N=95)

Independent Variables--Place of Residence	Dependent Variable--Percent of Potential Junior 4-H Members Enrolled in 4-H[b]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of 4-H members residing on farm	.18	.18	.03	3.2
Total number of 4-H members residing on rural nonfarm	-.16	.28[a]	.08	3.7
Total number of 4-H members residing in urban areas	-.13	.31[a]	.09	1.6

[a]Significant at .05 level.

[b]Nine percent of variation in percent of potential junior 4-H members enrolled in 4-H was accounted for by three place-of-residence variables.

TABLE XXVIII

MULTIPLE CORRELATION BETWEEN PERCENT OF POTENTIAL JUNIOR 4-H MEMBERS ENROLLED IN 4-H AND TWO EXTENSION STAFF PER COUNTY VARIABLES (N=95)

Independent Variables--Extension Staff Per County	Dependent Variable--Percent of Potential Junior 4-H Members Enrolled[c]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of total Extension staff members per county	-.28[a]	.28[a]	.08	7.6
Total number full-time staff equivalent responsible for 4-H work per county	-.22[b]	.28[b]	.08	0.1

[a]Significant at .01 level.

[b]Significant at .05 level.

[c]Eight percent of variation in percent of potential junior 4-H members enrolled in 4-H was accounted for by two Extension staff per county variables.

Multiple Correlation Between Percent of Potential Junior 4-H Members Enrolled Per Full-Time Staff Equivalent Responsible for 4-H Work Per County and Each of the Six Groups of County 4-H Program Variables

Table XXIX shows the multiple correlation coefficient of the six 4-H leadership variables with the percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work per county. Each of these coefficients achieved the .01 level of significance. The six 4-H leadership variables accounted for 26 percent of variation in the percent of the potential junior 4-H population enrolled in junior 4-H per full-time staff equivalent responsible for 4-H work per county. Of this 26 percent of variation, 18.7 percent was accounted for by the variable, total number of basic four organizations, and 6.1 percent was accounted for by total number of junior 4-H Club leaders. Each of the leadership variables is inversely related to the percent of potential junior 4-H members enrolled.

Table XXX shows the multiple correlation coefficients of the two organization variables with the percent of potential junior 4-H members enrolled per full-time staff equivalent. Although significant (.01 level) multiple correlations were shown, these organization variables accounted for 13 percent of variation in the percent of potential junior 4-H members enrolled per full-time staff equivalent. Nearly all of this 13 percent was accounted for by the variable, total number of 4-H Clubs. The significant inverse relations indicated that counties with large numbers of 4-H Clubs were enrolling a small percent of the potential junior members per full-time staff equivalent.

TABLE XXIX

MULTIPLE CORRELATION BETWEEN PERCENT OF POTENTIAL JUNIOR 4-H MEMBERS ENROLLED PER FULL-TIME STAFF EQUIVALENT RESPONSIBLE FOR 4-H WORK AND SIX LEADERSHIP VARIABLES (N=95)

Independent Variables--Leadership	Dependent Variable--Percent of Potential Junior 4-H Members Enrolled Per Full-Time Staff Equivalent[c]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of basic four organizations	-.43[a]	.43[a]	.19	18.7
Total number of junior 4-H Club leaders	-.35[a]	.50[a]	.25	6.1
Total number of 4-H all stars	-.30[a]	.50[a]	.25	0.4
Total number of junior and adult 4-H club leaders	-.31[a]	.51[a]	.25	0.2
Total number of adult leaders	-.25[b]	.51[a]	.26	0.3
Total number of honor club members	-.35[a]	.51[a]	.26	0.1

[a]Significant at .01 level.

[b]Significant at .05 level.

[c]Twenty-six percent of variation in percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work was accounted for by six leadership variables.

TABLE XXX

MULTIPLE CORRELATION BETWEEN PERCENT OF POTENTIAL JUNIOR 4-H MEMBERS ENROLLED PER FULL-TIME STAFF EQUIVALENT RESPONSIBLE FOR 4-H WORK AND TWO ORGANIZATION VARIABLES (N=95)

	Dependent Variable--Percent of Potential Junior 4-H Members Enrolled Per Full-Time Staff Equivalent Responsible for 4-H Work[c]			
Independent Variables--Organization	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of 4-H Clubs	-.37[a]	.37[a]	.13	13.3
Total number of senior 4-H Clubs	-.25[b]	.37[a]	.13	0.1

[a]Significant at .01 level.

[b]Significant at .05 level.

[c]Thirteen percent of variation in percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work was accounted for by two organization variables.

Table XXXI shows the multiple correlation coefficients of the three organization variables and one enrollment-related variable with the percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work. Each of these multiple correlation coefficients achieved .01 level of significance. The three participation variables accounted for 19 percent of variation in the percent of potential junior 4-H members enrolled per full-time staff equivalent. Of this percent of variation, 12.4 percent, 5.7 percent, and 1.2 percent, respectively, were accounted for by the variables, total number of 4-H members participating in 4-H camp, total number of senior district winners, and total number of 4-H members participating in 4-H judging. The total number of 4-H members participating in 4-H camp was the best predictor of the percent of potential junior 4-H members enrolled per full-time staff equivalent.

In this table, it also shows the multiple correlation coefficient of total number of potential junior 4-H members with the percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work per county. Although a significant (.01 level) inverse relation was observed, only 9.4 percent of variation in the percent of potential junior 4-H members enrolled per full-time staff equivalent was accounted for by the total number of potential 4-H members per county.

Table XXXII shows the multiple correlation coefficients of the three place-of-residence variables and one Extension staff per county variable with the percent of potential junior 4-H members enrolled per

TABLE XXXI

MULTIPLE CORRELATION BETWEEN PERCENT OF POTENTIAL JUNIOR 4-H MEMBERS ENROLLED PER FULL-TIME STAFF EQUIVALENT RESPONSIBLE FOR 4-H WORK AND THREE PARTICIPATION VARIABLES (N=95)

Independent Variables--Participation	Dependent Variable--Percent of Potential Junior 4-H Members Enrolled Per Full-Time Staff Equivalent Responsible for 4-H Work[b]: Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of 4-H members participating in 4-H camp	-.35[a]	.35[a]	.12	12.4
Total number of senior district winners	.33[a]	.43[a]	.18	5.7
Total number of 4-H members participating in 4-H judging	.00	.44[a]	.19	1.2
Independent Variable--Enrollment-Related				
Total number of potential junior 4-H members	-.31[a]	.31[a]	.09	9.4

[a]Significant at .01 level.

[b]Nineteen percent and 9 percent of variation in percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work were accounted for by three participation variables and one enrollment-related variable, respectively.

TABLE XXXII

MULTIPLE CORRELATION BETWEEN PERCENT OF POTENTIAL JUNIOR 4-H MEMBERS ENROLLED PER FULL-TIME STAFF EQUIVALENT RESPONSIBLE FOR 4-H WORK AND THREE PLACE-OF-RESIDENCE VARIABLES (N=95)

Independent Variables--Place-of-Residence	Dependent Variable--Percent of Potential Junior 4-H Members Enrolled Per Full-Time Staff Equivalent Responsible for 4-H Work[b]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of 4-H members residing on rural nonfarm	-.36[a]	.36[a]	.13	12.9
Total number of 4-H members residing in urban areas	-.35[a]	.42[a]	.18	5.0
Total number of 4-H members residing on farm	-.28[a]	.44[a]	.20	1.9
Independent Variable--Extension Staff Per County				
Total number of full-time staff equivalent responsible for 4-H work per county	-.71[a]	.71[a]	.51	51.0

[a]Significant at .01 level.

[b]Twenty percent and 51 percent of variation in percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work was accounted for by three place-of-residence variables and one Extension staff per county variable.

full-time staff equivalent responsible for 4-H work per county. These multiple correlation coefficients each achieved the .01 significance level. These three place-of-residence variables accounted for 20 percent of the variation in the percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work per county. Of this 20 percent of the variation, the total number of 4-H members residing on rural nonfarm accounted for 12.9 percent, the total number of 4-H members residing in urban areas accounted for 5.0 percent, and total number of 4-H members residing on farms accounted for 1.9 percent.

A significant (.01 level) inverse relation was obtained between the total number of full-time staff equivalent responsible for 4-H work per county and the percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work per county. Fifty-one percent of the variation was accounted for by this variable. This indicates that counties having a large 4-H staff tend to be enrolling a small percent of the potential junior 4-H members.

Multiple Correlation Between Percent of Potential Junior Members Per Extension Staff Member and Each of the Six Groups of County 4-H Program Variables

Table XXXIII shows the multiple correlation coefficient of the four leadership variables with percent of potential junior 4-H members enrolled per Extension staff member per county. None of these multiple correlation coefficients reached the .05 level of significance. These

TABLE XXXIII

MULTIPLE CORRELATION BETWEEN PERCENT OF POTENTIAL JUNIOR 4-H MEMBERS ENROLLED IN 4-H PER EXTENSION STAFF MEMBER PER COUNTY AND FOUR LEADERSHIP VARIABLES (N=95)

Independent Variables--Leadership	Dependent Variable--Percent of Potential Junior 4-H Members Enrolled in 4-H Per Extension Staff Member Per County[a]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of honor club members	-.19	.19	.04	3.7
Total number of basic four organizations	-.19	.22	.05	1.2
Total number of 4-H all stars	-1.0	.23	.05	0.4
Total number of junior 4-H Club leaders	-.14	.24	.06	0.2

[a]Six percent of variation in percent of potential junior 4-H members enrolled in 4-H per Extension staff member per county was accounted for by four leadership variables.

four leadership variables accounted for only 6 percent of the variation in percent of potential junior 4-H members enrolled per total number of Extension staff member per county. Although not significant, it was interesting to note the negative relation between each of the leadership variables and the percent of potential junior 4-H members enrolled per staff member.

Table XXXIV shows the multiple correlation coefficients of the three organization variables with percent of potential junior 4-H members enrolled per Extension staff member per county. None of these three organization variables reached the .05 level of significance. These three variables accounted for only 6 percent of variation in percent of potential junior 4-H members enrolled per Extension staff member per county.

Table XXXV shows the multiple correlation coefficients of the three participation variables and one enrollment-related variable with the percent of potential junior 4-H members enrolled per Extension staff member per county. Except one variable, each of these variables achieved .05 level of significance; however, the three participation variables accounted for only 10 percent of the variation in percent of potential junior 4-H members enrolled per Extension staff member per county. The correlation coefficient (-.23) between the total number of potential junior 4-H members and the percent of potential junior 4-H members enrolled per Extension staff member per county was significant at the .05 level and accounted for 5.4 percent of variation.

TABLE XXXIV

MULTIPLE CORRELATION BETWEEN PERCENT OF POTENTIAL JUNIOR 4-H MEMBERS ENROLLED IN 4-H PER EXTENSION STAFF MEMBER PER COUNTY AND THREE ORGANIZATION VARIABLES (N=95)

Independent Variables--Organization	Dependent Variable--Percent of Potential Junior 4-H Members Enrolled in 4-H Per Extension Staff Member Per County[a]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of junior 4-H Clubs	-.20	.20	.04	3.9
Average number of Senior 4-H members per senior clubs	.10	.23	.06	1.7
Total number of senior 4-H Clubs	-.09	.24	.06	.40

[a]Six percent of variation in percent of potential junior 4-H members enrolled in 4-H per Extension staff member per county was accounted for by three organization variables.

TABLE XXXV

MULTIPLE CORRELATION BETWEEN PERCENT OF POTENTIAL JUNIOR 4-H MEMBERS ENROLLED IN 4-H PER EXTENSION STAFF MEMBER PER COUNTY AND THREE PARTICIPATION VARIABLES (N=95)

Independent Variables--Participation	Dependent Variable--Percent of Potential Junior 4-H Members Enrolled in 4-H Per Extension Staff Member Per County[b]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of 4-H members participating in 4-H camp	-.20	.20	.04	3.8
Total number of 4-H members participating in 4-H judging	.14	.29[a]	.08	4.4
Total number of senior district winners	-.17	.31[a]	.10	1.6
Independent Variable--Enrollment-Related				
Total number of potential junior 4-H members	-.23[a]	.23[a]	.05	5.4

[a]Significant at .05 level.

[b]Ten percent and 5 percent of variation in percent of potential junior 4-H members enrolled in 4-H per Extension staff member per county was accounted for by three participation variables and one enrollment-related variable, respectively.

Table XXXVI shows the multiple correlation coefficients of two place-of-residence variables and one Extension staff per county variable with the percent of potential junior 4-H members enrolled per Extension staff member. Each of these multiple correlation coefficients achieved .05 level of significance. These two variables accounted for only 7 percent of the variation in the percent of potential junior 4-H members enrolled per Extension staff member.

The correlation coefficient between the total number of full-time staff equivalent responsible for 4-H work per county and percent of potential junior 4-H members enrolled per Extension staff member per county was significant at the .01 level and accounted for 16 percent of the variation.

TABLE XXXVI

MULTIPLE CORRELATION BETWEEN PERCENT OF POTENTIAL JUNIOR 4-H MEMBERS ENROLLED IN 4-H PER EXTENSION STAFF MEMBER PER COUNTY AND TWO PLACE-OF-RESIDENCE VARIABLES (N=95)

Independent Variables--Place-of-Residence	Dependent Variable--Percent of Potential Junior 4-H Members Enrolled Per Extension Staff Member Per County[c]			
	Coefficient of Correlation r	Coefficient of Multiple Correlation R	Coefficient of Multiple Determination R^2	Percent Increase in R^2
Total number of 4-H members residing on rural nonfarm	-.26[b]	.26[b]	.07	6.5
Total number of 4-H members residing on farm	-.11	.26[b]	.07	0.2
Independent Variable--Extension Staff Per County				
Total number of full-time staff equivalent responsible for 4-H work per county	-.40[a]	.40[a]	.16	16.0

[a]Significant at .01 level.

[b]Significant at .05 level.

[c]Seven percent and 16 percent of variation in percent of potential junior 4-H members enrolled per Extension staff member per county was accounted for by two place-of-residence variables and one Extension staff per county variable, respectively.

CHAPTER III

MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

I. INTRODUCTION

The study was concerned with the problem of decreasing county junior 4-H enrollment in the state of Tennessee. It was designed to ascertain the association between selected variables concerning county 4-H programs and the total junior 4-H enrollment. More specifically, the major purposes of this study were: (1) to ascertain the relations between the total number of junior 4-H members enrolled per county and selected variables concerning 4-H leadership, organization, participation, enrollment-related, place of member residence, and number of Extension staff members per county; (2) to determine which of the six groups of county 4-H programs or independent variables (i.e., 4-H leadership, organization, participation, enrollment-related, place of residence, and number of Extension staff per county variables) accounted for the largest percent of variation in the number of junior 4-H members per county; and (3) to determine which variable, within each of the six groups of 4-H Extension program variables, accounted for the highest percent of variation in the number of junior 4-H members enrolled per county.

II. SOURCE OF DATA AND NAME OF VARIABLES

Data for this study were obtained from the Tennessee 4-H Club Enrollment Reports for the years 1965, 1966, 1967, and the 1960 census of population for Tennessee counties. Twenty-one county 4-H program variables (independent variables) and six junior 4-H enrollment variables (dependent variables) were studied.

III. METHODS OF ANALYSIS

Two types of analysis were used in this study. The correlation coefficient (r) was used to determine the relation between each of the twentyone county 4-H programs or independent variables and each of the five 4-H enrollment or dependent variables. The multiple correlation coefficient (R) was used to determine the multiple relation between the county 4-H program or independent variables, within each group of independent variables, and each junior 4-H enrollment or dependent variable. The data were punched on cards and computations were made by The University of Tennessee Computing Center. A step-wise regression program was used to analyze the data.

IV. MAJOR FINDINGS

The major findings concerning each of the independent variables (4-H leadership, organization, participation, enrollment-related, place of member residence, and number of Extension staff members) are presented in this section. The associations and percent of variation in junior

4-H enrollment accounted for by each group of county Extension 4-H program variables are briefly described.

Relation Between Number of Leaders and Junior 4-H Enrollment

Total number of junior 4-H members. Each of the six leadership variables was significantly and positively related (.01 level) to the total number of junior 4-H members enrolled per county. These six leadership variables were: total number of adult leaders; total number of junior leaders; total number of junior and adult leaders; total number of basic four organizations; total number of all stars; and total number of honor club members. Thus, as the number of 4-H leaders increased, the total number of junior 4-H members enrolled per county also increased. It was also found that the six 4-H leadership variables accounted for 53 percent of the variation in the total number of junior 4-H members enrolled per county. Out of this, 42.6 percent of the variation in junior 4-H enrollment was accounted for by the variable, total number of junior 4-H leaders per county.

Number of junior 4-H members per full-time staff equivalent. Three leadership variables, total number of adult leaders, total number of junior 4-H Club leaders, and total number of junior and adult 4-H leaders showed a significant (.01 level) positive association with the total number of junior 4-H members enrolled per full-time staff equivalent. Thus, counties with more of the 4-H leaders tended to have more junior 4-H members enrolled per full-time staff equivalent. The

leadership variables accounted for a total of 19 percent of the variation in the number of junior 4-H members per full-time staff equivalent. Out of this, 13.4 percent was accounted for by the variable, total number of junior and adult 4-H Club leaders.

Number of junior 4-H members per Extension staff member. None of the six leadership variables was significantly related to the number of junior 4-H members per Extension staff member. Only six percent of variation was accounted for by these six leadership variables.

Percent of potential junior 4-H members enrolled. Only one of these six leadership variables, total member of basic four organizations, was significantly (.05 level) and inversely related to the percent of potential junior 4-H members enrolled. Thus, an increase in the total number of basic four organizations was accompanied by a decrease in percent of potential junior 4-H members enrolled. These six leadership variables accounted for 9 percent of the variation in percent of potential junior 4-H members enrolled. Out of this, 4.7 percent was accounted for by the variable, total number of basic four organizations.

Percent of potential junior 4-H members enrolled per full-time staff equivalent. Each of the six leadership variables showed a significant (either .01 or .05 level) and inverse relation with the percent of potential junior 4-H members enrolled per full-time staff equivalent. Thus, counties with a large number of leaders were enrolling a small percent of potential junior 4-H members per full-time staff equivalent.

These six leadership variables accounted for 26 percent of the variation in percent of potential junior 4-H members enrolled per full-time staff equivalent. About 19 percent of this variation was accounted for by the variable, total number of basic four organizations.

Percent of potential junior 4-H members enrolled per Extension staff member. None of the leadership variables was significantly related to the percent of potential junior 4-H members enrolled per Extension staff member. Only 6 percent of variation in percent of potential junior 4-H members enrolled per Extension staff member was accounted for by the four leadership variables.

Relation Between 4-H Organization and Junior 4-H Enrollment

Total number of junior 4-H members enrolled. Each of the four organization variables, total number of junior 4-H Clubs, total number of senior clubs, total number of 4-H Clubs and average number of senior 4-H members per senior club was significantly (either .01 or .05 level) related to the total number of junior 4-H members. Thus, an increase in either of the four organization variables was accompanied by an increase in the total number of 4-H members per county. These four organization variables accounted for 73 percent of the variation in total number of junior 4-H members enrolled. Sixty-nine percent of this variation was accounted for by the variable, total number of 4-H Clubs per county.

Number of junior 4-H members enrolled per full-time staff equivalent. Each of these four organization variables also showed a significant (.01 or .05 level) positive relation with the number of junior 4-H members enrolled per full-time staff equivalent. Thus, an increase in each of these four organization variables tended to accompany an increase in the total number of junior 4-H members enrolled per full-time staff equivalent. These four organization variables accounted for 24 percent of the variation in total 4-H enrollment. Nineteen percent of this variation was accounted for by the total number of junior 4-H Clubs.

Number of junior 4-H members enrolled per Extension staff member. None of these four organization variables was significantly related to the total number of junior 4-H members enrolled per Extension staff member. These organization variables accounted for only 3 percent of the variation in the number of junior 4-H members enrolled per Extension staff member.

Percent of potential junior 4-H members enrolled. Only one of these four organization variables, average number of senior 4-H members per senior club, was significantly (.05 level) related to the percent of potential junior 4-H members enrolled. Seven percent of the variation was accounted for by these organization variables. Out of this, 6.7 percent of the variation in the percent of potential junior 4-H members enrolled was accounted for by the variable, average number of senior 4-H members per senior club.

Percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work. Three of the four organization variables showed a significant (.01 or 105 level) negative relation with the percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work. Thus, as the number of 4-H Clubs increased there was a decrease in the percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work. Two of the organization variables, total number of 4-H Clubs and total number of senior 4-H Clubs, accounted for 13 percent of variation in the percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work.

Percent of potential junior 4-H members per Extension staff member. None of the four organization variables was significantly related to the percent of potential junior 4-H members enrolled per Extension staff member. The organization variables accounted for only 3 percent of the variation in percent of potential junior 4-H members per Extension staff member.

Relation Between 4-H Participation Variables and Junior 4-H Enrollment

Total number of junior 4-H members enrolled. Each of the participation variables was significantly (.01 level) related to the total number of junior 4-H members enrolled. This indicated that counties with a large junior 4-H enrollment also had more members participating in 4-H events and activities. The three 4-H participation variables

accounted for 44 percent of the variation in total junior 4-H members enrolled. Of this 44 percent, 32 percent was accounted for by the variable, total number of members participating in 4-H camp.

Number of junior 4-H members enrolled per full-time staff equivalent. Two participation variables, total number of 4-H members participating in 4-H judging and total number of 4-H members participating in 4-H camp, showed a significant (.01 or .05 level) relation with the number of junior 4-H members enrolled per full-time staff equivalent. However, these three participation variables accounted for 13 percent of the variation in the number of junior 4-H members enrolled per full-time staff equivalent. Of this 13 percent, 9.5 percent was accounted for by the total number of 4-H members participating in 4-H judging.

Number of junior 4-H members enrolled per Extension staff member. None of these participation variables was significantly related to the number of junior 4-H members enrolled per Extension staff member.

Percent of potential junior 4-H members enrolled. None of the three participation variables was significantly related to the percent of potential junior 4-H members enrolled.

Percent of potential junior 4-H members enrolled in 4-H per full-time staff equivalent responsible for 4-H work. Two of these participation variables, total number of senior district winners and total number of 4-H members participating in 4-H camp, had a significant (.01 level) and inverse relation with the percent of potential junior 4-H

members enrolled per full-time staff equivalent responsible for 4-H work. Thus, an increase in each of these two variables tended to accompany a decrease in the percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work. The three 4-H participation variables accounted for 19 percent of the variation in the percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work. Of this 19 percent, 12.4 percent was accounted for by total number of 4-H members participating in 4-H camp.

Percent of potential junior 4-H enrolled per Extension staff member. None of the participation variables was significantly related to the percent of potential junior 4-H members enrolled per Extension staff member.

Relation Between Potential Junior 4-H Members and Junior 4-H Enrollment

Total number of junior 4-H members. The total number of junior 4-H members showed a significant (.01 level) positive relation with the total number of potential junior 4-H members. Thus, as the total potential number of junior 4-H members increased, the total number of junior members enrolled also increased. This independent variable accounted for 25 percent of the variation in the total number of junior 4-H members enrolled.

Number of junior 4-H members enrolled per full-time staff equivalent. The number of junior 4-H members enrolled per full-time staff

equivalent was not significantly related to the total number of potential junior 4-H members.

Number of junior 4-H members enrolled per Extension staff member. The number of junior 4-H members enrolled per Extension staff member was not significantly related to the total number of potential junior 4-H members.

Percent of potential 4-H members enrolled. The percent of potential 4-H members enrolled showed a significant (.01 level) negative association with the potential number of junior 4-H members. Thus, counties with a high potential junior 4-H enrollment tended to enroll a small percent of the potential members. This potential junior 4-H enrollment variable accounted for 21 percent of variation in the percent of potential 4-H members enrolled per county.

Percent of potential 4-H members enrolled per full-time staff equivalent responsible for 4-H work. The percent of potential junior 4-H members enrolled per full-time staff equivalent had a significantly (.01 level) negative association with the total number of potential junior 4-H members. Thus, counties with a large number of potential junior 4-H members enrolled a smaller percent of the potential 4-H members per full-time staff equivalent responsible for 4-H work. However, this enrollment-related variable accounted for only 9 percent of variation in the percent of potential 4-H members enrolled per full-time staff equivalent responsible for 4-H work.

Percent of potential 4-H members enrolled per Extension staff member. The percent of potential 4-H members enrolled per staff member also showed a significantly (.05 level) negative relation with the total number of potential junior 4-H members. Counties with a large potential junior 4-H enrollment tended to enroll a smaller percent of the potential 4-H members per Extension staff member. However, this enrollment-related variable accounted for only 5 percent of the variation in the percent of potential 4-H members enrolled per Extension staff member.

Relation Between Place of Members Residence and Junior 4-H Enrollment

Total number of junior 4-H members enrolled. The number of 4-H members residing on farms, residing on rural nonfarms, and residing in urban areas had a significant (.01 level) positive association with the total number of junior 4-H members enrolled. Of the 96 percent of variation accounted for, 59 percent was accounted for by the number of junior 4-H members residing on rural nonfarm variable.

Number of junior 4-H members enrolled per full-time staff equivalent. Each of the three place of member residence variables also showed a significant (.01 level) positive association with the number of junior 4-H members enrolled per full-time staff equivalent. Thus, as the 4-H members residing on farms, residing on rural nonfarm, and residing in urban areas increased, the number of junior 4-H members enrolled per full-time staff equivalent also increased. These three variables accounted for 32 percent of variation in the number of junior 4-H

members enrolled per full-time staff equivalent. Out of this 32 percent, 23.6 percent was accounted for by the total number of 4-H members residing on rural nonfarm.

Number of junior 4-H members enrolled per Extension staff member. Only one of the three place of members residence variables was significantly (.05 level) related to the number of junior 4-H members enrolled per Extension staff member. These three variables accounted for only 6 percent of variation in number of junior 4-H members enrolled per Extension staff member.

Percent of potential 4-H members enrolled in junior 4-H. None of the place of member residence variables was significantly related to the percent of potential junior 4-H members enrolled per county.

Percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work. Each of the three place of member residence variables was significantly (.01 level) and inversely related to the percent of potential junior 4-H member enrolled per full-time staff equivalent responsible for 4-H work. Thus, an increase in either the number of members living on farm, on rural nonfarm, or in urban areas was accompanied by a decrease in the percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work. These three variables accounted for 20 percent of variation in the percent of potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work. Out of this, 13 percent

of the variation was accounted for by the variable, total number of 4-H members residing on rural nonfarms.

Percent of potential junior 4-H members enrolled per Extension staff member. One of the three place of member residence variables was significantly (.05 level) and inversely related to the percent of potential junior 4-H members enrolled per Extension staff member. An increase in the number of 4-H members residing on rural nonfarm accompanied a decrease in the percent of potential junior 4-H members enrolled per Extension staff member. Only 7 percent of variation in the percent of potential junior 4-H members enrolled per Extension staff member was accounted for by the place of members residence variables.

Relation Between the Number of Extension Staff Members and Junior 4-H Enrollment

Total number of junior 4-H members enrolled. The two Extension staff variables were total number of full-time staff equivalent responsible for 4-H work and total number of Extension staff members per county. Each of these variables showed a significant (.01 level) positive association with the number of junior 4-H members enrolled. Thus, counties with a large full-time Extension staff equivalent or a large number of staff members tended to have larger total junior 4-H enrollment. The two variables accounted for 56 percent of variation in the total junior 4-H members enrolled. Of this percent of variation,

54 percent was accounted for by the total number of full-time staff equivalent responsible for 4-H work.

There was not a significant relation between the number of junior 4-H members enrolled per full-time staff equivalent or the number of junior members enrolled per Extension staff member and the number of Extension staff member variables.

Percent of potential junior 4-H members enrolled in 4-H. Each of the two Extension staff variables showed a significant (.01 or .05 level) negative association with percent of potential junior 4-H members enrolled in 4-H. Thus, counties having a large staff tended to enroll a small percent of the potential junior 4-H members. However, these two variables accounted for only 8 percent of variation in the percent of potential junior 4-H members enrolled in 4-H.

Percent of potential junior 4-H members per full-time staff equivalent. Each of the two Extension staff variables was significantly (.01 level) and inversely related to the percent of potential junior 4-H members per full-time staff equivalent. Thus, counties with larger Extension staff tended to enroll a smaller percent of the potential junior 4-H members per full-time staff equivalent. The variable, total number of full-time staff responsible for 4-H work accounted for 51 percent of the variation in the percent potential junior 4-H members per full-time staff equivalent.

Percent of potential junior 4-H members enrolled per Extension staff member. Each of the two Extension staff variables was also signigicantly (.01 level) and inversely related to the percent of potential junior 4-H members enrolled per Extension staff member. The Extension staff variable, total number of full-time staff responsible for 4-H work, accounted for 16 percent variation in percent of potential junior 4-H members enrolled per Extension staff member. Counties enrolling a large percent of potential junior 4-H members per Extension staff member tended to have smaller county staffs.

V. CONCLUSIONS

The following conclusions were made concerning junior 4-H enrollment in the 95 counties of Tennessee.

1. The number of junior 4-H members increased when either the number of junior 4-H leaders, adult 4-H leaders, 4-H all stars, honor club members, or basic four organizations increased. Furthermore, the total number of junior 4-H Club leaders accounted for the highest percent of the variation in junior 4-H enrollment.

2. The number of junior 4-H members increased when either the total number of junior 4-H Clubs, total number of 4-H Clubs, or total number of senior 4-H Clubs increased. Furthermore, the total number of 4-H Clubs accounted for the highest percent of variation in the total junior 4-H enrollment.

3. The number of junior 4-H members increased when either the total number of 4-H members participating in 4-H camp. total number of senior district project winners, or total number of 4-H members participating in 4-H judging events and activities increased. Furthermore, the total number of 4-H members participating in 4-H camp accounted for the highest percent of the variation in total junior 4-H enrollment.

4. The number of junior 4-H members increased when either the total number of full-time Extension staff equivalent primarily responsible for 4-H work or total number of Extension staff members per county increased. Furthermore, the total number of full-time Extension staff equivalent responsible for 4-H work accounted for the highest percent of the variation in total junior 4-H enrollment.

5. The number of junior 4-H members enrolled per full-time staff equivalent increased when either the number of adult 4-H leaders, number of junior 4-H leaders, or the number of honor club members increased. The total number of junior and adult 4-H leaders accounted for the highest percent of variation in the number of junior 4-H members enrolled per full-time staff equivalent.

6. The number of junior 4-H members enrolled per full-time staff equivalent increased when either the number of junior 4-H Clubs, number of senior 4-H Clubs or the number of 4-H Clubs increased. The number of junior 4-H Clubs accounted for the highest percent of variation in the number of junior 4-H members enrolled per full-time staff equivalent.

7. The number of junior 4-H members enrolled per full-time staff equivalent increased when either the number of 4-H members participating

in 4-H judging or the number of 4-H members participating in 4-H camp increased. The number of 4-H members participating in judging accounted for the highest percent of variation in the number of junior 4-H members enrolled per full-time staff equivalent.

8. The percent of potential junior 4-H members decreased when either the number of junior 4-H leaders, basic four organizations, number of 4-H all stars, or number of honor club members increased. The number of basic four organizations accounted for the highest percent of variation in the percent of potential junior 4-H members enrolled in Tennessee.

9. The percent of potential junior 4-H members decreased when either the number of full-time staff equivalent responsible for 4-H work or the number of Extension staff members per county increased. The number of total Extension staff members per county accounted for the highest percent of variation in the percent of potential junior 4-H members enrolled in Tennessee.

10. The percent of potential junior 4-H members enrolled per full-time staff equivalent increased when either the number of adult leaders, junior leaders, basic four organizations, 4-H all stars, or number of honor club members decreased. The number of basic four organizations accounted for the highest percent of variation in the percent of potential junior 4-H members enrolled per full-time staff equivalent in Tennessee.

11. The percent of potential junior 4-H members enrolled per full-time staff equivalent increased when either the number of senior

4-H Clubs, junior 4-H Clubs, or total 4-H Clubs decreased. The total number of 4-H Clubs accounted for the highest percent of variation in the percent of potential junior 4-H members enrolled per full-time staff equivalent in Tennessee.

12. The percent of potential junior 4-H members enrolled per full-time staff equivalent increased when either the number of full-time staff equivalent responsible for 4-H work or the number of Extension staff members per county decreased.

VI. RECOMMENDATIONS FOR FURTHER STUDY

1. Studies are needed to identify factors which influence the number of adult and junior 4-H leaders serving in the various Tennessee counties. Counties having a large number, and counties with a small number, of leaders could be compared using as variables the characteristics of the counties, the characteristics of the Extension program, and the characteristics and attitudes of Extension agents and volunteer leaders.

2. Studies are needed to compare the "effectiveness" of 4-H programs in counties which enroll a high, and counties which enroll a low, percent of the potential 4-H members per full-time Extension staff equivalent. Effectiveness of Extension 4-H programs could be based upon percents of 4-H project completion, percents of members re-enrolling in 4-H, percents of members participating in 4-H events, activities, and so forth; or district supervisors could, if adequate criteria were established, complete rating scales which would give an evaluation of the effectiveness of county 4-H programs in their Extension district.

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APPENDIX

TABLE XXXVII

CORRELATION MATRIX[a]

	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16	X17	X18	X19	X20	X21	Y22	Y23	Y24	Y25	Y26	Y27
	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r
X 1	1.0	.57	.96	.19	.35	.38	.44	.55	.58	.28	.31	.24	.20	.06	.56	.61	.73	.19	.36	.36	.33	.55	.34	.13	.11	-.25	-.08
X 2		1.0	.73	.27	.48	.58	.67	.61	.68	.00	.47	.29	.33	.25	.66	.70	.68	.35	.56	.54	.54	.65	.30	.13	-.07	-.35	-.14
X 3			1.0	.22	.40	.47	.53	.62	.66	.24	.37	.29	.25	.11	.64	.70	.77	.28	.44	.44	.41	.63	.37	.15	.08	-.31	-.10
X 4				1.0	.33	.51	.23	.26	.28	-.03	.46	.13	.34	.20	.34	.33	.17	.34	.21	.43	.33	.36	-.03	-.01	-.22	-.43	-.19
X 5					1.0	.77	.40	.32	.37	.01	.56	.18	.41	.10	.42	.43	.32	.29	.38	.41	.27	.41	-.08	.12	-.05	-.30	-.10
X 6						1.0	.54	.44	.50	-.10	.63	.22	.60	.14	.56	.57	.39	.44	.47	.45	.33	.55	.21	.19	-.09	-.35	-.19
X 7							1.0	.46	.62	-.32	.30	.23	.36	.35	.50	.57	.52	.25	.42	.40	.49	.48	.22	-.02	-.07	-.25	-.10
X 8								1.0	.98	.16	.44	.31	.43	.32	.84	.84	.65	.53	.65	.67	.61	.82	.44	.13	.06	-.35	-.20
X 9									1.0	.07	.45	.32	.45	.36	.84	.86	.69	.52	.67	.68	.64	.83	.43	.11	.04	-.37	-.19
X10										1.10	-.02	.42	.03	.03	.24	.25	.29	.18	.09	.13	.03	.25	.26	.10	.26	.00	.10
X11											1.0	.11	.29	.11	.45	.44	.30	.38	.36	.40	.31	.45	.13	.11	-.12	-.33	-.17
X12												1.0	.30	.16	.35	.37	.21	.24	.38	.18	.15	.35	.31	.15	.10	.00	.14
X13													1.0	.26	.58	.57	.31	.46	.48	.46	.42	.57	.26	.13	-.08	-.35	-.20
X14														1.0	.51	.49	.10	.52	.50	.53	.66	.50	.12	.00	-.46	-.31	-.23
X15															1.0	.99	.70	.75	.75	.75	.71	.99	.58	.26	-.06	-.45	-.25
X16																1.0	.75	.72	.73	.74	.71	.98	.57	.24	-.04	-.44	-.22
X17																	1.0	.27	.22	.53	.51	.68	.41	.15	.18	-.28	-.11
X18																		1.0	.41	.57	.54	.77	.49	.21	-.16	-.36	-.26
X19																			1.0	.59	.54	.74	.32	.18	-.13	-.35	-.11
X20																				1.0	.85	.74	-.03	-.09	-.22	-.71	-.40
X21																					1.0	.70	.10	-.16	-.28	-.61	-.34
Y22																						1.0	.59	.28	-.06	-.44	-.25
Y23																							1.0	.44	.16	.22	.10
Y24																								1.0	-.01	.08	-.02
Y25																									1.0	.52	.39
Y26																										1.0	.51
Y27																											1.0

[a] r = .27 significant at .01 level.

X 1 Total number of adult leaders.
X 2 Total number of junior 4-H Club leaders.
X 3 Total number of junior and adult 4-H Club leaders.
X 4 Total number of basic four organizations.
X 5 Total number of 4-H all stars.
X 6 Total number of honor Club members.
X 7 Total number of senior 4-H Clubs.
X 8 Total number of junior 4-H Clubs.
X 9 Total number of 4-H Clubs.
X10 Average number of senior 4-H members per senior club.
X11 Total number of senior district winners.
X12 Total number of 4-H members participating in 4-H judging.
X13 Total number of 4-H members participating in 4-H camp.
X14 Total number of potential senior 4-H members.
X15 Total number of potential junior 4-H members.
X16 Total number of 4-H members enrolled.

[b] r = .21 significant at .01 level.

X17 Total number of 4-H members residing on farm.
X18 Total number of 4-H members residing on rural nonfarm.
X19 Total number of 4-H members residing in urban areas.
X20 Total number of full-time staff equivalent responsible for 4-H work.
X21 Total number of Extension staff members per county.
Y22 Total number of junior 4-H members.
Y23 Total number of junior 4-H members enrolled per full-time staff equivalent.
Y24 Total number of junior 4-H members enrolled per Extension staff member.
Y25 Percent of total potential junior 4-H members enrolled.
Y26 Percent of total potential junior 4-H members enrolled per full-time staff equivalent responsible for 4-H work.
Y27 Percent of potential junior 4-H members enrolled per Extension staff member per county.

TABLE XXXVIII

TOTAL JUNIOR 4-H ENROLLMENT DATA FOR 95 COUNTIES OF TENNESSEE 1965-1967

County	X1 Total Number of Adult 4-H Leaders	X2 Total Number of Junior 4-H Leaders	X3 Total Number of Junior and Adult 4-H Leaders	X4 Total Number of Basic Four Organizations	X5 Total Number of 4-H All Stars	X6 Total Number of Honor Club Members	X7 Total Number of Senior 4-H Clubs	X8 Total Number of Junior 4-H Clubs	X9 Total Number of 4-H Clubs	X10 Average Number of Senior 4-H Members Per Senior Club	X11 Total Number of Senior District 4-H Project Winners	X12 Total Number of 4-H Members Participating in Judging	X13 Total Number of 4-H Members Participating in 4-H Camp	X14 Total Number of Potential Senior 4-H Members	X15 Total Number of Potential Junior 4-H Members	X16 Total Number of 4-H Members Enrolled	X17 Total Number of 4-H Members Residing on Farm	X18 Total Number of 4-H Members Residing on Rural Nonfarm	X19 Total Number of 4-H Members Residing in Urban Areas	X20 Total Number of F.S.E. Responsible for 4-H Work	X21 Total Number of Extension Staff Members Per County	Y22 Total Number of Junior 4-H Members	Y23 Total Number of Junior 4-H Members Enrolled Per Full-Time Staff Equivalent	Y24 Total Number of Junior 4-H Members Enrolled Per Extension Staff Member	Y25 Percent of Total Potential Junior 4-H Members Enrolled	Y26 Percent of Total Potential Junior Members Enrolled Per Full-Time Staff Equivalent Responsible for 4-H Work	Y27 Percent of Potential Junior 4-H Members Enrolled Per Extension Staff Member Per County
Anderson	126	39	165	4	18	34	5	32	37	58	2	160	434	7008	7310	1874	480	1296	131	2.0	4	1614	807	404	22	11	6
Bedford	60	52	112	2	59	31	4	20	24	72	2	122	181	2247	2290	1217	560	314	310	2.5	4	925	370	231	40	16	14
Benton	28	7	35	1	14	25	7	12	19	22	0	82	157	1055	904	580	229	235	117	1.1	3	427	388	142	47	43	10
Bledsoe	38	5	43	2	17	11	7	17	24	15	1	33	59	914	854	561	322	240	0	1.1	4	455	239	114	53	28	11
Blount	99	41	140	4	11	18	3	34	37	116	5	134	90	6362	5753	2312	635	1422	255	2.0	4	2465	1233	616	43	21	11
Bradley	92	30	122	3	53	73	2	18	20	102	13	129	453	4073	4221	2091	635	1149	304	2.0	4	1855	929	464	44	22	11
Campbell	124	18	142	2	21	29	5	25	30	81	3	102	86	3278	2846	1706	726	971	30	2.0	4	1320	660	330	46	23	12
Cannon	110	22	132	3	25	23	7	16	23	17	8	56	122	812	756	622	414	204	4	1.4	3	503	359	168	67	47	22
Carroll	65	21	86	1	5	12	2	27	29	51	1	51	332	2238	2011	1078	460	351	264	1.6	4	980	613	245	49	30	12
Carter	90	27	117	3	17	25	4	24	28	41	4	49	55	4563	4161	1537	622	907	8	2.0	4	1370	685	343	33	17	8
Cheatham	27	5	32	0	6	0	2	28	30	50	0	41	107	993	964	955	390	532	0	0.6	2	854	1423	427	89	47	44
Chester	70	8	78	1	2	0	0	27	27	32	0	25	89	1035	897	603	187	294	121	1.1	3	537	488	179	60	58	19
Claiborne	85	15	100	1	24	1	4	33	37	59	0	83	86	2111	1904	1325	890	434	0	1.5	3	1089	726	363	57	38	19
Clay	14	11	25	1	13	1	2	18	20	46	2	45	65	852	700	563	361	194	8	1.0	3	471	471	157	67	67	23
Cocke	92	17	89	1	26	0	3	18	21	39	1	90	24	2600	1612	859	421	320	118	1.4	3	741	529	247	46	32	15
Coffee	68	19	87	3	26	24	1	14	15	101	5	36	55	3051	3311	317	166	90	62	1.8	4	215	119	54	7	3	16
Crockett	205	29	234	3	14	6	4	29	33	86	4	101	87	1584	1504	1262	799	463	0	1.6	4	915	572	229	61	50	15
Cumberland	39	16	55	2	9	17	1	25	26	100	7	78	161	2319	2154	1067	531	280	200	2.0	4	910	455	228	42	21	11
Davidson	84	42	126	1	9	12	2	48	50	105	0	332	471	37458	44871	2612	252	1026	1334	3.1	7	2401	774	343	5	2	7
Decatur	71	29	100	2	12	0	3	25	28	102	3	90	113	841	719	1012	495	517	0	2.0	5	672	336	135	94	47	31
DeKalb	77	27	104	1	8	0	1	23	24	230	0	1622	112	1011	1028	1103	499	474	129	0.8	2	868	1085	434	84	95	42
Dickson	68	35	103	2	13	13	3	37	40	61	2	93	415	1891	1880	1407	500	594	313	1.8	4	1223	679	305	65	37	16
Dyer	163	38	201	3	16	13	4	55	59	73	7	134	116	3077	2917	1317	579	481	257	2.3	4	1025	446	256	35	16	9

TABLE XXXVIII (continued)

County	Total Number of Adult 4-H Leaders X1	Total Number of Junior 4-H Leaders X2	Total Number of Junior and Adult Leaders X3	Total Number of Basic Four Organizations X4	Total Number of 4-H All Stars X5	Total Number of Honor Club Members X6	Total Number of Senior 4-H Clubs X7	Total Number of Junior 4-H Clubs X8	Total Number of 4-H Clubs X9	Average Number of Senior 4-H Members Per Senior Club X10	Total Number of Senior District 4-H Project Winners X11	Total Number of 4-H Members Participating in Judging X12	Total Number of 4-H Members Participating in 4-H Camp X13	Total Number of Potential Senior 4-H Members X14	Total Number of Potential Junior 4-H Members X15	Total Number of 4-H Members Enrolled X16	Total Number of 4-H Members Residing on Farm X17	Total Number of 4-H Members Residing on Rural Nonfarm X18	Total Number of 4-H Members Residing in Urban Areas X19	Total Number of F.S.E. Responsible for 4-H Work X20	Total Number of Extension Staff Members Per County X21	Total Number of Junior 4-H Members Y22	Total Number of Junior 4-H Members Enrolled Per Full-Time Staff Equivalent Y23	Total Number of Junior 4-H Members Enrolled Per Extension Staff Member Y24	Percent of Total Potential Junior 4-H Members Enrolled Y25	Percent of Total Potential Junior Members Enrolled Per Full-Time Staff Equivalent Responsible for 4-H Work Y26	Percent of Potential Junior 4-H Members Enrolled Per Extension Staff Member Per County Y27
Fayette	133	51	184	1	4	4	6	31	37	100	0	38	161	3309	3618	2059	1605	454	0	2.8	6	1457	520	243	40	14	6
Fentress	27	13	40	1	9	20	3	38	41	78	7	173	206	1778	1454	1207	578	620	0	1.6	3	972	608	324	67	42	22
Franklin	98	13	111	3	18	39	2	37	39	45	7	71	200	2791	1768	1316	494	730	92	2.0	5	1226	613	245	69	35	13
Gibson	174	58	232	3	14	21	7	39	46	73	4	222	264	4479	4203	2277	990	541	746	2.0	5	1767	883	353	42	21	84
Giles	58	33	91	1	26	19	9	17	26	36	2	149	306	2193	2091	1140	723	239	171	1.6	7	813	508	116	39	24	55
Grainger	26	10	36	1	10	0	2	26	28	108	0	33	56	1361	1269	1019	916	103	0	1.5	3	804	536	268	63	42	21
Greene	140	51	191	2	29	34	10	39	49	37	2	126	423	4328	4113	1923	1173	578	172	2.2	5	1549	704	309	38	11	8
Grundy	31	13	44	1	6	0	1	15	16	106	2	80	209	1293	1328	687	226	461	0	1.7	4	580	341	145	44	25	11
Hamblen	95	21	116	2	16	15	2	25	27	70	3	176	105	3236	3677	851	304	363	184	1.6	3	675	442	225	18	11	61
Hamilton	159	44	203	3	17	14	10	48	58	33	1	151	311	24027	16875	2290	389	374	535	2.1	6	1960	933	327	12	5	2
Hancock	37	13	50	0	9	0	7	20	27	26	0	23	18	896	819	578	484	94	0	0.4	1	399	998	399	49	20	49
Hardeman	120	22	142	0	5	0	4	58	62	73	0	34	66	2304	2255	2149	982	778	391	2.7	6	1857	688	310	82	30	13
Hardin	70	12	82	0	8	2	1	29	30	113	2	45	95	1928	1692	972	362	294	216	1.2	3	859	716	286	51	42	16
Hawkins	408	164	482	2	55	103	23	62	85	39	10	334	275	3154	3237	3260	1874	355	1067	2.2	5	2386	1085	477	74	34	15
Haywood	525	39	564	1	6	0	3	49	52	227	0	132	53	3036	1979	2447	2209	177	61	2.1	5	1768	843	354	89	42	18
Henderson	59	26	85	3	7	4	2	40	42	72	1	141	127	1651	1547	1140	552	416	172	1.9	5	996	524	199	64	34	13
Henry	54	15	69	2	7	13	5	29	34	23	3	77	40	2125	1939	845	407	298	140	1.8	4	730	406	183	38	21	9
Hickman	35	15	40	0	8	0	3	25	28	69	1	72	272	1216	1112	831	336	386	108	1.8	4	625	347	156	56	31	14
Houston	18	12	30	0	4	0	2	12	14	62	1	118	140	480	471	428	131	263	0	0.6	2	280	467	140	59	99	29
Humphreys	58	19	77	0	30	0	2	30	32	108	0	112	189	1177	1223	1072	320	315	437	2.0	4	850	425	213	70	35	17
Jackson	37	9	46	2	11	5	1	24	25	61	1	89	32	941	806	626	490	136	0	1.6	2	565	353	283	70	44	35
Jefferson	334	16	350	0	18	0	3	16	19	86	1	101	146	1970	2098	1061	331	486	243	1.5	3	908	605	303	43	28	16
Johnson	44	17	61	3	1	8	4	21	25	27	0	77	53	1251	1003	692	436	256	0	1.5	3	586	391	195	58	39	19
Knox	99	24	123	2	15	18	7	26	33	33	2	86	220	23747	16370	1445	418	934	94	2.2	6	1207	549	201	7	3	12

TABLE XXXVIII (continued)

County	X1 Total Number of Adult 4-H Leaders	X2 Total Number of Junior 4-H Leaders	X3 Total Number of Junior and Adult 4-H Leaders	X4 Total Number of Basic Four Organizations	X5 Total Number of 4-H All Stars	X6 Total Number of Honor Club Members	X7 Total Number of Senior 4-H Clubs	X8 Total Number of Junior 4-H Clubs	X9 Total Number of 4-H Clubs	X10 Average Number of Senior 4-H Members Per Senior Club	X11 Total Number of Senior District 4-H Project Winners	X12 Total Number of 4-H Members Participating in Judging	X13 Total Number of 4-H Members Participating in 4-H Camp	X14 Total Number of Potential Senior 4-H Members	X15 Total Number of Potential Junior 4-H Members	X16 Total Number of 4-H Members Enrolled	X17 Total Number of 4-H Members Residing on Farm	X18 Total Number of 4-H Members Residing on Rural Nonfarm	X19 Total Number of 4-H Members Residing in Urban Areas	X20 Total Number of F.S.E. Responsible for 4-H Work	X21 Total Number of Extension Staff Members Per County	Y22 Total Number of Junior 4-H Members	Y23 Total Number of Junior 4-H Members Enrolled Per Full-Time Staff Equivalent	Y24 Total Number of Junior 4-H Members Enrolled Per Extension Staff Member	Y25 Percent of Total Potential Junior 4-H Members Enrolled	Y26 Percent of Total Potential Junior Members Enrolled Per Full-Time Staff Equivalent Responsible for 4-H Work	Y27 Percent of Potential Junior 4-H Members Enrolled Per Extension Staff Member Per County
Lake	4	1	5	0	0	0	0	3	3	2	0	0	2	1177	1140	56	44	12	0	0.1	1	80	800	800	7	70	7
Lauderdale	78	51	135	0	13	5	3	26	29	89	5	30	167	2354	2486	1470	737	481	252	1.6	3	1202	751	401	48	30	16
Lawrence	89	25	114	2	13	17	5	29	34	43	6	69	478	3023	1927	1466	843	558	65	1.8	5	1270	706	254	66	36	13
Lewis	2	1	3	0	0	0	1	11	12	33	0	29	48	709	634	247	59	43	145	0.8	2	214	267	107	34	42	16
Lincoln	33	12	45	1	11	37	4	17	21	33	1	66	199	2439	2387	914	492	317	105	2.0	5	782	391	156	33	16	6
Loudon	46	23	69	2	13	8	3	15	18	50	1	91	73	2447	2448	812	333	325	153	1.4	3	662	473	221	27	19	9
McMinn	175	61	236	2	45	47	7	25	32	38	7	170	113	3365	3595	1449	833	420	196	2.0	4	1183	591	296	33	17	8
McNairy	89	12	101	1	10	18	12	36	48	46	0	327	472	1915	1703	1245	655	555	35	1.2	3	1037	804	346	61	50	20
Macon	20	12	32	1	6	11	3	10	13	77	1	87	105	1203	1128	956	567	226	163	1.6	3	732	458	251	65	40	21
Madison	147	145	192	1	16	19	6	53	59	35	7	105	5	6125	6499	2381	1289	786	306	2.6	7	1831	704	262	28	11	4
Marion	11	4	15	1	12	10	2	18	20	61	0	19	71	2454	2054	699	147	552	0	1.2	3	577	481	192	28	23	9
Marshall	134	27	161	2	12	29	4	13	17	44	1	98	181	1660	1579	884	474	201	209	1.3	3	708	545	236	45	34	14
Maury	84	38	122	2	23	18	4	52	56	54	2	180	117	4267	4498	1777	754	469	495	3.0	6	1470	490	245	33	11	5
Meigs	14	10	24	3	9	4	1	5	6	57	0	18	25	649	538	289	178	77	34	0.5	2	232	464	116	43	86	22
Monroe	40	8	48	3	7	6	2	34	36	81	4	69	236	2683	2416	1119	540	435	144	1.8	4	955	531	239	40	22	10
Montgomery	116	54	170	3	30	62	3	35	38	104	2	166	790	4921	5941	2014	971	896	148	2.5	5	1703	681	341	29	11	6
Moore	30	11	41	2	5	7	1	8	9	29	1	33	68	327	313	216	146	68	0	0.7	2	187	267	935	60	85	29
Morgan	49	28	77	1	10	15	4	30	34	81	1	139	131	1648	1557	1528	484	1044	0	1.6	3	1204	753	401	77	47	25
Obion	126	28	154	3	8	29	3	26	29	58	4	77	119	2444	2573	1226	570	397	259	2.0	4	1020	510	255	40	20	10
Overton	18	18	36	2	8	8	1	10	11	46	4	57	77	1632	1448	225	160	58	7	1.3	3	172	132	573	12	9	5
Perry	41	15	56	1	4	1	4	16	20	17	0	69	122	508	425	449	128	321	0	1.1	3	383	348	128	90	82	30
Pickett	26	3	29	1	3	0	1	14	15	94	0	31	48	545	435	429	273	157	0	0.8	2	335	419	165	77	93	38
Polk	54	16	70	1	5	21	2	17	19	99	1	61	139	1431	1275	805	325	465	15	2.1	3	607	289	303	48	22	16
Putnam	79	18	97	2	15	15	3	39	42	55	9	87	283	2773	2711	1306	460	352	495	1.8	4	1140	633	285	42	23	11
Rhea	44	16	60	0	5	3	5	27	32	26	2	89	111	1744	1692	889	268	420	201	1.6	4	760	475	190	45	27	11
Roane	48	18	66	2	7	19	3	28	31	81	2	184	117	4518	4452	1421	267	800	355	1.9	4	1180	621	295	27	14	6

TABLE XXXVIII (continued)

County	Total Number of Adult 4-H Leaders X1	Total Number of Junior 4-H Leaders X2	Total Number of Junior and Adult 4-H Leaders X3	Total Number of Basic Four Organizations X4	Total Number of 4-H All Stars X5	Total Number of Honor Club Members X6	Total Number of Senior 4-H Clubs X7	Total Number of Junior 4-H Clubs X8	Total Number of 4-H Clubs X9	Average Number of Senior 4-H Members Per Senior Club X10	Total Number of Senior District 4-H Project Winners X11	Total Number of 4-H Members Participating in Judging X12	Total Number of 4-H Members Participating in 4-H Camp X13	Total Number of Potential Senior 4-H Members X14	Total Number of Potential Junior 4-H Members X15	Total Number of 4-H Members Enrolled X16	Total Number of 4-H Members Residing on Farm X17	Total Number of 4-H Members Residing on Rural Nonfarm X18	Total Number of 4-H Members Residing in Urban Areas X19	Total Number of F.S.E. Responsible for 4-H Work X20	Total Number of Extension Staff Members Per County X21	Total Number of Junior 4-H Members Y22	Total Number of Junior 4-H Members Enrolled Per Full-Time Staff Equivalent Y23	Total Number of Junior 4-H Members Enrolled Per Extension Staff Member Y24	Percent of Total Potential Junior 4-H Members Enrolled Y25	Percent of Total Potential Junior Members Enrolled Per Full-Time Staff Equivalent Responsible for 4-H Work Y26	Percent of Potential Junior 4-H Members Enrolled Per Extension Staff Member Per County Y27
Robertson	136	54	190	2	10	9	6	36	42	53	4	159	388	2798	2865	2070	1066	413	592	3.1	6	1755	566	292	61	20	10
Rutherford	164	76	240	3	39	80	9	66	75	55	12	187	439	4869	6630	2709	982	1030	701	2.1	5	2212	1053	442	33	16	6
Scott	26	4	30	2	2	0	3	10	13	53	0	123	242	2028	1773	603	215	352	37	0.8	2	446	557	223	25	30	12
Sequatchie	8	2	10	0	20	0	1	3	4	41	0	25	32	733	656	261	101	160	0	0.8	3	216	273	726	33	40	11
Sevier	40	19	59	0	12	0	3	20	23	57	0	86	290	2569	2508	1344	845	451	49	1.5	3	1176	748	586	47	31	15
Shelby	36	62	98	3	21	30	14	44	58	47	5	167	299	65331	69948	3224	875	1528	821	4.0	11	2571	643	234	4	9	3
Smith	82	10	92	2	19	9	1	16	17	77	4	98	92	1099	1074	816	459	358	0	1.3	3	713	584	238	66	51	22
Stewart	48	6	54	0	0	0	0	19	19	29	0	50	42	776	738	549	244	306	0	0.8	2	520	891	260	71	98	35
Sullivan	122	30	152	1	56	50	5	35	40	46	9	57	97	12126	12348	1311	399	870	43	2.2	5	1082	491	216	9	40	17
Sumner	188	39	227	3	66	94	4	65	69	94	8	256	653	3375	3707	3064	1115	1012	971	2.6	4	2725	1048	681	74	28	18
Tipton	150	42	192	1	3	9	5	35	40	75	1	65	197	3514	3774	2199	1174	724	37	1.0	6	1616	1616	269	43	43	7
Trousdale	44	36	80	2	23	9	4	14	18	31	2	97	65	488	458	776	230	99	161	1.0	2	367	367	184	80	80	40
Unicoi	43	7	50	1	5	2	1	15	16	136	0	45	66	1640	1622	1135	250	648	237	0.7	2	999	1427	500	62	88	31
Union	24	21	45	0	1	0	5	18	23	46	0	26	13	895	939	690	460	230	0	0.9	2	459	510	230	49	54	24
Van Buren	22	2	24	0	10	0	1	8	9	52	1	45	35	472	401	279	130	150	0	0.5	2	229	458	115	57	14	28
Warren	65	18	83	2	12	15	6	14	20	36	2	211	298	2400	2337	949	453	333	164	2.0	5	707	354	121	30	15	6
Washington	36	6	42	2	5	5	4	31	35	33	3	139	218	6308	6421	1148	510	338	289	2.0	4	1020	510	255	16	80	4
Wayne	49	21	70	2	5	14	5	23	28	38	2	54	195	1375	1266	872	412	460	0	1.5	3	684	463	228	54	36	18
Weakley	30	18	48	1	13	7	1	27	28	155	3	112	88	2100	1921	1692	478	659	465	1.9	4	1420	747	355	74	38	18
White	71	12	83	2	38	0	1	23	24	157	2	136	179	1682	1492	1043	623	317	106	1.8	4	885	480	221	59	33	15
Williamson	123	25	148	1	14	19	6	43	49	52	4	183	218	2783	1825	1969	647	713	609	2.0	5	1656	828	331	90	45	18
Wilson	110	72	182	3	56	118	10	32	42	41	2	113	529	2716	1722	1803	805	617	382	2.5	5	1393	557	279	81	32	16

VITA

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