FACTORS INFLUENCING MEMBERS' SELECTION OF 4-H CLUB PROJECTS, WITH SPECIAL EMPHASIS ON POULTRY PROJECTS

Thesis for the Degree of Ph. D.

MICHIGAN STATE UNIVERSITY

KEMP LEE SWINEY

1967

This is to certify that the

thesis entitled

Factors Influencing Members' Selection of 4-H Club Projects, With Special Emphasis On Poultry Projects

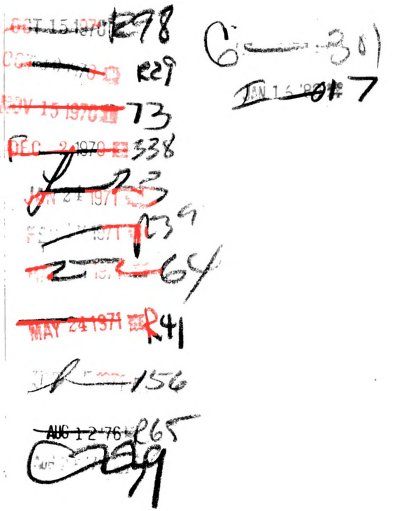
presented by

Kemp Lee Swiney

has been accepted towards fulfillment of the requirements for

Ph.D. degree in Poultry Science

Date



ABSTRACT

FACTORS INFLUENCING MEMBERS' SELECTION OF 4-H CLUB PROJECTS WITH SPECIAL EMPHASIS ON POULTRY PROJECTS

By Kemp Lee Swiney

The decline in enrollment of 4-H poultry projects has created concern among administrators and leaders charged with supervising poultry work with youth. Poultry is an excellent vehicle with which to expose youth to learning experiences but if the program is not appealing to club members or if they do not avail themselves of the opportunities, then the program cannot be successful.

A study was undertaken among 4-H Club members and parents to investigate the source of awareness of projects, to determine the influences and reasons for enrolling in projects, and to assess their knowledge of the present commercial poultry industry. The area selected for this study consisted of three counties in Michigan; Calhoun, Jackson and Kalamazoo. The sample included 363 members from fifteen local clubs and 180 of their parents.

To obtain the data, two survey instruments were constructed and pretested. One was designed for the members, the other for the parents. At the scheduled club meetings, the member instruments were completed in a group situation. Those present took an instrument to their parents. One week after the scheduled meeting, 43 percent of the parents had not responded. Follow-up telephone calls were made and a 75.4 percent final return of all parents was received.

The data were analyzed from contingency tables generated by a computer. Critical values of chi-square were used to determine significance.

The member sample consisted of 38.6 percent boys and 61.4 percent girls. Their average age was 12.5 years and tenure was 2.96 years of club work. Rural farm was indicated by 52.6 percent as their place of residence. There were 39.1 percent who classed themselves as rural non-farm. Only 7.4 percent classed themselves as urban or suburban.

Results of the parent sample indicated there were 27.8 percent part time farmers and 16.6 percent full time farmers.

Club members (33.61 percent) and parents (32.22 percent) listed the local leader as the primary source of project awareness. Siblings (18.45 percent), fellow club members (17.08 percent) and parents (12.67 percent) were other sources mentioned by members. Parents indicated that fellow club members (27.22 percent), parents (13.89 percent) and siblings (10.56 percent) were sources. The local leader was also the primary source of awareness for newly offered projects for members (38.57 percent) and for parents (50.56 percent).

Club members perceived their own knowledge and interest to be the important influence to enroll in a project. Parents agreed with their children in this respect. The reasons most often given by club members for enrolling in a project were that they thought it would be educational and interesting.

Mass media appeared to be a minor source of awareness or influence in project work.

Results from both the member and parent samples indicated a general lack of knowledge of the present commercial poultry industry. When asked what a poultry graduate could do for an occupation, 60.88 percent of the members and 68.34 percent of the parents either left the answer blank or said "raise chickens".

Indications then, point to the fact that for a 4-H youth program to be successful in Michigan, it must be designed to be educational and interesting. The suggested procedure for gaining widest acceptance of a program would be to inform and convince the local leaders that the program is available and has opportunities for youth.

FACTORS INFLUENCING MEMBERS' SELECTION OF 4-H CLUB PROJECTS, WITH SPECIAL EMPHASIS ON POULTRY PROJECTS

By

Kemp Lee Swiney

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Poultry Science

1967

ACKNOWLEDGEMENTS

The author wishes to express sincere thanks and appreciation to Dr. John H. Wolford, Assistant Professor of Poultry Science, for his guidance and interest in this study and for the direction given throughout the preparation of this manuscript. He is also indebted to Dr. C. C. Sheppard, Associate Professor of Poultry Science, for his guidance in planning a course of study.

To Dr. Mason E. Miller, Director of the Institute for Extension Personnel Development, and Dr. T. Wayne Taylor, Professor, Science and Mathematics Teaching Center, go special thanks for their helpful suggestions in this study.

Thanks also go to Michigan State University, the Department of Poultry Science and to the people of Michigan for providing funds and facilities with which to conduct this research.

The cooperation of the 4-H state and county staff members, especially Carolyn Kerber of Calhoun County, William H. Minner of Jackson County, and William G. Plummer of Kalamazoo County was valuable in this study. Sincere appreciation is expressed to the club members, parents and local leaders in the fifteen clubs surveyed, for without their cooperation this study would not have been possible.

The author wishes to express his thanks to Mrs. Erwin P. Bettinghaus and David Wright of the Research Institute, College of Education, Michigan State University, for their assistance in constructing the questionnaires and planning computer programming.

Finally, the author is sincerely appreciative of the patience and encouragement shown by his wife, Shirley, and his son, Kemp, Jr., during this period of study. He is indebted to his wife for her many hours of secretarial work in connection with the preparation of this manuscript.

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INTRODUCTION

The 4-H Club program is the "world's most unique youth program" stated C.M. Ferguson (1961) former Director of the Federal Extension Service. It consists of learning experiences cast in every day practical situations by volunteer lay leaders guided by a cooperative effort of the land-grant colleges and the United States Department of Agriculture. The 4-H educational efforts agree in many respects with the principles advocated by John Dewey, a pioneer in progressive education at the University of Chicago.

Project work on which 4-H Club activity is based consists of real life experiences at a level the youth can comprehend. Poultry is one of the fields in which this work can be conducted. In recent years, however, poultry, along with certain other projects, appears to be experiencing difficulty. This trouble is most evident in the declining enrollment and herein is the problem which was investigated.

There are a number of reasons why this decline has occurred. Some are probably beyond control. Other causes of decline, however, can be an indication to interested administrators and leaders which should suggest ways to stem or even reverse the trends.

The concept of an adoption process has created much interest in the Extension Service. Major emphasis has been in adult work and primarily with innovations - newly conceived ideas or practices.

The 4-H Club program and its associated projects are an innovation to most youngsters reaching the age of 10 to 12. There are many influences which cause them to adopt or reject new ideas.

Poultry and its projects are recognized by many educators as being excellent ways to create learning experiences in numerous areas

of study. Birds, for instance, make excellent research subjects for studies in embryology, physiology, nutrition and genetics.

The necessity of knowing the influences and reasons for enrollment in projects by club members led to this present study. Data presented on source of awareness should be useful to leaders in preparing and presenting 4-H programs.

REVIEW OF LITERATURE

The roots of the 4-H Club program have been traced to the Boys and Girls Agricultural Clubs or similar named organizations by Reck (1951). He notes, after studying records in numerous state extension offices, that educators as early as the 1880's and 1890's formed clubs for boys and girls in which the youth conducted projects in agricultural subjects. The ability to apply knowledge acquired in the school system on a practical basis has been given as the reason for these early clubs.

Educational Principles

Aiton (1956), summarizing the philosophy of John Dewey, a University of Chicago pioneer in progressive education, and the rural situation and needs out of which 4-H Club work grew, indicated that much similarity existed. Dewey's educational and philosophical principles, according to Aiton, are summarized as follows:

1. Education is as inclusive as the transmission of culture and school is only one method of education.
2. Education is not alone a preparation for the future but a process of so directing present experiences as to make desirable future experiences readily accessible.
3. The best way to learn is by doing.
4. The end of the educational process is growth.
5. Individualized growth should be stimulated through education insofar as individuals differ from one another.
6. Directed activities, experiments and investigation of principles and results should supplant mechanical drill.
7. The spirit of the classroom should be that of a group of cooperating individuals.

The following principles are listed by Aiton (1956) as having motivated the formation of programs by the pioneers in 4-H Club work:

1. Equal dignity and status for rural youth
2. The club idea
3. Coeducational activity
4. Development of family partnerships
5. Dignity and value of work
6. Ownership
7. Youth teach adults
8. Learning by doing
9. Learning through projects or small work units
10. Volunteer local leaderships
11. A vocation program
12. Competition

Although rural conditions had changed and program emphasis had been altered, Aiton (1956) believed that many of these twelve principles were still applicable.

Tyler (1960), in discussing the educational potential of 4-H Club work, indicated that learning occurs under at least seven conditions. He cited as the first of these, motivation ... the learner must have something to compel him to do it; the second ... he must recognize that his present behavior is inadequate in some respects, otherwise there will be no change in the learner's behavior; the third ... is the need for guidance to a new behavior, for without it the process will be pure trial and error and possibly frustration; the fourth ... to have opportunities to practice this behavior; the fifth ... satisfaction in the desired behavior; the sixth ... acquirement of high but attainable standards of success; and the seventh ... a means of applying these standards of success to guide him.

There are eight general conditions of learning in which 4-H Club situations are particularly helpful in providing conditions for effective learning (Tyler, 1960). The first is that 4-H Club work for those who engage in it is a meaningful activity. Members are familiar with it and understand it. This makes it meaningful. The second condition is that it ties together concrete observations and practices, things one can see and work with directly, with the "why" of them. A third condition, intrinsic satisfaction, is furnished by most of the activities. A fourth condition of learning is the working relationship with adults who can help to provide for "identification" and the development of mature behavior and values. The fifth condition is a freer career exploration than is normally possible in the school and home. A sixth condition is to give greater orientation for young people to the world beyond their immediate community. The seventh is the opportunity the club program provides for emphasizing inquiry. An eighth condition is to give wider range of voluntary choices for the activities of the club members than is possible in the school.

4-H Poultry Objectives

The seven established objectives of the National 4-H Poultry Program are (Federal Extension Service, U.S. Department of Agriculture, 1961):

1. Develop leadership talents and work toward achieving the broad objectives of character and effective citizenship.

2. Develop desirable work habits, sportsmanship, and the ability to cooperate and to express ideas through participation in projects, discussions, method demonstrations, judging teams and exhibits.

3. Appreciate and use scientific information in poultry production and marketing.

4. Acquire information and skill in the efficient production of poultry and poultry products.

5. Improve their knowledge of grading, marketing and merchandising of poultry and poultry products.

6. Increase their knowledge of the nutritive value of poultry meat and eggs and how these contribute toward health.

7. Learn the importance of the poultry industry in the local and national economy.

The objectives for the Michigan 4-H poultry program, as published by the Cooperative Extension Service of Michigan State University (1963) are:

1. Appreciate and use scientific information in poultry production and marketing.

2. Acquire information and skill in the efficient production of poultry and poultry products.

3. Improve knowledge of grading, marketing and merchandising of poultry and poultry products.

4. Increase knowledge of the nutritive value of poultry meat and eggs and how these contribute toward health.

5. Learn the importance of the poultry industry in the local and national economy.

As a means of reaching these objectives, the Michigan 4-H poultry program offers project material in pullet raising, egg production, egg marketing, efficient meat production and science for three age levels.

Swiney (1965) pointed out that there is an intangible value in conducting poultry projects which many extension workers, leaders and parents often do not consider. The value of creating responsibility in a youth through raising of a live animal type project can be immeasurable. Poultry projects can be relatively inexpensive when compared to other projects and hobbies such as a beef calf or photography.

4-H Project Enrollment

Michigan's 4-H poultry enrollment showed a slight increase in 1966 with 648 enrolled, as compared to the previous year when 523 enrolled.

The 1966 enrollment represented 0.85 percent of the total enrollment while the 1965 figures represented 0.60 percent of the total. A review of enrollment statistics for the past twelve years (Table 1) indicated that a decrease in the number and percent of the total had occurred almost every year.

A review of the enrollment statistics of the eight live animal projects offered to Michigan 4-H Club members during the past twelve years indicated that poultry is not the only project of this type experiencing enrollment difficulty (Table 2). Enrollment in rabbit projects maintained a status quo while swine, dairy and poultry projects decreased 27.2 percent, 40.1 percent and 44.8 percent respectively. At the same time, beef projects increased 39.2 percent, sheep projects 42.6 percent, and horse projects, a phenomenal 311.5 percent. Dog care projects, introduced in 1960, had an enrollment of over 900 by 1966.

Some of these increases may have been due to routine enrollment growth; Michigan's total enrollment increased 32.9 percent during this same period, but in the case of dog care and horse projects, the increases appear to be from a cause other than routine growth. Dog care and horse projects are of the hobby type, whereas swine, dairy and poultry projects have been classified as being agriculture production oriented.

Highly specialized large farms devoted to production of these three agricultural enterprises, and the picture they convey to club members, may account for this enrollment decline in swine, dairy and poultry projects, but it does not explain why sheep and beef enrollments have increased.

An analysis was made by counties comparing the 4-H poultry enrollment and the number of farms reporting sale of poultry and poultry

Table 1. Michigan 4-H Club enrollment statistics, 1967.

Year	Total	Poultry	Percent of Total Enrollment
1955	60,469	1,041	1.70
1956	60,501	1,106	1.80
1957	63,513	858	1.35
1958	69,196	922	1.33
1959	70,465	826	1.17
1960	70,745	604	0.86
1961	70,945	705	0.99
1962	72,577	680	0.93
1963	74,484	590	0.79
1964	78,679	600	0.76
1965	86,481	523	0.60
1966	80,400	648	0.85

Source: Michigan State University Cooperative Extension Service 4-H Records, 1967.

Table 2. Michigan 4-H Club enrollment by selected projects and years, 1967.

	Live Animal Projects							
Year	Beef	Dairy	Dog Care	Horses	Poultry	Rabbits	Sheep	Swine
1955	1,706	5,397	--	1,789	1,173	1,145	632	960
1956	1,680	5,161	--	2,146	1,106	928	699	830
1957	1,768	4,793	--	2,684	858	981	733	765
1958	1,357	3,765	--	3,202	818	1,177	984	568
1959	1,707	4,525	--	3,509	826	1,198	825	894
1960	1,747	4,185	81	3,667	604	1,091	767	772
1961	1,955	4,144	176	4,471	705	1,190	806	748
1962	2,159	4,313	396	4,854	680	1,292	802	752
1963	2,073	4,096	477	5,345	590	1,304	779	809
1964	2,358	4,054	604	6,251	600	1,418	827	782
1965	2,492	3,640	843	6,672	523	1,323	828	698
1966	2,374	3,235	914	7,361	648	1,205	901	699

Source: Michigan State University Cooperative Extension Service 4-H Records, 1967.

products (Table 3). A correlation coefficient of +.54 was obtained. There was some association between the number of farms reporting sale of poultry and poultry products and 4-H poultry enrollment. This relationship, however, was not significant.

Statistics from the National 4-H Service Committee (1967) indicated a general trend in reduction of the number of club members enrolled in poultry and in the percent of the total. There were 66,441 club members enrolled in poultry in 1966 (Table 4) while in the previous year there were 75,451. These figures account for 3.44 percent and 3.25 percent respectively, of the total enrollment.

A lack of knowledge about agriculture and rural life may also be a reason for this decline in project enrollment. A group of 23 junior high school students (Anon. 1961) from a private New York school, visiting Indiana farms, were surprised at the farmer's share of the food dollar and expected farm animals to be vicious. One member of the group said, "the great knowledge required for the farmer borders on the awesome".

Strait (1963) reported factors that seemed to influence enrollment in colleges other than agriculture. These factors were:

1. A complete lack of interest in agriculture,
2. Lack of vocational agriculture training in high school,
3. The opinion that farming and agriculture are synonymous,
4. Lack of information about jobs in agriculture,
5. Parental influence into careers outside agriculture,
6. A belief that starting salaries are low in agriculture,
7. A belief that superior students in science and mathematics should enter fields other than agriculture.

Table 3. Poultry project enrollment, 1965, and number of farms reporting poultry and poultry products sold, 1964, by counties, 1967.

County	4-H Poultry Project Enrollment, 1965		No. Farms Reporting Poultry and Poultry Products Sold, 1965	
	Number	Rank	Number	Rank
St. Clair	33	1	330	11
Wayne	26	2	170	34
Kent	25	3	317	14
Clinton	24	4	348	8
Genesee	24	4	223	24
Washtenaw	22	6	439	5
Saginaw	21	7	592	1
Monroe	19	8	393	6
Allegan	17	9	581	2
Ingham	15	10	177	32
Barry	12	11	223	24
Eaton	12	11	266	17
Sanilac	12	11	326	12
Ottawa	11	14	571	3
Calhoun	10	15	298	15
Hillsdale	10	15	319	13
Otsego	10	15	49	61
Shiawassee	10	15	252	20
Tuscola	10	15	375	7
Isabella	9	20	184	31
Dickson	8	21	26	75
Oakland	8	21	151	37
St. Joseph	8	21	262	18
Delta	7	24	94	45
Osceola	7	24	114	41
Berrien	6	26	345	9
Huron	6	26	553	4
Marquette	6	26	33	70
Grand Traverse	5	29	67	56
Branch	4	30	246	21
Jackson	4	30	209	27
Kalamazoo	4	30	176	33
Macomb	4	30	273	16
Chippewa	3	34	93	47
Gratiot	3	34	224	23
Lapeer	3	34	210	26
Ogenaw	3	34	48	63
Antrim	2	38	82	50
Bay	2	38	258	19
Cass	2	38	202	28
Cheboygan	2	38	51	60
Houghton and Keweenaw	2	38	77 1	54 83

Table 3. (Continued) Poultry project enrollment, 1965, and number of farms reporting poultry and poultry products sold, 1964, by counties, 1967.

County	4-H Poultry Project Enrollment, 1965		No. Farms Reporting Poultry and Poultry Products Sold, 1965	
	Number	Rank	Number	Rank
Midland	2	38	125	39
Alcona	1	44	62	58
Arenac	1	44	80	52
Clare	1	44	59	59
Ionia	1	44	186	30
Lake	1	44	31	71
Lenawee	1	44	339	10
Menominee	1	44	120	40
Montmorency	1	44	195	29
Oceana	1	44	90	48
Van Buren	1	44	228	22
Alger	-	54	37	69
Alpena	-	54	78	53
Baraga	-	54	24	76
Benzie	-	54	31	71
Charlevois	-	54	49	61
Crawford	-	54	3	82
Emmet	-	54	65	57
Gladwin	-	54	94	45
Gogebic	-	54	12	79
Iosco	-	54	46	64
Iron	-	54	44	65
Kalkaska	-	54	23	77
Leelanau	-	54	106	43
Livingston	-	54	169	35
Luce	-	54	6	81
Mackinac	-	54	30	73
Manistee	-	54	72	55
Mason	-	54	104	44
Mecosta	-	54	86	49
Missaukee	-	54	82	50
Montcalm	-	54	195	29
Muskegon	-	54	114	41
Newaygo	-	54	143	38
Ontonagon	-	54	38	68
Oscoda	-	54	43	67
Presque Isle	-	54	166	36
Roscommon	-	54	7	80
Schoolcraft	-	54	14	78
Wexford	-	54	44	65
Total	523		13,500	

Source: 1964 U.S. Census of Agriculture, Bureau of the Census, U.S. Department of Commerce, and Michigan State University Cooperative Extension Service 4-H Records, 1967.

Table 4. National 4-H Club enrollment by years, 1967.

Year	Club Members	Poultry Projects	Percent of Total Enrollment
1955	2,155,952	167,925	7.79
1956	2,164,294	160,209	7.40
1957	2,201,481	149,557	6.79
1958	2,253,999	141,896	6.30
1959	2,301,722	134,441	5.84
1960	2,296,735	115,312	5.02
1961	2,285,592	104,987	4.59
1962	2,224,444	96,035	4.32
1963	2,190,721	78,533	3.58
1964	2,221,119	76,270	3.43
1965	2,185,145	75,451	3.44
1966	2,047,452	66,441	3.25

Source: National 4-H Service Committee Records, 1967.

The low opinion and lack of knowledge of agriculture are only two reasons why poultry projects have not maintained their share of the total enrollment. The American agricultural community has undergone tremendous changes both sociologically and economically.

Opinion of Agriculture

The enrollment decline in 4-H poultry projects may be due partly to a general low opinion of agriculture. Butts (1960) listed some of the possible reasons for this low opinion:

- high food costs
- big farmers are getting rich (they drive big cars)
- a heavy tax cost for farm subsidies
- agriculture obtains special favors in cooperative taxes and credit
- the Federal Government has a sprawling and expensive agricultural bureaucracy
- agricultural research and education has (sic) created costly surpluses

Hall (1963) reported that urban opinion leaders held several attitudes about the "typical farmer" and toward "agriculture in general". The 897 respondents in his study were drawn from the Chicago and downstate area of Illinois. In general, he indicated that those surveyed thought the agriculture industry --

expects political solutions for its problems

fights too much among its own group

gets much income from government

does too much "belly-aching"

carries its share of community work

has not contributed to increased cost of living

has not had its way too long

adopts new research promptly

plays a vital role in the economy.

He did not indicate whether the favorable or unfavorable statements were the more critical. He concluded that urban opinion leaders had several images of agriculture and that a particular situation determines the one that is evident.

Reiss (1961), studying returns from respondents in many occupations, regions and age groups, found that only those individuals classed in the rural farm group or listing farming as their occupation would highly recommend farming as an occupation.

Nelson (1957) found, when studying 234 senior 4-H Club members consisting of 127 boys and 107 girls, that most of the boys, including the farm boys, preferred "an average job in a town or city to a farm operation". Both farm and non-farm girls preferred to have their future husbands in non-farm work.

From a survey conducted with 64 percent of the entire 4-H membership in Boone County, Missouri, Singh (1964) found that a rural image of 4-H Clubs still persists in the minds of club members.

Strait (1963) reported the following factors as appearing to influence enrollment in the College of Agriculture at Washington State University:

1. An interest in an agricultural career above all other alternatives
2. The belief that farming is only a part of agriculture
3. The understanding that agriculture consists of production, marketing and processing of food and fiber
4. Studied vocational agriculture in high school
5. The belief that more science will be needed in agriculture to provide food and clothing for our expanding population
6. The belief that many more agriculture workers will be needed in the future
7. More knowledge about careers in agriculture

8. The belief that agriculture is highly scientific and requires people who are highly trained in science and mathematics

9. Influence of parents.

Socio-economic Changes

In the century from 1860 to 1960, the national population grew from 31½ million to almost 180 million. During this same period of time, the rural population increased in numbers but decreased in percentage from 24¼ million or 77 percent of the total to 66¼ million or 36.8 percent of the total. Census records (1960), available for the farm portion of the rural population since 1910, showed that this category had decreased both in numbers and percentage, from 32 million or 35 percent of the total to 13¼ million or 7.5 percent of the total. In this same 100 years, the number of farms has changed. During the period from 1860 to 1935, the number grew from 2 million to 6.8 million. From 1935 to 1960, the number decreased to 3.7 million.

Census reports of median income give still another means of understanding the enrollment decline. The 1960 report lists the median income of the total population as being $2,823; that of urban $3,136; that of non-farm (rural) $2,250; and that of farm (rural) $1,649.

Adoption Process

The adoption process is the mental process through which an individual passes from first hearing about an innovation to final adoption, according to Rogers (1962). He defines an innovation as an idea perceived as new by the individual and points out that it matters little, as far as human behavior is concerned, whether or not an idea is "objectively" new as measured by the amount of time elapsed since its first use or discovery. It is the newness of the idea to the individual that determines his reaction to it. A 4-H Club poultry project can be

considered an innovation to a new club member. It is something perceived as new.

The adoption process can be thought of as a series of stages through which the individual passes. The North Central Rural Sociology Subcommittee for the Study of Diffusion of Farm Practices (1955), Lionberger (1960), and Rogers (1962) utilized the categories of awareness, interest, evaluation, trial and adoption to describe these stages. Awareness indicates that the person has heard of the innovation but knows little about it. In the interest stage the individual is actively seeking information about the innovation. The evaluation stage is usually a mental trial in which the individual applies the innovation to his present and anticipated future situations and decides whether or not to try it. The individual trys the innovation on a limited scale in the trial stage. Adoption means the individual decides to continue the full use of the innovation.

Wilkening (1956), Lionberger (1950), and Rogers (1962) cited impersonal information sources as being the most important in creating awareness. Personal information sources are most important in the evaluation stage for many individuals. These generalizations have been formed from research with adults, primarily farmers, and little information is available to know if they apply to youth.

Influences on Youth

Data from a University of Michigan Institute for Social Research Study (1960) showed that, for boys who were in the 11-13 age category, the most frequently mentioned reason for their joining a club was the influence of their friends. Copp and Clark (1956) reported that influence of siblings and friends was a major reason given to explain why 4-H Club members did not re-enroll in clubs.

The Institute for Social Research Study (1960) further indicated that both younger and older adolescent boys are concerned with their acceptance by others their age,but that younger boys feel this concern more. When comparing girls and boys of younger age (11-13 years), girls were much more concerned about their acceptance by others than were boys.

Stowe (1963) indicated that 4-H Club members and non-members 14-18 years of age in Steven County, Washington, did not re-enroll or drop out because of friends,but that being well accepted by fellow members seemed to be one of the secondary reasons for re-enrollment or drop-outs.

Cunningham (1959), studying group influence on 4-H re-enrollment, indicated that two important influences were a sibling in 4-H who re-enrolled and friends in 4-H who also re-enrolled.

From an Ohio study with 4-H Club members age 14-18 years, Thornburn (1960) reported that 59.0 percent of the boys gave friends who joined or re-enrolled as one reason for re-enrolling. Mintmier (1956) stated that boys and girls who had siblings in 4-H Clubs tended to enroll at a higher rate.

Krietlow, et al (1959), working with youth in ten Wisconsin communities, reported that, of the 4-H members studied, they chose working with other boys and girls as the second best aspect of club work. The opportunity to learn was listed as first and "projects" were listed third.

Deshmukh (1960), studying three groups of rural youth in seven Indian villages, reported that the youth leader was more effective in obtaining adoption of improved farm practices than school teachers and village leaders. The school teachers and village leaders were equally effective in changing knowledge, but the youth leader was more effective in changing skills, attitudes and behavior of youth.

Brehm (1958) studied source of help provided 159 dairy project members and found father or other family members were the most important source, county fairs were second and project leaders were third. He further stated that project bulletins were the most important source for creating awareness of skills and these were followed by magazines. Fathers ranked above local leaders in assistance to learn skills. The father was the source most often given as aiding in decision making.

Nelson and York (1959) reported that 359 Texas 4-H Club members indicated most of their educational and occupational guidance came from their parents. Russell (1959) found similar characteristics from 202 4-H Club members in five counties. He also found that these club members indicated reading was an important source of career information.

Slayton (1960) reported that Rockbridge County, Virginia, Senior club boys ranked sources of awareness about careers as follows: school personnel, counselors, 4-H leaders, family and friends, and father. The girls in the club ranked sources of awareness in the order of school personnel, teachers, other professionals, 4-H leader, family and friends, and, friends and reading.

There are many impersonal sources of information available to American youth. According to a report published by the Advertising Research Foundation (1964), households having two to six members had a television set saturation ranging from 94 to 97.6 percent. Data from the 1966 Statistical Abstracts indicated that there were approximately 63 million radios in the homes of our nation. Schramm (1960) indicated that saturation of radio sets into homes had reached 98 percent. Both these sources of information reported that a vast amount of printed material in many forms is available to youth.

Many researchers have studied and reported on the type and amount of mass media consumed by youth. Other workers have investigated its influence. Klapper (1960) summarized the total effect which mass media has:

> "Persuasive mass communication functions far more frequently as an agent of reinforcement than as an agent of change -- within a given audience exposed to particular communication, reinforcement or at least constancy of opinion is typically found to be the dominant effect; minor changes as in intensity of opinion are found to be next most common and conversion is typically found most rare".

One-fourth of the Extension staff members surveyed by Sabrosky (1963) agreed with the statement that some boys and girls do not have enough money to conduct 4-H projects. One-third of the parents and older club members surveyed also agreed to this statement. One-half of the Extension staff and three-fifths of the lay group agreed with the statement that some club boys and girls do not have facilities with which to conduct club work.

Stowe (1963) reported "type and variety of projects in the club" as one of the secondary reasons why club members re-enroll or drop out. A lack of leadership and the urban residence of some 4-H members prevented them from enrolling in the project of their choice.

Lidster (1963) found that boys conducting projects in sheep and gardening had lower socio-economic scores than those boys conducting projects in electrical science, dairying and woodworking. Deshmukh (1960), studying adoption of improved farm practices by Indian rural youth, found that education and financial status were correlated with the adoption of the practices of calf raising and vegetable gardening.

OBJECTIVES

Specific objectives of this study are:

1. To investigate possible reasons for the decline in 4-H Club poultry project enrollment.

2. To ascertain the source of awareness for projects by both existing and new members.

3. To determine the influences which club members believe cause them to enroll in projects.

4. To explore the acceptability by members and parents of certain types of poultry projects.

5. To investigate the amount of knowledge which club members and parents possess regarding the present day commercial poultry industry.

HYPOTHESES

Research hypotheses are drawn to guide a research study. They are prepared from the theory developed by the literature and from knowledge gained by personal experience. The research hypotheses prepared to guide this study are as follows:

1. (a) Members perceive that peer influence is their most important source for creating awareness of existing projects among youth who have just joined 4-H Clubs. This influence is followed in importance by the influence of local leaders, parents, club agents and those impersonal influences such as mass media.

   (b) Parents perceive that peer influence is the most important source for creating awareness of existing projects among youth who have just joined 4-H Clubs. This influence is followed in importance by the influence of local leaders, parents, club agents and those impersonal influences such as mass media.

2. (a) Members perceive that peer influence is their most important source for creating awareness of new projects. This influence is followed in importance by the influence of local leaders, parents, club agents and those impersonal influences such as mass media.

   (b) Parents perceive that peer influence is the most important source for creating awareness of new projects among their children who are 4-H Club members. This influence is followed by the influence of local leaders, parents, club agents and those impersonal influences such as mass media.

3. (a) Members perceive that peers are the most important source of influence causing youth to adopt certain 4-H projects. This influence is followed in importance by the influence of local leaders, parents, club agents and those impersonal influences such as mass media.

   (b) Parents perceive that peers are the most important source of influence causing youth to adopt certain 4-H projects. This influence is followed in importance by the influence of local leaders, parents, club agents and those impersonal influences such as mass media.

4. More club members who reside on a farm and have space and facilities will enroll in projects requiring live animals than will members who do not reside on a farm.

5. More club members will enroll in poultry projects requiring live animals if their families rank high on a level-of-living index than will those members whose families rank low.

6. Club members and parents are not as aware of the 4-H poultry projects as they are of other projects.

   a. Club members do not recognize that many species of birds are acceptable as poultry projects.

   b. Club members and parents consider only the production phases of poultry as the acceptable project subject and do not consider projects dealing with marketing and science.

7. Club members and parents equate poultry with the small backyard or barnyard flocks of the past and do not have information about the present commercial poultry industry, its structure and organization, and the opportunities available for future employment.

PROCEDURE

The method chosen for conducting this study consisted of selecting a suitable study area and sample, constructing and pretesting the data collecting survey instruments, and gathering and analyzing the data.

Study Area

The area selected for this study consisted of Calhoun, Jackson and Kalamazoo Counties, Michigan. These counties are located near Michigan State University and represent 5.6 percent of Michigan's population.

Jackson County's population has increased at approximately the same rate as that of the State of Michigan in the period 1950-1960. The population increase in Calhoun County was approximately 18 percent below the state average while Kalamazoo County showed an increase of 11 percent above the state average (Table 5).

The location of population by residence indicated that there were more rural people in these three counties than shown by the state average (Table 6). The counties located around Detroit and the southeastern section of the state accounted for the lower percentage of rural people in Michigan. Kalamazoo County was the most urbanized of the three counties, with 70.2 percent of its population classed as urban. Jackson County was the least urbanized with only 57.6 percent so classified. Kalamazoo County had the least portion of its population classified as rural farm while Calhoun County was slightly higher than Jackson County in this classification.

The percentage of the population classified 10 to 19 years of age in 1960 was almost the same for each county. Kalamazoo County had the least, with 5.2 percent of the total population so classified. Jackson County had the most with 6.9 percent and Calhoun County had 6.1 percent. These figures were considerably below the state average of 16.7 percent.

Table 5. Population and percent increase in selected Michigan counties, 1950-1960.

	Population		Percent Increase
	1950	1960	
Calhoun	120,813	138,858	14.9
Jackson	107,925	131,994	22.3
Kalamazoo	126,707	169,712	33.9
Michigan	6,371,766	7,823,194	22.8

Source: Bureau of Census, U.S. Department of Commerce, Washington, D.C. 1960.

Table 6. Percent of population by residence in selected Michigan counties, 1960.

	Rural			Urban
	Farm	Non-Farm	Total	
Calhoun	6.6	28.5	35.1	64.9
Jackson	6.4	36.0	42.4	57.6
Kalamazoo	4.1	25.7	29.8	70.2
Michigan	5.6	21.0	26.6	73.4

Source: Bureau of Census, U.S. Department of Commerce, Washington, D.C. 1960

Median family incomes were slightly higher in these three counties than for the state (Table 7).

Table 7. Median family income in selected Michigan counties, 1960.

	Median Family Income
Calhoun	$ 6,376
Jackson	6,421
Kalamazoo	6,528
Michigan	6,256

Source: Bureau of Census, U.S. Department of Commerce, Washington, D.C. 1960.

Kalamazoo County had the highest median income of the three counties. This possibly may have been due to more men and women being classified as professional and fewer men classified as craftsmen and operatives (Table 8). Kalamazoo County was also above the state average in median years of school completed. Census data indicated that Kalamazoo County had a median of 11.7 years of school completed as compared with 11.2 years for Calhoun County, 10.9 years for Jackson County and 10.8 years for the state.

Data from the 1964 Census of Agriculture indicated that Calhoun County had more agriculture than did the other two counties (Tables 9 and 10). Calhoun County had the largest number of farms, the greatest amount of land in farms, and had a larger income from the sale of farm products. Kalamazoo County ranked the lowest in these three categories. This distribution is supported by the occupational data from the 1960 general census which indicated that Calhoun County had more farmers and Kalamazoo County had the fewest farmers (Table 8).

Dairy was the major agricultural enterprise, as measured by source of farm income in Calhoun and Jackson Counties. Livestock was the most important in Kalamazoo County. Income from poultry ranked fourth in importance in Calhoun County, fifth in Jackson County and sixth in Kalamazoo County.

Calhoun County had the largest poultry industry of the three counties (Table 11). Most of this poultry was in the form of commercial egg production flocks. Only Kalamazoo County reported farms raising broilers. Turkeys were not a major enterprise in any of the three counties, although Jackson County had 10 farms that raised 12,232 birds.

Table 8. Percent of the labor force employed in selected categories in selected Michigan counties, 1960.

	Professional	Farmer	Manager	Clerical	Salesworker	Craftsman	Operative	Service	Labor
					Male				
Calhoun	9.3	3.4	10.0	5.8	6.1	22.0	24.6	6.8	7.4
Jackson	9.4	2.8	9.4	6.3	6.9	21.2	26.4	6.4	6.8
Kalamazoo	12.4	2.3	10.3	6.2	7.7	20.7	22.9	6.0	6.4
Michigan	10.6	3.0	9.2	6.6	6.6	21.6	26.1	5.6	6.6
					Female				
Calhoun	12.8	0.2	3.8	28.9	7.7	1.1	17.4	16.8	0.9
Jackson	13.6	0.4	3.6	31.4	8.0	1.4	15.4	15.9	0.9
Kalamazoo	15.0	0.3	2.7	29.3	7.7	1.2	16.5	14.9	1.2
Michigan	13.5	0.4	3.2	30.8	9.1	1.2	13.5	15.7	1.1

Source: Bureau of Census, U.S. Department of Commerce, Washington, D. C., 1960.

Table 9. Number of farms, percent of land area in farms, and number of farms by types for selected Michigan counties, 1964.

	County			
	Calhoun	Jackson	Kalamazoo	Michigan
Number of farms	1,837	1,602	1,243	93,504
Percent of land area in farms	67.2	59.3	54.1	37.2
Types of Farms:				
Cash-grain	295	169	206	15,418
Other field crops	6	9	-	1,027
Vegetable farms	14	13	8	1,335
Fruit and nut farms	14	18	80	4,181
Poultry farms	36	15	27	1,734
Dairy farms	351	308	138	20,230
Other livestock	270	241	173	8,725
General farms	114	109	50	5,287
Misc. and unclassified	737	720	561	35,567

Source: Census of Agriculture, Bureau of Census, U.S. Department of Commerce, Washington, D. C. 1964.

Table 10. Value in dollars of farm products sold, by source, for selected Michigan counties, 1964.

Source	Calhoun	Jackson	Kalamazoo	Michigan
All Farm Products	14,822,449	13,166,296	11,159,800	766,394,156
Average Per Farm	8,069	8,219	8,978	8,196
All Crops	5,355,838	4,812,210	5,301,527	365,329,153
Poultry and Poultry Products	717,006	406,192	619,482	45,630,852
Dairy Products	4,380,924	4,638,223	1,817,104	208,291,743
Other Livestock	4,360,405	3,169,220	3,407,757	145,860,732

Source: Census of Agriculture, Bureau of Census, U.S. Department of Commerce, Washington, D. C., 1964.

Table 11. Numbers of poultry by types for selected Michigan counties, 1964.

	Calhoun	Jackson	Kalamazoo	Michigan
Chickens 4 mos. Old and Older:				
Farms Reporting	483	411	278	23,216
Number	151,240	100,421	100,303	7,773,877
Laying Hens and Pullets:				
Farms Reporting	437	366	255	20,921
Number	143,783	94,190	101,258	6,911,355
Broilers and Other Meat Birds Raised:				
Farms Reporting	-	-	3	122
Number	-	-	124,000	1,560,202
Chicken Eggs Produced:				
Farms Reporting	269	192	161	12,212
Number Dozens	1,992,240	1,045,791	1,500,980	96,824,886
Turkeys Raised:				
Farms Reporting	5	10	8	460
Number	8,650	12,232	5,373	1,383,523
Value of Poultry Products Sold:				
Farms Reporting	298	209	176	13,500
Dollars	717,006	406,192	619,482	45,630,852

Source: Census of Agriculture, Bureau of Census, U.S. Department of Commerce, Washington, D. C., 1964.

Data pertaining to club work, enrollment, number of organized clubs and local leaders for 1966 showed that there were more 4-H Club members and local leaders in Kalamazoo County and more clubs in Calhoun County (Table 12). Calhoun County had the fewest number of club members and local leaders while Jackson County had the least number of clubs.

Enrollment in 4-H Club work and the place of residence differed greatly from the general population characteristics (Table 13). Whereas only 4.1 percent to 6.6 percent of the total population were classified as rural farm in Table 7, 23 percent to 43.7 percent of the 4-H enrollment was rural farm.

Table 12. 4-H Club enrollment, number of clubs and local leaders in selected Michigan counties, 1966.

	Number of Club Members	Number of Clubs	Number of Local Leaders
Calhoun	2,091	62	258
Jackson	2,105	34	310
Kalamazoo	2,316	44	767
Michigan	80,400		

Source: Michigan State University Cooperative Extension Service 4-H Records, 1967.

Table 13. Percent of 4-H Club enrollment by residence in selected Michigan counties, 1966.

	Rural		Urban	
	Farm	Non-Farm	and Suburban	Total
Calhoun	31.5	39.2	29.3	2,091
Jackson	19.3	47.4	33.3	2,105
Kalamazoo	17.8	58.3	23.9	2,316
Michigan	32.2	42.8	25.0	80,400

Source: Michigan State University Cooperative Extension Service 4-H Records, 1967.

The average age of all club members in Michigan for the year 1966 was 12.0 years. The records of Calhoun County and Kalamazoo County indicated an average age of 12.2 years for their club members. Jackson County enrolls 9 year olds and therefore had a lower average age than the state with 11.4 years. All of the counties studied had a concentration of members in the younger age groups (Table 14). Statistics for the state enrollment also showed a similar concentration.

Data available on the number of years of club work completed by the enrollment, both for the state and the selected counties (Table 15) indicated that over 50 percent of the club members had completed their first and second year of project work. Calculations indicated that the average years of club work completed for the state enrollment was 2.35 years. For Calhoun County this statistic was 2.43 years and for Kalamazoo County it was 2.47 years. Jackson County, with a higher percentage of members in first year club work, had an average of 1.90 years.

Table 14. Percent of 4-H Club enrollment by age in selected Michigan counties, 1966.

Age	County			
	Calhoun	Jackson	Kalamazoo	Michigan
9	-	12.5	-	7.7
10	31.1	30.8	26.3	21.2
11	18.6	21.9	17.9	20.0
12	12.8	10.4	16.6	16.1
13	13.0	7.4	13.9	11.9
14	8.5	5.8	9.2	8.9
15	5.2	4.8	7.0	5.9
16	4.3	6.3	5.3	4.7
17	3.6	-	2.8	2.7
18	1.5	-	1.0	0.8
19	1.4	-	0.1	0.2

Source: Michigan State University Cooperative Extension Service 4-H Records, 1967.

Table 15. Percent of 4-H Club enrollment by years of club work completed in selected Michigan counties, 1966.

Years of Club Work	County			
	Calhoun	Jackson	Kalamazoo	Michigan
1	46.9	61.6	37.8	41.3
2	17.4	15.2	22.9	22.9
3	9.7	9.0	15.5	13.9
4	7.8	5.7	10.1	8.8
5	8.4	3.2	5.5	5.7
6 or more	9.8	5.3	8.2	7.4

Source: Michigan State University Cooperative Extension Service 4-H Records, 1967.

Distribution statistics for the state enrollment indicated that there were almost twice as many girls as there were boys enrolled (Table 16). With some variation, this ratio also applied to the distribution according to sex for the three counties.

Table 16. Percent of 4-H Club enrollment by sex in selected Michigan counties, 1966.

	Boys	Girls
Calhoun	37.0	63.0
Jackson	38.4	61.6
Kalamazoo	35.6	64.6
Michigan	35.25	64.75

Source: Michigan State University Cooperativ e Extension Service 4-H Records, 1967.

A study of enrollment records in the state 4-H office showed that most of the Michigan counties have a relatively small enrollment in poultry (Table 17). The entire state had only 648 4-H poultry projects in 1966. While the lack of 4-H poultry projects in Calhoun, Jackson and Kalamazoo Counties appeared to be a problem in this study, the low enrollment in the state indicated that no group of counties would have enough 4-H poultry projects to provide more conclusive data than in the selected area.

The demographic data for these three counties indicated that they are somewhat atypical of Michigan. This can be explained by the variation in sections of the state. Michigan has some counties that are highly urbanized and contain population that tends to raise the average in many measurable categories. Other sections of the state, notably the Upper Peninsula, are not as developed and this tends to lower certain averages.

It must be noted then, that Calhoun, Jackson and Kalamazoo Counties are not typical of some of Michigan's counties; but for counties with similar demographic statistics, the findings in this study would appear to be applicable.

Table 17. 4-H Club poultry project enrollment in selected Michigan counties, 1966.

	Poultry Projects		
	Boys	Girls	Total
Calhoun	3	5	8
Jackson	8	8	16
Kalamazoo	3	1	4
Michigan	435	213	648

Source: Michigan State University Cooperative Extensive Service 4-H Records, 1967.

Construction of the Survey Instruments

To obtain data needed in this study, it was necessary to question club members and parents. Personal interviews could have been conducted but the questionnaire method was used in order to obtain a larger sample with the same expenditure of time and money. Since no standard instruments were available which would give the needed data, two questionnaires were constructed. One was designed for the 4-H Club member and one for the parents. Questions were prepared to give answers to the hypotheses posed. Some questions also were included in the member instrument to be used as a basis for constructing a level-of-living index.

The services of the Michigan State University College of Education Research Center and their specialists in questionnaire construction were used in preparing the instruments for machine scoring the responses.

Pretest of the Survey Instruments

A pretest was conducted to ascertain if the survey instruments were suitable for the intended audiences. Club members and parents in Eaton County were used as subjects for this pretest. Eaton County is located in the same general area as Calhoun, Jackson and Kalamazoo Counties and has similar demographic statistics.

Two groups of club members and adults were randomly selected for pretesting the instruments. The first group visited was a 4-H Club business meeting at which 30 club members and 8 adults were present. The second group was comprised of 13 club members and 4 adults, gathered for a beef project meeting.

No detailed instructions for completing the instruments were given for the pretest with the first group of subjects. Club members and adults were asked to read each question and mark the machine scoring answer sheet, circle any word they did not understand and place a question mark after any question which was not clear to them. On the front page of the questionnaire, members were asked to indicate their age, sex, and number of years in club work. This information was used as a means of verifying the correct use of the answer sheets by comparing them with the answers to the three questions in the body of the instrument.

It appeared that club members 14 years and above could understand the questionnaires and answer the questions with little instruction. Younger club members had difficulty with certain question and two individuals appeared to have difficulty with all of the questions.

After reviewing results of the pretest with the first audience, revisions were made in the instruments. The revised instruments were

then administered to the second group of subjects. At this meeting more detailed explanations were given.

A study of the results from the pretest with the second group revealed that they had little difficulty in completing the revised instruments.

Administration of the Survey Instruments

The 4-H agents in the three selected counties were contacted and their assistance was obtained in selecting 4-H Clubs for the survey. A list of clubs in each county was secured and from this list, the choices were made until the desired number were scheduled. The administrative local leaders were contacted and the purpose and details of the study were explained. Permission was secured to visit the clubs at which the member instrument would be administered and a packet of material sent to each set of parents. If scheduling conflicts arose, the meeting was either voluntarily rescheduled or another club was selected.

Local leaders were contacted by mail to confirm the scheduled meeting dates and further explanation was given regarding the purpose and details of the study.

The sample consisted of one 4-H Club in 10, based on the 1966 enrollment records of each county. Six 4-H Clubs were chosen from Calhoun County, four from Jackson County, and five from Kalamazoo County (Appendix, Table A).

The administrative local leaders provided estimates of expected attendance and packets of materials were prepared for each respondent. The member packets contained a questionnaire, a machine scoring answer sheet, a machine scoring pencil, and an information card on which members were asked to record the name and address of their parents. The

envelopes and materials were coded with a six digit number indicating the type of instrument, the county, the club and a respondent number. The parent packet contained a questionnaire, a machine scoring answer sheet, an addressed stamped return envelope, and a machine scoring pencil. Member and parent packets were coded with a similar number, differing only with the first digit, which indicated the type of questionnaire.

At the scheduled meeting, the member questionnaires were administered in a group situation. A short presentation was made, giving the details of the study and the purpose of the questionnaire. Instructions in marking the machine scoring answer sheet were given.

As the club members completed the instruments, individual assistance was given to any who had difficulty in interpreting the questions. Members were cautioned to express their own knowledge and feelings. This was particularly stressed in regard to those questions dealing with their knowledge of poultry and the poultry industry.

Club members were asked to hand carry the parent packets to their parents. To prevent sending more than one packet to each home, the members were given one per family. By using the coded numbers and the information cards, sibling relations were determined.

If the machine scoring answer sheets were not returned by the parent within one week, a telephone call was made to the home. It appears that these calls increased the parent returns by 27.1 percent.

Analysis of Data

An IBM machine sensing data sheet was used by both audiences to indicate their responses to the questions. Each questionnaire also contained one open end question to which the respondents were asked to

express their own opinion. The respondents' answers to these questions were classified and the data sheet was marked accordingly.

The services of the Michigan State University Evaluation Service were used to transfer the responses from the IBM data sheet to a punched IBM card. The data sheets were closely examined before being sent to the Evaluation Service and any incorrectly marked or double marked responses were eliminated. This precaution greatly reduced the number of corrections as the data decks were prepared for use in the CDC 3600 Computer.

The services of the Michigan State University Computer Laboratory were used to analyze the data. The Computer Institute for Social Science Research programs TR-13, "Single-Column Frequency Distribution" and TR-14, "Analysis of Contingency Tables" were used. The Analysis of Contingency Tables program provided a means of recoding variables. In the member phase of this study this provision was employed to recode data to construct a level-of-living index.

A level-of-living index for each member respondent was constructed by combining responses from seven questions. A research specialist in the College of Education assisted with this procedure. Raw data from questions 35, 36, 37, 38, and 41 were used to form five recoded variables and responses to questions 42 and 43 were combined to form the sixth recoded variable. Each of these recoded variables were assigned a value of 0, 1 or 2, depending on the original response (Appendix, Table B).

The reassigned values from the six recoded variables were totaled to give a new variable valued from 0 to 12. This range was trichotomized into low with a value of 0 to 3; medium with a value of 4 to 8; and high with a value of 9 to 12. These placings were then assigned values of 0, 1 and 2.

The "Single-Column Frequency Distributions" program for the CDC 3600 Computer gives frequencies, means, standard deviations and percentages for each frequency of total. The "Analysis of Contingency Tables" program forms contingency tables from designated pairs of input variables. The program will enable the computer to perform the following operations on the tables it generates: observed frequencies, percentage of each cell in table row totals, percentage of each cell in the column totals, percentage of each cell in the grand total, expected frequencies for each cell, contributions of each cell to chi-square, chi-square (uncorrected), degrees of freedom and contingency coefficients.

RESULTS

The responses to the questions on the member and parent survey instruments were analyzed and are presented according to the description of the sample, member responses to questions pertaining to the hypotheses and parent responses to questions dealing with the hypotheses.

Description of Sample

A total of 363 members completed the survey instrument. All were included in the analysis. Member respondents from the three counties included 140 boys and 223 girls. The percentages of 38.6 percent and 61.4 percent were comparable to the state average of 35.35 percent and 64.75 percent. There was some variation from county to county (Table 16).

The average age of the member respondents was 12.5 years. The average age for all 4-H Club members in Michigan in 1966 was 12.0 years. There was a concentration of member respondents in the younger age division (Table 18), but this was typical of the entire enrollment of each county and of Michigan (Table 14).

The club members in this study had an average tenure of 2.96 years of club work. The average for the state in 1966 was 2.4 years. A larger number of the member respondents were first and second year members (Table 19). This appears to be typical of the entire enrollment of the three counties and of the state (Table 15).

Question 23 asked "where do you live?". Results indicated that 91.7 percent of the respondents classed themselves as rural, 52.6 percent as rural farm and 39.1 percent as rural non-farm. There were only 27 or 7.4 percent of the sample in the suburban or urban categories. This distribution was atypical when compared to the state average but did not vary considerably from the statistics reported by the three counties (Table 13).

Table 18. Number and percent of club members by age, 1967.

Age	Number of Club Members	Percent
9	24	6.61
10	50	13.77
11	67	18.46
12	69	19.01
13	35	9.64
14	35	9.64
15	36	9.92
16	28	7.71
17	12	3.31
18 or over	7	1.93
Total	363	100.00

Table 19. Number and percent of club members by total years of club work completed, 1967.

Years of Club Work	Number of Club Members	Percent
1	104	28.65
2	83	22.87
3	48	13.22
4	43	11.85
5	31	8.54
6	26	7.16
7	13	3.58
8	6	1.65
9	2	0.55
Unreported	7	1.93
Total	363	100.00

Responses from the members indicated that they carried an average of 2.8 projects per member for the year 1966-67. One-half of the club members said they carried 2 or less projects while 7 said they conducted 10 or more projects (Table 20). The average number of projects per club member for the state in 1966 was 1.9. At the same time, for the three county area, the average number of projects per member was 1.8 in Calhoun County, 1.6 in Jackson County, and 2.2 in Kalamazoo County.

An analysis of the number of projects carried by age and number of years of club work completed (Tables 21 and 22) indicated that younger club members both in age and years of club work carried fewer projects than did the older club members and those who had more years completed. Chi-square values for these tables indicated both had a significance beyond the 0.001 level of probability.

The sex of the club member appeared to influence the number of projects carried (Table 23). This analysis showed girls tended to enroll in more projects than did boys. This difference was significant beyond the 0.05 level.

Place of residence did not appear to affect the number of projects per club member ($P > 0.05$) but the small number of club members classed in the suburban and urban areas should be taken into consideration in this generalization (Table 24).

Statistics pertaining to the distribution of club members by grade in school were not available for the state and the three counties but responses for this study indicated that most of the club members were in the lower grades (Table 25). This would appear reasonable considering the average age and the concentration of members in the younger age groups.

Table 20. Number and percent of club members by projects carried, 1967.

No. of projects per club member	Number of Club Members	Percent
1	87	23.97
2	95	26.17
3	68	18.73
4	37	10.19
5	27	7.44
6	13	3.58
7	4	1.10
8	4	1.10
9	1	0.28
10 or more	7	1.93
Unreported	20	5.51
Total	363	100.00

Table 21. Number of club members by projects reported and by age, 1967.

Age	Number of Projects										Total
	1	2	3	4	5	6	7	8	9	10	
9	11	6	2	0	0	0	0	0	0	1	20
10	11	15	11	3	2	1	0	0	1	0	44
11	22	18	7	7	3	1	1	1	0	1	61
12	15	17	18	11	3	2	0	0	0	1	67
13	8	10	7	3	4	2	1	0	0	0	35
14	10	8	3	4	8	1	0	0	0	1	35
15	6	10	7	4	2	2	2	1	0	1	35
16	3	6	9	3	3	2	0	1	0	0	27
17	0	4	3	1	0	1	0	1	0	2	12
18	1	1	1	1	2	1	0	0	0	0	7
Total	87	95	68	37	27	13	4	4	1	7	343
								Unreported			20
											363

Computed chi-square = 102.958
Degrees of freedom = 81
Probability < 0.001

Table 22. Number of club members by projects reported and years of club work, 1967.

Years of Club Work	Number of Projects										Total
	1	2	3	4	5	6	7	8	9	10	
1	42	29	14	4	1	0	0	0	0	1	91
2	21	20	16	12	5	2	1	0	0	1	78
3	11	17	9	6	2	2	0	0	0	1	48
4	6	10	8	5	6	5	1	0	1	1	43
5	3	6	7	5	9	1	0	0	0	0	31
6	2	7	7	2	4	1	2	1	0	0	26
7	0	2	5	1	0	1	0	1	0	3	13
8	0	2	2	0	0	1	0	1	0	0	6
9	0	1	0	1	0	0	0	0	0	0	2
Total	85	94	68	36	27	13	4	3	1	7	338
								Unreported			25
											363

Computed chi-square = 168.709
Degrees of freedom = 81
Probability < 0.001

Table 23. Number of club members by projects reported and sex, 1967.

Sex	Number of Projects										Total
	1	2	3	4	5	6	7	8	9	10	
Boys	36	42	30	7	5	5	1	2	0	0	128
Girls	51	53	38	30	22	8	3	2	1	7	215
Total	87	95	68	37	27	13	4	4	1	7	343
								Unreported			20
											363

Computed chi-square = 18.626
Degrees of freedom = 9
Probability < 0.05

Table 24. Number of club members by projects reported and place of residence, 1967.

Residence	Number of Projects										Total
	1	2	3	4	5	6	7	8	9	10	
Farm	42	51	35	19	18	9	2	3	1	5	185
Non-Farm	38	35	27	16	8	4	1	1	0	2	132
Suburbs	1	3	2	0	0	0	0	0	0	0	6
Urban	5	4	4	2	1	0	1	0	0	0	17
Total	86	93	68	37	27	13	4	4	1	7	340
									Unreported		23
											363

Computed Chi-square = 14.003
Degrees of freedom = 27
Probability > 0.05

Table 25. Number and percent of club members by grade, 1967.

Grade	Number of Club Members	Percent
4	42	11.57
5	65	17.91
6	72	19.83
7	40	11.02
8	45	12.40
9	41	11.29
10	27	7.44
11	23	6.34
12	6	1.65
Did not attend school	2	0.55
Total	363	100.00

A total of 240 parent instruments were distributed to each family represented at the scheduled meeting. One week after the parents received these packets, 116 or 48.3 percent of the answer sheets had been returned. Of the 105 not returned, those parents who could be reached by phone were called. These calls increased the number of returns by 65. A total of 181 parents or 75.4 percent completed the instruments. The telephone calls were 61.9 percent effective. These statistics are shown by clubs (Appendix, Tables C and D). One parent return contained answers to only three questions. This one was eliminated and 180 were included in the analysis.

The place of residence of the parents indicated that 88.9 percent considered themselves rural, 50.6 percent as rural farm, and 38.3 percent as rural non-farm. Only 20 or 11.1 percent considered themselves as urban or suburban. This distribution does not differ greatly from the member responses, especially when the number of members from each family is considered.

Responses indicated that four families, or 2.2 percent, had one parent in the home. Of these, three had only a female parent and one had only a male parent. The remaining 176 responses indicated that both female and male parents were present.

The average age of the parent respondents was difficult to calculate due to open end categories in the possible answers. A study of the responses indicated that the female parents were slightly younger than the male parents (Table 26). There was a concentration of male parents in the 35 to 44 age groups with 48.3 percent of them so classified. The female parents were concentrated in the 30 to 44 age groups with 75.5 percent so classified.

Table 26. Number and percent of parents by age and sex, 1967.

Age	Males		Females	
	Number	Percent	Number	Percent
Under 25	2	1.11	0	0.00
25 - 29	2	1.11	6	3.33
30 - 34	26	14.44	47	26.11
35 - 39	53	29.45	47	26.11
40 - 44	52	28.89	42	23.34
45 - 49	27	15.00	24	13.33
50 - 59	13	7.22	7	3.89
60 and over	2	1.11	0	0.00
Unreported	3	1.67	7	3.89
Total	180	100.00	180	100.00

Average years of school completed for the female parents studied were slightly higher than for the male parents. Female parents had completed 12.2 years of school while the male parents had completed 11.9 years.

A farm background was indicated by 68.3 percent of the male parents. Of these, 47.2 percent reported they spent their entire childhood on the farm. No farm background was reported by 30 percent of the male parents.

There were 52 percent of the female parents who said they had farm backgrounds. Two-thirds of these said they spent their entire childhood on the farm while one-third indicated they spent only part of their childhood there. The remaining 47.7 percent indicated that they had no farm experience in their childhood.

Twenty-nine male local leaders were included in the sample. Of these, two were administrative leaders, 23 were project leaders, and four indicated they were both administrative and project leaders. The remaining 151 or 83.8 percent said they were not local leaders.

For the female parents, there were 65 who indicated they were local leaders. Of this group, one was an administrative leader, 45 were project leaders and 19 were both administrative and project leaders. The remaining 115 or 63.9 percent of the females indicated they were not local leaders.

A slightly larger percentage of female parents (40.6 percent) had been 4-H Club members than males (35.6 percent). Almost 60 percent of the 360 parents indicated they had not been 4-H Club members.

The categories of farmer or farm manager and craftsman had the largest number of male occupational responses. There were 20 percent

for each. Laborer was third with 16.7 percent and professional was fourth with 13.9 percent. There were 107 or 59.4 percent of the male parents who were employed at salaried full time work. Self-employed full time work accounted for 23.9 percent.

Female responses indicated that 116 or 64.4 percent did not work outside the home. From the 64 remaining, 15 percent were part time salaried, 13.9 percent were full time salaried and 44 percent were self-employed. Of those who were employed, 15 were classed as clerical, 13 as professional, 8 as laborer, 7 as operative and 6 each as craftsmen and service. There were two managers and one farmer in the female parent group.

Question 17 asked "is the head of the family a farmer?". The data indicated that 98 or 54.4 percent of the respondents were not farmers. There were, however, 27.8 percent of the parents classed as part time farmers and 16.6 percent classed as full time farmers.

The type of farm was the subject of Question 18. The answer "general" accounted for the largest number of types. There were 31 of these. Dairy was listed second with 18, followed by 15 in cash grain, 8 in beef, 3 in swine and 2 each in truck and other. The greatest number of farms had 101-250 acres with 30 so classed.

Members

Source of Project Awareness

Included in the member instrument were two questions designed to obtain member source of awareness of projects. Question 11 was constructed to secure information about available projects for new members just joining 4-H Clubs. Question 12 was constructed to obtain knowledge of newly conceived projects for existing members. Hypotheses 1 (a) and

2 (a) were posed to guide the investigation of these two situations. The hypotheses state that members perceive that peer influence is the most important to create awareness of projects. These hypotheses were not supported (Tables 27 and 28). The member respondents reported a local leader as being their first source of awareness of projects in both of these situations. The data supported peer influence as being the second highest reported source of awareness of projects, if fellow club members and siblings are combined to form the peer group. Parents ranked third as a source of awareness and mass media was ranked lowest. The distribution in these tables was significant beyond the 0.001 level.

Club members considered their own knowledge in some instances and it should be noted that these answers were incorrect as the member respondents would have had to become aware of projects from some source other than their own knowledge.

Influence to Enroll in a Project

Peer influence was hypothesized to be the dominant influence causing club members to enroll in a project. Hypothesis 3 (a) stated that peers were the most important source of influence, local leaders were considered second, followed by 4-H Club agents and mass media. This hypothesis was not supported by the data obtained in this study (Table 29). Substantially more members perceived that their own knowledge and interest were the most important influences. Parents ranked second, only slightly higher than the combination of fellow club members and siblings. Computed chi-square value indicated that this distribution could have occurred by chance less than one time in a thousand.

Analyzing responses from the members by age and influence to enroll in a project indicated that the younger members were influenced by more

Table 27. Number and percent of club members reporting source of awareness of existing projects for new members, 1967.

Source	Number of Club Members	Percent
Local leader	122	33.61
Sibling	67	18.45
Fellow club member	62	17.08
Parent	46	12.67
Others (undefined)	25	6.89
Member's own knowledge	24	6.61
4-H Club agent	7	1.93
M.S.U. publications	7	1.93
Mass media	1	0.28
Ag or Home Ec agent	0	0.00
Unreported	2	0.55
Total	363	100.00

Computed Chi-square = 444.16
Degrees of Freedom = 10
Probability < 0.001

Table 28. Number and percent of club members reporting source of awareness of new projects for existing members, 1967.

Source	Number of Club Members	Percent
Local leader	140	38.57
Fellow club member	55	15.15
Parent	38	10.47
Others (undefined)	34	9.37
Sibling	29	7.99
Member's own knowledge	23	6.33
4-H Club agent	19	5.23
M.S.U. publications	8	2.20
Ag or Home Ec agent	4	1.10
Mass media	1	0.28
Unreported	12	3.31
Total	363	100.00

Computed chi-square = 455.99
Degrees of Freedom = 10
Probability < 0.001

Table 29. Number and percent of club members reporting source of influence to enroll in a project, 1967.

Source	Number of Club Members	Percent
Member's own knowledge	171	47.11
Parent	72	19.83
Fellow club member	38	10.47
Sibling	26	7.16
Local leader	25	6.90
Others (undefined)	17	4.68
4-H Club agent	4	1.10
Ag or Home Ec agent	0	0.00
M.S U. publications	0	0.00
Mass media	0	0.00
Unreported	10	2.75
Total	363	100.00

Computed chi-square = 775.63
Degrees of freedom = 10
Probability < 0.001

sources than the older ones ($P < 0.001$). The older members depended more on their own knowledge and interest than any other source. This dependence increased as the members grew older (Table 30). When analyzed against sex, the influence to enroll in a project appeared to be the same for boys and girls with the exception that more girls appeared to be influenced by parents (Table 31).

There were 43.2 percent of the members who gave as their reasons for enrolling in a project that they "thought it would be educational and interesting " ($P < 0.001$). Mentioned second most frequently was "can't remember any particular reason". Parents and peers were the third and fourth reasons mentioned (Table 32).

Residence and Project Enrollment

The 4-H projects offered by the Michigan 4-H club programs were grouped into 45 classes. Club members were asked to make two choices from these classes. The first was to indicate their most interesting project in 1966-67 (Appendix, Table E). Eight of the 45 classes of projects required live animals. Hypothesis 4 suggested that more club members who reside on a farm and have the facilities for a live animal would enroll in projects that required live animals than those members having other places of residence. An analysis of the data from the question "what was your most interesting project?" (Table 33) indicated that 82 or 24.5 percent of the members chose a live animal project. The horse project was the one most frequencly selected. Data indicated that 57 or 69.5 percent of the 82 club members gave their place of residence as farm (Table 34). Of the remaining 25 members, 29.3 percent, or all but one, gave non-farm rural as their place of residence.

The hypothesis that more members who live on a farm will enroll in live animal projects was supported.

Table 30. Number of club members by age and influence to enroll in a project, 1967.

Age	Club Member	Local Leader	4-H Club Agent	Parent	Ag Agent	Sibling	Mass Media	M.S U. Material	Own Knowledge	Other	Total
9	2	5	2	5	0	1	0	0	8	0	23
10	5	1	0	14	0	8	0	0	16	3	47
11	11	3	1	18	0	5	0	0	23	3	64
12	5	6	1	20	0	4	0	0	26	4	66
13	2	5	0	5	0	4	0	0	18	1	35
14	6	1	0	4	0	1	0	0	21	2	35
15	4	1	0	4	0	2	0	0	23	2	36
16	2	1	0	2	0	0	0	0	21	2	28
17	1	0	0	0	0	1	0	0	10	0	12
18	0	2	0	0	0	0	0	0	5	0	7
Total	38	25	4	72	0	26	0	0	171	17	353
									Unreported		10
											363

Computed chi-square = 88.085
Degrees of freedom = 81
Probability < 0.001

Table 31. Number and percent of club members by sex reporting source of influence to enroll in a project, 1967.

Source	Boys		Girls		Number of Club Members
	Number	Percent	Number	Percent	
Member's own knowledge	64	47.41	107	49.08	171
Parent	19	14.07	53	24.31	72
Fellow club member	15	11.11	23	10.55	38
Local leader	13	9.63	12	5.50	25
Sibling	11	8.15	15	6.89	26
Others (undefined)	9	6.67	8	3.67	17
4-H Club agent	4	2.96	0	0.00	4
Ag or Home Ec agent	0	0.00	0	0.00	0
Mass media	0	0.00	0	0.00	0
M.S U. publications	0	0.00	0	0.00	0
Total	135	100.00	218	100.00	353
			Unreported		10
					363

Boys chi-square = 240.64
Degrees of freedom = 9
Probability < 0.001

Girls chi-square = 480.14
Degrees of freedom = 9
Probability < 0.001

Chi-square total = 708.58
Degrees of freedom = 9
Probability < 0.001

Table 32. Number and percent of club members by reasons given for enrolling in a project, 1967.

Reason	Number of Club Members	Percent
Thought it would be educational or interesting	157	43.25
Can't remember any particular reason	72	19.83
Parent's desire	34	9.37
Friends were taking it	31	8.54
Start from older sibling	18	4.96
Admired other members in project	17	4.68
Thought it would be an easy project	13	3.58
Local leader's influence	10	2.75
M.S.U. publications	1	0.28
Mass media	1	0.28
Unreported	9	2.48
Total	363	100.00

Computed chi-square = 634.41
Degrees of freedom = 10
Probability < 0.001

Table 33. Number and percent of club members selecting a live animal project as their most interesting project, 1967.

Project	Number	Percent
Beef	10	3.0
Dairy	30	8.9
Dog care	3	0.9
Horses	21	6.3
Poultry	0	0.0
Rabbits	10	3.0
Sheep	2	0.6
Swine	6	1.8
Total	82	24.5

Table 34. Number of club members by residence and choice of live animal projects, 1967.

Project	Farm	Non-Farm Rural	Suburban	Urban	Total
Beef	6	4	0	0	10
Dairy	29	1	0	0	30
Dog care	2	1	0	0	3
Horses	11	10	0	0	21
Poultry	0	0	0	0	0
Rabbits	6	4	0	0	10
Sheep	0	2	0	0	2
Swine	3	2	0	1	6
Total	57	24	0	1	82

Location on the level-of-living index appeared to influence the enrollment in live animal projects (Table 35). Only 7 members, or 8.5 percent of the 82 enrolled in such a project were classed as low on the level-of-living index. Classed as high on the index were 48.8 percent of those enrolled. These data support hypothesis 5 that states that more club members who enroll in live animal projects will be classed as high on the level-of-living index.

Members were asked to indicate from the list of 45 classes of projects what they would choose if there were no restrictions on them. This was explained to the club member to mean that money was not a problem, that equipment and facilities were available, and that parents would give them permission to take any project desired. Responses were considerably different from the question "what was your most interesting project?" (Appendix, Table E). The responses indicating a choice of one of the eight live animal projects were also different from the responses to the choice of the most interesting project (Table 36). It is interesting to note that while 82 chose a live animal project as their most interesting, 131 would select a live animal project if no restrictions were placed on them. These statistics represented 22.6 percent and 36.1 percent of the total number of respondents. Horse projects had the most spectacular gain, increasing from 21 to 78 or 6.3 percent to 21.9 percent.

By comparing the data from these two questions, it would appear that an increased number of urban and suburban club members would enroll in live animal projects if no restrictions were placed on them (Table 37). When analyzed by location of a level-of-living index, there was an indication that more members in medium and high categories would enroll in a live animal project (Table 38).

Table 35. Number of club members by level-of-living index and choice of live animal projects, 1967.

Project	Level-of-Living			Total
	Low	Medium	High	
Beef	0	7	3	10
Dairy	3	14	13	30
Dog care	0	2	1	3
Horses	2	4	15	21
Poultry	0	0	0	0
Rabbits	2	3	5	10
Sheep	0	2	0	2
Swine	0	3	3	6
Total	7	35	40	82

Table 36. Number and percent of club members selecting a live animal project if they could take any project they wished, 1967.

Project	Number	Percent
Beef	7	2.0
Dairy	10	2.8
Dog care	13	3.6
Horses	78	21.9
Poultry	4	1.1
Rabbits	11	3.1
Sheep	5	1.4
Swine	3	0.9
Total	131	36.8

Table 37. Number of club members by residence and desire to enroll in a live animal project, 1967.

Project	Farm	Non-Farm Rural	Suburban	Urban	Total
Beef	6	1	0	0	7
Dairy	8	2	0	0	10
Dog care	3	9	1	0	13
Horses	47	25	0	6	78
Poultry	1	3	0	0	4
Rabbits	9	1	0	1	11
Sheep	2	3	0	0	5
Swine	1	2	0	0	3
Total	77	46	1	7	131

Table 38. Number of club members by level-of-living index and desire to take a live animal project, 1967.

Project	Level-of-Living			Total
	Low	Medium	High	
Beef	2	3	2	7
Dairy	1	5	4	10
Dog care	0	7	6	13
Horses	2	36	40	78
Poultry	0	3	1	4
Rabbits	1	5	5	11
Sheep	1	4	0	5
Swine	0	3	0	3
Total	7	66	58	131

Poultry Project Enrollment

Only 11 or 3.03 percent of the respondents indicated they enrolled in poultry in 1966. A question as to the validity of these answers was raised when these data were compared to the reported enrollment by the three counties (Table 17). The 1966 enrollment records indicated that only 28 of the 6512 club members in the three counties were enrolled in poultry projects. While it was possible to have selected a sample of 363 club members that would have included 11 enrolled in poultry, the probability of this event occurring would be very small. Each of these 11 club members were identified and nine of them, those that could be reached by phone, were contacted in an effort to ascertain if their responses were correct and if not, why the response was given. Two of the nine had answered the question correctly. The other seven indicated they either did not carefully read the question and thought it asked "did you enroll in a project?", or did not understand what the question was seeking (Table 39). All but one of these seven were under 13 years of age. Reasons for enrolling by the two who answered correctly were "thought it would be educational and interesting" and "can't remember any particular reason".

Responses to the question "if you did not enroll in poultry, why?" were given by 330 respondents (Table 40). Answers indicated that the largest group, 32.8 percent, simply were not interested in poultry. There were 12.4 percent of the respondents who said they "didn't know about poultry projects". Another group, or 13.5 percent, reported they did not have space and/or facilities for poultry ($P < 0.001$).

Table 39. Results of investigating eleven club member responses to the question "did you enroll in a poultry project in 1966-67?", 1967.

Code Number	Name	Sex	Age	Response To Question	County Records	Member's Statement
121022	Aldrich	Boy	13	Yes	No	Unavailable
123003	Struble	Boy	16	Yes	Yes	Yes
123004	Baker	Girl	16	Yes	Yes	Yes
123017	Bramble	Boy	11	Yes	No	Did not read question correctly
131011	Girolami	Girl	13	Yes	No	Did not read question correctly
132030	Scholten	Boy	11	Yes	No	Did not understand question
133020	Meier	Boy	10	Yes	No	Missed the word "poultry" in question
133033	Brown	Boy	9	Yes	No	Unavailable
133037	Miller	Boy	12	Yes	No	Missed the word "poultry" in question
134008	Kraushaar	Girl	12	Yes	No	Did not understand question
134033	Kraushaar	Boy	17	Yes	No	Did not read question correctly

Table 40. Number and percent of club members by reasons why they did not enroll in poultry, 1967.

Reasons	Number of Club Members	Percent
Not interested in poultry	119	32.78
Another reason not listed	69	19.01
Didn't have space and/or facilities for poultry	49	13.50
Didn't know about poultry projects	45	12.40
Don't like chickens	28	7.71
Parents would not let me	14	3.85
Could not see any profit in chickens	4	1.10
Chickens require too much time	1	0.28
Chickens cost too much to raise	1	0.28
None of my friends enrolled in poultry	0	0.00
Unreported	33	9.09
Total	363	100.00

Computed chi-square = 407.73
Degrees of Freedom = 10
Probability < 0.001

Knowledge of Poultry Projects

It was hypothesized that club members were not familiar with the species of birds acceptable as project subjects. Question 24 listed 15 different farm animals and bird species. Club members were asked to indicate the species that would be acceptable for a poultry project. They were asked to mark on the questionnaire those they considered suitable and record the number on the answer sheet. Data indicated that 29.5 percent of the respondents gave the correct answer (Table 41). This distribution was significant beyond the 0.001 level of probability. Of those who did not answer correctly, bantam was the most frequently missed, quail was second and pigeon was third. Duck, goose, turkey and chicken were omitted less frequently.

Respondents were asked to indicate their willingness to conduct a poultry project in four different areas. These areas were production, marketing, business and science. The responses were marked on a scale ranging from "definitely would not like to" to "definitely would like to" (Table 42). Science type projects received the largest number of favorable answers. Business projects accumulated the greatest number of unfavorable answers. More of the members expressed opinions about science projects than any other type. The production type projects had the greatest number of "I just don't know". Responses from these data, when analyzed by sex, indicated that girls were more opinionated than boys (Table 43). They gave fewer "don't know" answers. Girls gave more unfavorable responses than boys to each of the four project types but their greatest distaste was for business and marketing.

Questions 28, 29 and 30 described different hypothetical 4-H project situations which club members could experience. Respondents

Table 41. Number and percent of club members by choice of listed species acceptable as poultry projects, 1967.

Choice	Number of Club Members	Percent
None	12	3.31
1	14	3.85
2	18	4.96
3	23	6.34
4	34	9.37
5	55	15.15
6	73	20.11
7	107	29.48
8	6	1.65
9	11	3.03
Unreported	10	2.75
Total	363	100.00

Computed chi-square = 316.01
Degrees of freedom = 10
Probability < 0.001

Table 42. Number of club members indicating willingness to conduct poultry projects of different types, 1967.

	Unfavorable	Don't Know	Favorable	Unreported	Total
Production	135	113	101	14	363
Marketing	172	102	76	13	363
Business	180	86	83	14	363
Science	141	77	131	14	363

Table 43. Number of club members indicating willingness to conduct poultry projects of different types, by sex, 1967.

	Unfavorable	Don't Know	Favorable	Sub-Total	Unreported	Total
Production						
Boys	42	50	42	134		
Girls	93	63	61	217		
				351	12	363
Marketing						
Boys	57	46	29	132		
Girls	115	56	47	218		
				350	13	363
Business						
Boys	59	38	35	132		
Girls	121	48	48	217		
				349	14	363
Science						
Boys	47	35	52	134		
Girls	94	42	79	215		
				349	14	363

were asked to select a suitable answer to each question, indicating the type or nature of the project. Question 28 described a poultry production and marketing project. Responses indicated that 28.1 percent gave the correct answer for this situation (Table 44). Question 29 described a typical poultry science project. The correct answer to this question was chosen by 44.1 percent (Table 45). Question 30 described a consumer education project. There were 62.3 percent who felt that this was not a poultry project but one in foods (Table 46). The "correct" response of a poultry consumer education project was given by 12.7 percent. All of these tables had a distribution that was significant beyond the 0.001 level.

Knowledge of the Poultry Industry

To obtain knowledge from the club members regarding job opportunities in the poultry industry, respondents were asked what kind of a job a person could get if he studied poultry in college. The responses to this open end question were classed into four groups: blanks or don't know; expected answer - farming; farming plus some knowledge; and extensive knowledge (Table 47). The expected answer of farming or raise chickens was given by the largest group, 113 members or 31.1 percent. There were 108 or 29.8 percent who either left the question blank or answered that they did not know ($P< 0.001$). It would appear from these data that 60.9 percent of the members have little or no knowledge of the commercial poultry industry while 40.0 percent are somewhat knowledgeable in this area. This finding supports hypothesis 7.

Comparison of knowledge by place of residence indicated no significance in where a club member lived and his knowledge of the poultry

Table 44. Number and percent of club members indicating their concept of a poultry production and marketing project, 1967.

	Number of Club Members	Percent
A poultry production and marketing project	102	28.10
A poultry marketing project	60	16.53
A poultry marketing and science project	51	14.05
A poultry science project	38	10.47
A poultry production and science project	36	9.91
A poultry production project	30	8.26
Not a poultry project at all	23	6.34
Unreported	23	6.34
Total	363	100.00

Computed chi-square = 108.16
Degrees of freedom = 7
Probability < 0.001

Table 45. Number and percent of club members indicating their concept of a poultry science project, 1967.

	Number of Club Members	Percent
A poultry science project	160	44.08
A poultry production and science project	57	15.70
A poultry production project	51	14.05
A poultry production and marketing project	26	7.17
Not a poultry project at all	19	5.23
A poultry marketing and science project	15	4.13
A poultry marketing project	13	3.58
Unreported	22	6.06
Total	363	100.00

Computed chi-square = 398.75
Degrees of freedom = 7
Probability < 0.001

Table 46. Number and percent of club members indicating their concept of a poultry consumer education project, 1967.

	Number of Club Members	Percent
Not a poultry project but one in food preparation	226	62.26
Poultry consumer education project	46	12.67
Not a poultry project at all	29	7.99
A poultry science project	15	4.13
A poultry production project	14	3.86
A poultry marketing project	13	3.58
Unreported	20	5.51
Total	363	100.00

Computed chi-square = 697.98
Degrees of freedom = 6
Probability < 0.001

Table 47. Number and percent of club members by indicated knowledge of job opportunities in the poultry industry, 1967.

	Number of Club Members	Percent
Expected answer - farming	113	31.13
Blank or don't know	108	29.75
Farming plus some knowledge of industry	90	24.80
Extensive knowledge of industry	50	13.77
Unreported	2	0.55
Total	363	100.00

Computed chi-square = 114.25
Degrees of freedom = 5
Probability < 0.001

industry (Table 48). Computed chi-square value indicated the level of probability was greater than 0.05. As would be expected, since they are correlated, analyses by age and years of club work are significant ($P < 0.001$) (Tables 49 and 50). Older club members showed more knowledge of the industry than did the younger ones. When the division was made according to sex, the data was significant ($P < 0.025$) but not at as high a level as age and years of club work (Table 51).

Parents

Source of Project Awareness

The perception of parents as to where their child became aware of projects was sought. Responses were obtained by including two questions worded similarly to those on the member instrument.

The responses to the question designed to obtain knowledge of the child's source of existing projects when he first joined the 4-H Club (Table 52) were similar to the member responses (Table 27). More parents considered the source of awareness to be the local leader ($P < 0.001$). There were 10 percent more parents than members who indicated that fellow club members were the source of awareness. Approximately 8 percent more members than parents said siblings were the source of awareness of projects for new members.

Data from the parent responses do not support hypothesis 1 (b) which stated that peer influence was the most important in creating awareness of existing projects for new members.

Responses to the question investigating member source of awareness of new projects indicated a greater percentage of the parents considered the local leader to be the source ($P < 0.001$). The rank order of the sources were similar to the member responses (Table 53). More parents

Table 48. Number of club members by knowledge of poultry industry and place of residence, 1967.

	Don't Know	Farming	Some Knowledge	Extensive Knowledge	Total
Farm	53	59	50	29	191
Non-farm	44	45	32	19	140
Suburban	4	2	0	1	7
Urban	5	6	8	1	20
Total	106	112	90	50	358
				Unreported	5
					363

Computed chi-square = 7.644
Degrees of freedom = 9
Probability > 0.05
Not significant at chosen critical level

Table 49. Number of club members by knowledge of poultry industry and age, 1967.

Age	Don't Know	Farming	Some Knowledge	Extensive Knowledge	Total
9	16	7	1	0	24
10	21	20	6	3	50
11	22	25	14	4	65
12	25	21	18	5	69
13	8	8	11	8	35
14	6	9	16	4	35
15	4	15	6	11	36
16	3	6	12	7	28
17	2	2	4	4	12
18+	1	0	2	4	7
Total	108	113	90	50	361
				Unreported	2
					363

Computed chi-square = 89.293
Degrees of freedom = 27
Probability < 0.001

Table 50. Number of club members by knowledge of poultry industry and years of club work completed, 1967.

Years of Club Work	Don't Know	Farming	Some Knowledge	Extensive Knowledge	Total
1	41	36	17	10	104
2	29	30	19	4	82
3	17	14	14	2	47
4	7	16	12	8	43
5	5	7	12	7	31
6	2	8	7	9	26
7	2	1	4	6	13
8	0	0	4	2	6
9	1	0	0	1	2
Total	104	112	89	49	354
				Unreported	9
					363

Computed chi-square = 67.881
Degrees of freedom = 24
Probability < 0.001

Table 51. Number of club members by knowledge of poultry industry and sex, 1967.

Sex	Don't Know	Farming	Some Knowledge	Extensive Knowledge	Total
Boys	38	56	33	13	140
Girls	70	57	57	37	221
Total	108	113	90	50	361
				Unreported	2
					363

Computed chi-square = 9.725
Degrees of freedom = 3
Probability < 0.025

Table 52. Number and percent of parents indicating perceived source of their child's awareness of existing projects for new members, 1967.

Source	Number of Club Members	Percent
Local leader	58	32.22
Fellow club member	49	27.22
Parent	25	13.89
Sibling	19	10.56
Child's own knowledge	19	10.56
Others (undefined)	6	3.32
4-H Club agent	1	0.56
Ag or Home Ec agent	0	0.00
Mass media	0	0.00
M.S.U. publications	0	0.00
Unreported	3	1.67
Total	180	100.00

Computed chi-square = 257.47
Degrees of freedom = 10
Probability < 0.001

Table 53. Number and percent of parents indicating perceived source of their child's awareness of new projects for existing members, 1967.

Source	Number of Club Members	Percent
Local leader	91	50.56
Fellow club member	31	17.22
Child's own knowledge	16	8.89
Parent	11	6.10
Sibling	7	3.89
Others (undefined)	7	3.89
M.S.U. publications	5	2.78
4-H Club agent	4	2.22
Ag or Home Ec agent	1	0.56
Mass media	2	1.11
Unreported	5	2.78
Total	180	100.00

Computed chi-square = 422.12
Degrees of freedom = 10
Probability < 0.001

than members considered the child's own knowledge and interest to be the source of awareness, but here, as in the member data, these responses must be considered incorrect as the members would have had to become aware of projects from some source other than their own knowledge.

Hypothesis 2 (b) which said that peers were most important in creating awareness of new projects among their children was not supported by these data. The local leader was the most important source of awareness.

Influence to Enroll in a Project

Hypothesis 3 (b) stated that peers were the most important source of influence causing club members to enroll in a project. Responses to question 30 on the parent instrument were used to investigate this hypothesis. There were 55.6 percent who said that the child's own knowledge and interest was the influence that caused him to enroll (Table 54). Computed chi-square value indicated a probability beyond 0.001. A comparison with member responses indicated a similarity of ranking with the parents.

When asked to indicate the reason why their child enrolled in a project, 62.8 percent of the parents felt their child thought the project would be educational or interesting (Table 50) ($P < 0.001$).

Responses to the four questions seeking information of awareness, influence and reasons were analyzed by constructing contingency tables. Place of residence, ages of both parents, schooling of both parents, farm background of both parents, occupation of both parents, local leader status of both parents, former club member status of both parents, and type and size of farm were used as control variables. The four questions were spread variables. No significant relationships were observed.

Table 54. Number and percent of parents indicating perceived source of influence causing their child to enroll in a project, 1967.

Source	Number of Club Members	Percent
Child's own knowledge and interest	100	55.56
Parent	32	17.78
Fellow club member	23	12.78
Local leader	16	8.89
Sibling	5	2.78
4-H Club agent	1	0.55
Others (undefined)	1	0.55
Ag or Home Ec agent	0	0.00
Mass media	0	0.00
M.S.U publications	0	0.00
Unreported	2	1.11
Total	180	100.00

Computed chi-square = 543.72
Degrees of freedom = 10
Probability < 0.001

Table 55. Number and percent of parents indicating perceived reasons for their child enrolling in a project, 1967.

Source	Number of Club Members	Percent
Child thought it would be educational or interesting	113	62.78
Parents wanted child to work with the project	26	14.44
Other club members were in the project	10	5.56
Don't know any reason	8	4.44
Child's friend enrolled	6	3.33
Local leader suggested it	6	3.33
Sibling left him a start	5	2.78
M.S.U. publications	1	0.56
He thought it would be easy	1	0.56
Mass media	0	0.00
Unreported	4	2.22
Total	180	100.00

Computed chi-square = 587.96
Degrees of freedom = 10
Probability < 0.001

Knowledge of Poultry Projects

A series of six questions was asked the parents to ascertain their acceptance of certain type poultry projects. Each question described a poultry project situation which could occur. Parents were asked to indicate their feelings in regard to their child conducting a project of this nature. The first question, 32, described a science type study dealing with quail. Question 33 pictured a marketing project using turkeys as the subject. Science was the subject of question 34 and dealt with the embryology of chickens. Question 35 could have been a science project studying genetics or a production project dealing with hobby type fancy feathered breeds of chickens. Question 36 dealt with the production and financial record keeping of chickens. The last, question 37, described a typical small backyard type poultry project.

Answers were placed along a scale ranging from unfavorable, "I definitely would not like him to do it" through neutral, "I just don't know" to favorable, "I definitely would like him to do it" (Table 56). Parents were more opinionated about the typical backyard flock with only 41 of the 175 respondents giving a neutral answer. The turkey marketing project received the largest number of favorable and fewest number of unfavorable responses. The science project dealing with embryology of the chicken received the fewest number of favorable and the most number of unfavorable and neutral responses. These data indicated that parents were not as receptive to science type projects as they were to marketing, business and production. This would tend to support hypothesis 6 (b) which said that parents consider only the production phase of poultry as the acceptable project subject.

Table 56. Number of parents indicating acceptance of certain poultry projects for their child, 1967.

Project	Unfavorable	Don't Know	Favorable	Unreported	Total
Science (Quail)	38	51	86	5	180
Marketing (Turkeys)	43	47	86	4	180
Science (Chickens)	58	52	66	4	180
Production and Science (Chickens)	49	51	76	4	180
Business and Production (Chickens)	45	47	83	5	180
Production (Chickens)	51	41	83	5	180

Knowledge of the Poultry Industry

Parents were asked to respond to an open end question regarding their knowledge of occupational opportunities in the poultry industry. Their responses were grouped into four categories for analysis. These categories were: blanks or don't know; the expected answer - farming; farming plus some knowledge; and extensive knowledge of the industry (Table 57). The "don't know" answers accounted for 100 of the responses or over 55 percent. The remaining 45 percent were divided almost equally into the other three categories with the smallest number of parents, 12.8 percent, giving the expected answer ($P < 0.001$). With over three-fourths of the respondents answering "don't know" or "farming", these data would tend to support hypothesis 7 which stated that parents do not have information about the present commercial poultry industry.

Table 57. Number and percent of parents by their knowledge of the poultry industry, 1967.

	Number of Parents	Percent
Blank or don't know	100	55.56
Expected answer - farming	23	12.78
Farming plus some knowledge of industry	29	16.10
Extensive knowledge of industry	28	15.56
Total	180	100.00

Computed chi-square = 90.07
Degrees of freedom = 4
Probability < 0.001

DISCUSSION

Knowledge of 4-H Club projects can be obtained from many different sources. This fact was clearly shown from the responses of both members and parents in this study. The local leader, however, was the most important source in creating awareness of projects. This does not agree with the report by Brehm (1958) but the circumstances of the two studies are not identical. Brehm's study concerned awareness of skills and not projects. The indication of the importance of the local leader is supported by Slayton (1960). Again, the two studies are not identical but the local leader was in a comparable position in 4-H Club work with the school personnel mentioned in Slayton's study.

Ten possible choices were given the club members as answers to the question seeking source of awareness of projects. One in particular was "their own personal knowledge and interest". This choice should not have been included. The nature of club work makes it inconceivable for a club member to be aware of projects from his own knowledge. Projects, or at least suggested projects, are prepared by the supporting staff of the 4-H program and made available through channels to the membership. For this answer to have been possible, the members would have had to conceive of a project themselves. An exceptional club member may have done this but there probably would not be as many as the 6.0 percent who indicated this answer.

Club members, according to the data presented in this study, did not recognize the influence of peers as being important in their enrolling in a project. This does not agree with the literature in regard to peer influence. The studies of the Institute for Social

Research (1960), Copp and Clark (1956), Cunningham (1959), Thornburn (1960), and Mintmier (1956), which emphasize the importance of peer groups, do not indicate what influences the peers. Had these studies investigated this facet, they surely would have found some one among the group of peers who would have had another important influence. This study indicates that club members do look at the content of the programs offered to them and do not just follow the group blindly.

Data from the questions asking the most interesting project carried and the most desired project indicated quite a difference in certain project areas. More club members would enroll in live animal projects if they could. Place of residence appeared to be an influence on the choice of projects.

Thus it would appear from this study that to accomplish the objectives of the 4-H poultry program in Michigan, certain revisions are needed. If club members are to be exposed to learning experiences which will cause them to appreciate and use scientific information; to acquire information and skill in production of poultry; to increase their knowledge of grading, marketing and merchandising of poultry; to increase their knowledge of the nutritive value of poultry and poultry products; and to learn the importance of the poultry industry to the economy, the program must be acceptable to youth. To interest more youth, they must first be aware of the program and feel that those who influence them believe the program to be worthwhile. The program must also offer to them something they consider interesting and educational.

A proposed revised poultry program for Michigan youth includes project work in four areas of orientation. The first area, production, should be available for those club members who have facilities and a desire to conduct a live bird type project. Suggested topics of study

included in this area are the typical egg and meat production projects, plus hobby type projects dealing with pigeons, game birds, exotic birds and standard breeds or bantams. The magnitude of these projects will depend on the age of the individual club member and his own particular set of circumstances. Some group projects in the area of production offer possibilities. The high school vocational agricultural classes have had much success with group broiler projects.

The second area, science oriented projects, has received much emphasis in recent years. This area of study should be offered to those youth wishing to investigate a scientific aspect of poultry. Project size will vary with the member's ability and interest. Projects in embryology, physiology, nutrition, genetics or animal behavior may be conducted in conjunction with other type projects such as production.

Marketing oriented projects should make poultry projects available to those club members who cannot conduct a live bird project. This area of study will give club members an opportunity to investigate marketing of poultry through the cooperation of a producer, processor or retailer. Suggested areas of project work will cover transportation, processing, grading, merchandising and consumer education. These projects will also vary in size according to the individual club member and can be in conjunction with another type project.

A fourth area of orientation should be business or record keeping. These projects will not necessitate the ownership of live birds but will require the agreement of industry cooperators. These people, either producers, processors or retailers, could allow the club member to maintain a set of records on their poultry enterprise.

The data from this study indicated that club members are familiar

with most of the species of birds used as poultry projects. Care should be taken in revising the program and its materials, however, so that club members and local leaders are made aware of the many opportunities that the Avian species offer for project work.

Club members, according to the results of this study, indicated a favorable attitude toward science projects, while parents were not as favorable. The data did not indicate why this difference occurred but the responses by parents indicating knowledge of the poultry industry could be a clue. If parents were more knowledgeable of poultry and its scientific aspects, they might be more favorable to science projects.

Even though this study indicated that several of the suggested new project areas may be unpopular, the projects were included in the proposed program. Despite the possible unpopularity, these projects are included because of their importance in meeting the overall program objectives as well as improving the image of poultry as a project in the 4-H program.

Results of the study indicated that a revision is also needed in the method of reaching club members. The local leaders are an important link in the dissemination system in 4-H club work. Thus they must be made aware of the proposed program and supplied with resources to accomplish the goals of the program. Administrative local leaders verbally indicated during the scheduled meetings that many project leaders felt inadequate in certain project areas. Poultry was one of the most often mentioned areas where project leaders were difficult to secure because of this sense of inadequacy. Previous personal experiences with poultry may be one of the reasons for their reluctance to

accept these positions. Resource materials which provide an outline of the new program and the importance of the poultry industry must be made available to those administrative personnel who are in a position to influence and recruit leaders. These volunteer leaders must be supplied with resources such as knowledgeable persons and printed matter to aid them in accomplishing a successful program. This has been demonstrated with horse and dog care projects.

While it is true that the poultry industry is highly commercialized and in a sense impersonal, there are many poultry producers and businessmen who could act as resource people for a project leader. Training sessions for project leaders should be arranged and a plan devised for making these resource persons available to the project leaders.

It is recommended that a poultry project chairman be secured for each county. This person would work closely with the county 4-H Club agent and the administrative local leaders and would supervise the overall county poultry youth program. The chairman would be a source of information regarding resource people for local project leaders. A notebook, prepared by poultry specialists and revised periodically, would assist these people in accomplishing their task.

The local project leader would be charged with the responsibility of supervising the individual club members and their projects. In addition, the local project leader, with the assistance of the county project chairman, should disseminate information of the poultry program and the poultry industry to the club members and create a desire in the club members to conduct projects in this field.

The administrative local leader would be expected to perform those functions of the program already allotted to that position. This

person could secure project leaders and coordinate project groups into the overall club program.

These three groups of volunteer personnel are not new to the 4-H Club program but their positions have not been fully used in the poultry program in the past.

Industry and its personnel have supported club work in the past but the proposed program recommends that they be given more opportunities to help with the youth. It is proposed that an inventory of knowledgeable people who are willing to act as resource people in a geographic area, be obtained and made available as consultants to club agents, project chairmen and local leaders in that area. These resource people could assist project leaders in conducting training sessions for members and be a source of information for necessary materials to conduct projects.

A new type of opportunity for industry people would be that of a project cooperator. Cooperators such as producers, processors, feed dealers, etc. could make available certain areas of their businesses to club members as a 4-H poultry project. Participation in marketing and business oriented projects will almost necessitate the availability of these cooperators.

Club members and parents appear to have little knowledge of the present commercial poultry industry. Many do not desire to learn of poultry but responses to certain questions in this study indicated that some club members and more parents consider poultry projects to be desirable areas of participation for youth. When asked specifically why they did not enroll in a poultry project, 32.78 percent of the 330 members responding to this question said they were not interested in

poultry. It was not determined how many of the 119 were knowledgeable about poultry and this could be a reason for the lack of interest. There were 12.4 percent who said they did not know that poultry projects existed.

An effort must be made to provide club members with knowledge of the poultry program and the poultry industry. Mass media does not appear to be effective. Personal communication must be incorporated in the program. Although this study did not survey the local leaders, they appear to be the means of increasing the knowledge and interest of the club members. Staff members, particularly extension personnel from the Poultry Science Department of Michigan State University, and industry personnel, must be available to the local leader to convey this knowledge to the members. With increased knowledge and an attractive program, the enrollment in poultry projects should increase.

Research and teaching members of the Poultry Science Department should be expected to assist in preparing project materials and act as resource personnel for this program.

Reaching non-members and recruiting them into 4-H Club work has been a problem for the entire youth program of the Cooperative Extension effort. This problem, when solved, will benefit all club work and not just poultry alone. Some suggestions which may be helpful are: start an active recruiting drive by the existing membership; display posters and exhibits in schools and other places where youth congregate, and inform the public about the 4-H program.

This study did not provide all the answers to the problems facing the 4-H poultry program. It was not intended to do so. A very important audience, the local leader, was not surveyed. A study designed

to obtain the local leader's knowledge of poultry projects and the industry, their source of awareness and their communication habits would be very helpful in arriving at a successful program.

The 4-H Club agents are "gatekeepers" in the communication channels from the specialist to the members. A study of their communication habits, interest and knowledge of poultry projects and interest and knowledge of the poultry industry, would also be very helpful.

SUMMARY

A study was made among 4-H Club members and their parents in fifteen 4-H Clubs in Calhoun, Jackson and Kalamazoo Counties, Michigan. Information was obtained from 363 club members and 180 of their parents by specially prepared and pretested questionnaires.

The local leader in this study was the first source of awareness for 4-H poultry projects. This finding held true for both new club members with existing projects and existing club members with newly offered projects. Club members indicated that their own knowledge and interest were the dominant influences causing them to enroll in a project. The primary reason given for enrolling was that the project appeared to be educational or interesting. Parent responses supported the answers of members in regard to influences and reasons.

Acceptance of certain poultry projects was investigated. Marketing and business oriented projects appeared to be the least popular, while science and production oriented projects were more acceptable. Parent responses, however, indicated a more favorable attitude toward all project types but were most unfavorable toward production oriented projects.

Almost one-third of the members recognized the seven listed species of birds as being acceptable poultry project subjects. In addition, another one-third of the members recognized five or six of the species as being acceptable. Species most often not recognized were bantam, quail and pigeon.

As an indicator of their knowledge of the commercial industry, club members and their parents were asked "what jobs could a college graduate trained in poultry obtain?". The most frequent response from club

members was the answer of farming or raising chickens. The response from 55 percent of the parents was either "don't know" or the question was not answered. The data indicated that there was a general lack of knowledge about the poultry industry among both club members and parents questioned in the three counties.

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A P P E N D I X

Table A. Number of 4-H clubs included in the study, 1967.

Code Number	County	Club	Expected Attendance
111000	Jackson	Tompkins	45
112000	Jackson	Campbell	30
113000	Jackson	Farmer Commanders	30
114000	Jackson	Riceville Prizewinners	30
121000	Calhoun	Harper Creek	37
122000	Calhoun	Hewitt Makemasters	25
123000	Calhoun	Cleveland Pioneers	35
124000	Calhoun	Lucky Fours	29
125000	Calhoun	Pennfield Stars	30
126000	Calhoun	Four Leaf Clovers	30
131000	Kalamazoo	Fulton Lucky Clovers	40
132000	Kalamazoo	Miller Road	50
133000	Kalamazoo	Scotts Busy Youth	70
134000	Kalamazoo	County Center Clovers	50
135000	Kalamazoo	Cooper Farmers and Farmerettes	40

Table B. Procedure for constructing a level of living index from member responses to seven questions, 1967.

Question	Subject of Question	Recoded Variable	Recoded Level and Value Assigned		
			Low - 0	Medium - 1	High - 2
35	Telephones	1	0	1	2 or above
36	Automobiles	2	0 or 1	2	3 or above
37	Televisions	3	0	1	2 or above
38	Bathrooms	4	0	1 or 2	3 or above
41	Sleeping space	5	2 or above	1	0
42 & 43	Paid lessons and out of state travel	6	No and No	No and Yes or Yes and No	Yes and Yes

Table C. Number of instruments distributed, number of returns, and number and percent of members represented by parent returns by clubs, 1967.

Club Code	Instruments Distributed		Number Members Per Family	PARENT RETURNS		
	Members	Parents		Number	Members Represented	
					Number	Percent
111000	10	5	2	4	7	70.0
112000	14	7	2	7	14	100.0
113000	16	14	1.1	8	10	62.5
114000	19	15	1.3	12	17	89.5
121000	25	17	1.5	10	15	60.0
122000	13	10	1.3	8	10	76.9
123000	29	15	1.9	12	23	79.3
124000	15	9	1.7	7	13	86.7
125000	26	16	1.6	15	25	96.2
126000	12	10	1.2	6	8	66.7
131000	41	21	2.0	20	39	95.1
132000	31	20	1.6	12	17	54.8
133000	48	34	1.5	25	37	71.2
134000	38	27	1.4	19	28	73.7
135000	26	20	1.3	16	17	65.4
Total	363	240	1.5	181	280	76.4

Table D. Number and percent of parent returns and effect of telephone calls by clubs, 1967.

Club Code	Pre-Call Returns		Calls	Post-Call Returns		Difference	
	Number	Percent		Number	Percent	Number	Percent
111000	4 of 5	80.0	1	4 of 5	80.0	-	-
112000	4 of 7	57.1	3	7 of 7	100.0	3	42.9
113000	5 of 14	35.7	9	8 of 14	57.1	3	21.4
114000	7 of 15	46.6	7	12 of 15	80.1	5	33.4
121000	5 of 17	29.4	10	10 of 17	58.8	5	29.4
122000	5 of 10	50.0	4	8 of 10	80.0	3	30.0
123000	8 of 15	53.3	7	12 of 15	80.0	4	26.7
124000	3 of 9	33.3	6	7 of 9	77.8	4	44.5
125000	9 of 16	56.3	7	15 of 16	93.8	6	37.5
126000	2 of 10	20.0	7	6 of 10	60.0	4	40.0
131000	11 of 21	52.3	10	20 of 21	95.2	9	42.9
132000	8 of 20	40.0	8	12 of 20	60.0	4	20.0
133000	21 of 34	61.8	8	25 of 34	73.5	4	11.7
134000	13 of 17	48.1	10	19 of 27	70.4	6	22.3
135000	11 of 20	55.0	8	16 of 20	80.0	5	25.0
Total	116 of 240	48.3	105	181 of 240	75.4	65	27.1

Table E. Number of members choosing most interesting project and most desired project, by projects, 1967.

Project	Most Interesting		Most Desired	
	Number	Percent	Number	Percent
Archery	4	1.19	27	7.57
Art	6	1.78	1	0.28
Automotive care and safety	4	1.19	10	2.80
Beef	10	2.96	7	1.96
Business Program	0	0.00	1	0.28
Basic Conservation	4	1.19	1	0.28
Ceramics	7	2.08	1	0.28
Child Development	0	0.00	1	0.28
Clothing	55	16.32	12	3.36
Dairy	30	8.90	10	2.80
Dog care and training	4	1.19	13	3.64
Electrical science	11	3.26	6	1.68
Entomology	7	2.08	7	1.96
Family living	4	1.19	4	1.12
Field crops	2	0.59	1	0.28
Fire prevention	0	0.00	0	0.00
First aid	1	0.30	2	0.56
Flower garden	5	1.48	5	1.40
Foods	37	10.98	23	6.44
Forest Conservation	2	0.59	4	1.12
Fruits	0	0.00	1	0.28
Gun safety	7	2.08	10	2.80
Home design	4	1.19	12	3.36
Horses	21	6.23	78	21.85
Horticulture	3	0.89	5	1.40
Plant Science	0	0.00	3	0.84
Landscape	0	0.00	4	1.12
Leathercraft	32	9.50	8	2.24
Junior Leadership	6	1.78	16	4.48
Knitting	22	6.53	7	1.96
Management for you and family	0	0.00	2	0.56
Personal improvement	0	0.00	2	0.56
Photography	1	0.30	7	1.96
Plastics	4	1.19	1	0.28
Poultry	0	0.00	4	1.12
Rabbits	10	2.96	11	3.09
Safety	1	0.30	2	0.56
Sheep	2	0.59	5	1.40
Swine	6	1.78	3	0.84
Soil and water	1	0.30	0	0.00
Tractor care and safety	1	0.30	11	3.09
Vegetable gardening	5	1.48	3	0.84
Wildflowers	3	0.89	3	0.84
Wildlife	5	1.48	15	4.20
Woodworking	10	2.96	8	2.24
Subtotal	337	100.00	357	100.00
Unreported	26		6	
Total	363		363	

EXHIBIT A

111

4-H Club Member Questionnaire

Michigan State University

Instructions:

An answer sheet which will be scored by machine is attached to your questionnaire booklet. Each answer space has a place for ten different responses numbered 0 through 9. You are to black out with the special pencil, the space that is numbered like the number opposite your chosen answer. For example: In Question #1, if you are in the 6th grade, you would black out space 2. For Question #2, if you are a boy, you would black out space 0. Spaces for the odd numbered answers are on the left side of the answer sheet; spaces for the even numbered answers are on the right side of the answer sheet.

The last question,#44, is a completion type question. Turn in that sheet with the machine scoring answer sheet.

Thank you for your assistance in this study.

4-H Club Member Questionnaire

Michigan State University

1. What is your grade in school?

0. 4th	5. 9th
1. 5th	6. 10th
2. 6th	7. 11th
3. 7th	8. 12th
4. 8th	9. Do not attend school

2. Are you a

0. Boy
1. Girl

3. How old were you on your last birthday?

0. Nine	5. Fourteen
1. Ten	6. Fifteen
2. Eleven	7. Sixteen
3. Twelve	8. Seventeen
4. Thirteen	9. Eighteen or over

4. How many brothers do you have?

0. No brothers	5. Five
1. One	6. Six
2. Two	7. Seven
3. Three	8. Eight
4. Four	9. Nine

SKIP TO QUESTION 6 IF YOU HAVE NO BROTHERS

5. Have any of your brothers been 4-H club members?

0. No
1. Yes, they are older
2. Yes, they are younger
3. Yes, they are both older and younger

6. How many sisters do you have?

0. No sisters	5. Five
1. One	6. Six
2. Two	7. Seven
3. Three	8. Eight
4. Four	9. Nine

Skip to Question 8 if you have no sisters.

7. Have any of your sisters been 4-H club members?

0. No
1. Yes, they are older
2. Yes, they are younger
3. Yes, they are both older and younger

8. How many years have you been a 4-H club member?

0. One
1. Two
2. Three
3. Four
4. Five
5. Six
6. Seven
7. Eight
8. Nine
9. 10 years or more

9. Who influenced you most to join the 4-H club? (Mark only one)

0. Agricultural agent or Home Ec agent
1. Brother or sister
2. 4-H club agent
3. 4-H local leader
4. Friends
5. Newspaper, radio, T.V.
6. No one
7. Others
8. Parents
9. School teacher

10. What was the most important reason why you joined the 4-H club? (Mark only one)

0. I liked the activities
1. I thought it would be fun
2. I was interested in projects
3. I wanted to learn things
4. I admired other friends already in 4-H
5. I wanted to help others
6. I enjoy being with other people
7. My family wanted me to join
8. All my friends were going to join
9. Other reasons

11. Think back to when you first joined 4-H club, or before you joined. How did you first learn of the projects available? Indicate on the answer sheet which of the following first informed you of the projects available. (Mark only one)

0. A fellow club member
1. A local leader
2. A 4-H club agent
3. Parent
4. Agricultural Agent or Home Ec Agent
5. Brother or sister
6. Newspaper, radio, T.V.
7. Materials published by M.S.U.
8. My own personal knowledge and interest
9. Other

12. Think back to some instance when you first heard of a new project offered by a 4-H club. It may have been any sort of project. Indicate on the answer sheet which of the following first informed you of this new project. (Mark only one)

0. A fellow club member
1. A local leader
2. A 4-H club agent
3. Parent
4. Agricultural Agent or Home Ec Agent
5. Brother or sister
6. Newspaper, radio, T.V.
7. Materials published by M.S.U.
8. My own personal knowledge and interest
9. Other

From the list on the next page, indicate what was your most interesting project in 1966-67. Select only one project and then draw a circle around the two digits to the left of the one you select. Next, on the answer sheet, mark answer 13 by blacking out the space corresponding with the first digit of your circled number and mark answer 14 by blacking out the space corresponding with the second digit of your circled number. You should have only <u>one</u> mark for answer <u>13</u> and <u>one</u> mark for answer <u>14</u>

13. 1st digit 14. 2nd digit

Next year, if you could take any project you wanted from the list of projects on the next page, what would it be? Make a square around the number to the left of the project you would like to take. Then on the answer sheet mark answer 15 by blacking out the space corresponding with the first digit of your chosen number and mark answer 16 by blacking out the space corresponding with the second digit of your chosen number. You should have only <u>one</u> mark for answer <u>15</u> and <u>one</u> mark for answer <u>16</u>.

15. 1st digit 16. 2nd digit

00. Archery
01. Automotive care and safety
02. Beef
03. Business Program
04. Basic conservation
05. Child development
06. Clothing
07. Dairy
08. Dog care and training
09. Electrical science
10. Entomology
11. Family living
12. Field crops
13. Fire prevention
14. First aid
15. Flower garden
16. Foods
17. Forest conservation
18. Fruits
19. Gun safety
20. Home design
21. Horses
22. Horticulture
23. Plant Science
24. Landscape
25. Leathercraft
26. Junior leadership
27. Knitting
28. Management for you and your family
29. Personal improvement
30. Photography
31. Poultry
32. Rabbits
33. Safety
34. Sheep
35. Swine
36. Soil and water
37. Tractor care and safety
38. Vegetable gardening
39. Wildflowers
40. Wildlife
41. Woodworking

17. How many projects did you carry in 1966-67?

0. One
1. Two
2. Three
3. Four
4. Five
5. Six
6. Seven
7. Eight
8. Nine
9. 10 or more

18. How satisfied were you with the entire group of 4-H projects you carried in 1966-67?

0. Not satisfied at all
1. Not very satisfied
2. They were so so
3. Quite satisfied
4. Very satisfied

19. You decided to enroll in at least one project this year. Think back to when you made this decision. Indicate on the answer sheet which of the following influenced you most to enroll in this project. (Mark only one)

0. A fellow club member
1. A local leader
2. A 4-H club agent
3. Parent
4. Agricultural Agent or Home Ec agent
5. Brother or sister
6. Newspaper, radio, T.V.
7. Materials published by M.S.U.
8. My own personal knowledge and interest
9. Other

20. There was some reason why you enrolled in a certain project this year. Indicate on the answer sheet the <u>most important</u> reason causing you to enroll in this project or projects. (Mark only one)

0. All my friends were taking it
1. Can't remember any particular reason
2. I admired other club members already in the project
3. I had a start from an older brother or sister
4. I heard about the project from newspaper, radio, T.V.
5. I read about the project in materials published by M.S.U.
6. I thought it would be an easy project
7. I thought it would be educational or interesting
8. My parents wanted me to work with the project
9. The local leader suggested I enroll

21. How interested are your parents or guardian in you belonging to 4-H?

0. They did not want me to join
1. They do not like the idea
2. They do not care one way or another
3. They are interested
4. They are very interested

22. How often did you attend either project or general business meetings this year? (Mark only one)

0. Attended all the meetings
1. Attended almost all of the meetings
2. Attended about one-half of the meetings
3. Attended a few of the meetings
4. Did not attend any meetings

23. Where do you live?

0. On a farm
1. In the country but not on a farm
2. In the suburbs of a town
3. In town

24. How many of the following species of animals would be acceptable for a poultry project? Not just for you but for any club member. Draw a circle around each of the species you believe to be suitable. Then count your circles and mark the answer sheet.

Calf, Duck, Quail, Steer, Turkey, Pig, Dog, Pigeon, Bantam, Goose, Horse, Chicken, Dairy cow, Lamb, Goat

0. None
1. One
2. Two
3. Three
4. Four
5. Five
6. Six
7. Seven
8. Eight
9. Nine

25. Did you enroll in a poultry project in 1966-67?

0. Yes
1. No

SKIP TO QUESTION 27 IF YOU DID NOT ENROLL IN A POULTRY PROJECT

26. If you enrolled in poultry, there was some reason why you enrolled. Indicate on the answer sheet the most important reason causing you to enroll in poultry. (Mark only one)

0. All my friends were taking poultry
1. I can't remember any particular reason
2. I admired other club members already in poultry
3. I had a start from an older brother or sister
4. I heard about poultry projects from newspaper, radio, T.V.
5. I read about poultry projects from materials published by M.S.U.
6. I thought poultry would be an easy project
7. I thought poultry projects would be educational or interesting
8. My parents wanted me to work with the poultry project
9. The local leader suggested I enroll

27. If you did not enroll in poultry this year, why not?

0. Didn't know about poultry projects
1. Didn't have space and/or facilities for poultry
2. Don't like chickens
3. Chickens require too much time
4. Chickens cost too much to raise
5. Parents would not let me
6. I am not interested in poultry
7. I could not see any profit in chickens
8. None of my friends enrolled in poultry
9. Another reason not listed above

Each question describes a project that a club member might conduct. You are to mark what kind of a project it is from the group of answers listed below each question.

28. A club member fed two groups of broiler chicks different rations. He weighed the chicks once a week and recorded weights and computed rate of gain and feed efficiency. At the end of the growing period he followed the chicks to the dressing plant and obtained the dressed weight, condemnation loss and dressed grades. He computed dressing yield and determined how much money the processor would have to sell the meat for in order to break even.

0. A poultry production project
1. A poultry marketing project
2. A poultry science project
3. A poultry production and marketing project
4. A poultry marketing and science project
5. A poultry production and science project
6. Not a poultry project at all

29. Another club member built an incubator which held 3 dozen eggs. He placed 3 dozen eggs in this incubator. 1 dozen were completely coated with wax, 1 dozen had ½ of the shell coated with wax. The third dozen had no wax on the shell. He noted the weight of each egg each day and then at the end of the incubation period he noted the eggs that hatched and the weight of the baby chick.

    0. A poultry production project
    1. A poultry marketing project
    2. A poultry science project
    3. A poultry production and marketing project
    4. A poultry marketing and science project
    5. A poultry production and science project
    6. Not a poultry project at all

30. A club member practiced barbecuing chickens until he had the process perfect. He then demonstrated to a group of friends his method of cooking chicken.

    0. A poultry production project
    1. A poultry marketing project
    2. A poultry science project
    3. A poultry consumer education project
    4. Not a poultry project at all but one in food preparation
    5. Not a project at all

How would you like to do a poultry project in each of the types of projects listed in the following questions? Select the answer that best fits your feelings about these project types.

31. Production (growing birds of some type, keeping laying hens, etc.)

    0. I definitely would not like to
    1. I would not like to
    2. I just don't know
    3. I would like to
    4. I definitely would like to

32. Marketing (learning grades of eggs and poultry, observing marketing channels, etc.)

    0. I definitely would not like to
    1. I would not like to
    2. I just don't know
    3. I would like to
    4. I definitely would like to

33. Business (figuring production cost, obtaining processing cost,etc.)

0. I definitely would not like to
1. I would not like to
2. I just don't know
3. I would like to
4. I definitely would like to

34. Science (research with birds in nutrition, embryology,genetics, etc.)

0. I definitely would not like to
1. I would not like to
2. I just don't know
3. I would like to
4. I definitely would like to

We are interested in some things about your home. Please indicate on the answer sheet how many of the following you have.

35. How many telephones in your home and in your parent's farm buildings?

0. None
1. One
2. Two
3. Three
4. Four
5. Five
6. Six
7. Seven
8. Eight
9. Nine

36. How many automobiles and trucks do you have in your family? By family we mean you, your parents, and brothers or sisters who still live in the home.

0. None
1. One
2. Two
3. Three
4. Four
5. Five
6. Six
7. Seven
8. Eight
9. Nine or more

37. How many television sets do you have in your home and farm buildings? (Do not count those owned by non-family members)

0. None
1. One
2. Two
3. Three
4. Four
5. Five
6. Six
7. Seven
8. Eight
9. Nine

38. How many bathrooms (full and half) do you have inside your home?

0. None
1. One
2. Two
3. Three
4. Four
5. Five
6. Six
7. Seven
8. Eight
9. Nine

39. How many phonographs (Hi-Fi and Stereo) do you have in your home?

0. None
1. One
2. Two
3. Three
4. Four
5. Five
6. Six
7. Seven
8. Eight
9. Nine

40. How many rooms in your home? (Do not count bathrooms)

0. One
1. Two
2. Three
3. Four
4. Five
5. Six
6. Seven
7. Eight
8. Nine
9. Ten or more

41. How many people usually sleep in the room where you sleep?

0. No one. I have my own bedroom
1. One
2. Two
3. Three
4. Four
5. Five
6. Six
7. Seven
8. Eight
9. Nine or more

42. Do you take regular lessons of any kind (music, dancing, riding, sports, etc.) for which your parents pay someone?

0. Yes
1. No

43. Did you travel outside Michigan during this past year 1966?

0. Yes
1. No

Complete the question below in the space provided on this sheet. Turn in this sheet with the machine scoring answer sheet.

44. If a person studies poultry in college, what kind of a job can he get after college?

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Dear Parents:

Since your child is at present enrolled in the 4-H club program, I am sure you consider this club work important. The Extension Service solicits your assistance to improve 4-H club work to meet the needs of our changing times.

This study is being undertaken to aid us in preparing more appealing resource materials and programs. Your responses to the enclosed questionnaire will help us design projects and project materials which will be more acceptable to our youth and will better equip them for adult citizenship responsibilities.

Dr. Gordon Beckstrand, Director of 4-H Youth Programs, Michigan State University, and your 4-H Club Agent, have given their approval for this study.

Enclosed is a questionnaire and an answer sheet. Please complete the answer sheet by answering the questions on the questionnaire and returning it to us in the self-addressed stamped envelope, as promptly as possible. The study cannot be completed until the responses from you, the parents, are received.

Thank you for your cooperation and assistance.

Sincerely,

K. L. Swiney

K. L. Swiney
Graduate Research Assistant
Poultry Science Department
Michigan State University

4-H Club Parent Questionnaire

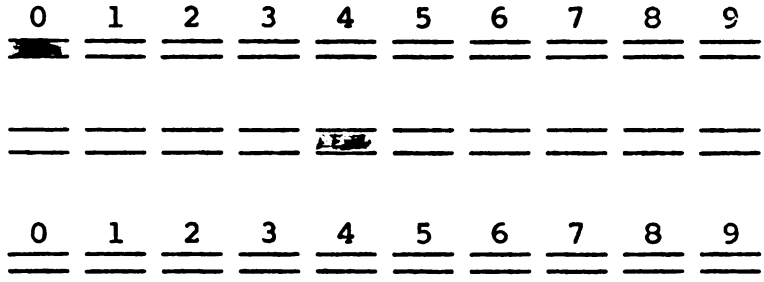
Michigan State University

Instructions:

This questionnaire has been prepared to include both male and female heads of the family. Either parent may complete the questions, answering for the other. In either case, please answer all the questions.

An answer sheet which will be scored by machine is attached to your questionnaire booklet. Each answer space has a place for ten different responses numbered 0 through 9. You are to black out the space that is numbered like the number opposite the response which you choose. For example: In Question #1, if your place of residence is farm, you would black out space 0. For Question #3, if husband is between 40 and 44 years old, you would black out space 4.

Example:



Spaces for the odd numbered answers are on the left side of the answer sheet; spaces for the even numbered answers are on the right side of the answer sheet.

Question #40, the last one, is a completion type question and should be answered in the space provided on page 9. Use the self-addressed stamped envelope and return the answer sheet and page 9 to us promptly. This study cannot be completed until we have your responses.

If you should receive two or more of these packets due to having more than one child enrolled in club work, please complete only one answer sheet but return all answer sheets as we need them to complete our records.

Thank you for your cooperation.

4-H Club Parent Questionnaire

1. Place of residence

   0. Farm
   1. Non-farm rural
   2. In the suburbs of a town
   3. In town

2. Indicate what adults are living in the home

   0. Both father or male head and mother or female head of family
   1. Mother or female head only
   2. Father or male head only

SKIP TO QUESTION 10 IF THERE IS NO MALE FAMILY HEAD LIVING IN THE HOME

3. How old is the male family head or father?

   0. Under 25
   1. 25-29 years
   2. 30-34 years
   3. 35-39 years
   4. 40-44 years
   5. 45-49 years
   6. 50-59 years
   7. 60 or over

4. How much schooling has he completed?

   0. Some elementary (1-8)
   1. Completed elementary grades (8)
   2. Some high school (9-12)
   3. Graduated from high school (12)
   4. Some college
   5. Completed a Bachelor's Degree
   6. Some graduate work
   7. Completed one or more graduate degrees

5. Was he reared on a farm?

   0. Yes - entire childhood
   1. Yes - only part of childhood
   2. No

6. Is he at present a 4-H local leader? (Mark only one)

   0. No
   1. Yes, an administrative leader
   2. Yes, a project leader
   3. Yes, both administrative leader and project leader

7. Is he a former 4-H club member?

0. Yes
1. No

8. Listed below are some occupational categories. Indicate in which of these the male head of the family should be considered. (Mark only one)

0. Professional or technical-Engineer,Doctor,Teacher,Lawyer,etc.
1. Farmer or farm manager
2. Manager - official, proprietor,etc.
3. Clerical - stenographer, clerk, etc.
4. Salesworker - retail, wholesale
5. Craftsman - construction, mechanic, repairman, etc.
6. Operative - driver, operator, etc.
7. Service - guard, waiter, cook, etc.
8. Laborer - construction, manufacturing
9. Retired

9. Is he self-employed or salaried and does he work part time or full time? (Mark only one)

0. Self employed - part time work
1. Self employed - full time work
2. Salaried - Part time work
3. Salaried - Full time work
4. Combination of any of the above

SKIP TO QUESTION 17 IF THERE IS NO FEMALE FAMILY HEAD LIVING IN THE HOME

10. How old is the female family head or mother?

0. Under 25
1. 25-29 years
2. 30-34 years
3. 35-39 years
4. 40-44 years
5. 45-49 years
6. 50-59 years
7. 60 or over

11. How much schooling has she completed?

0. Some elementary (1-8)
1. Completed elementary grades (8)
2. Some high school (9-12)
3. Graduated from high school (12)
4. Some college
5. Completed a Bachelor's Degree
6. Some graduate work
7. Completed one or more graduate degrees

12. Was she reared on a farm?

0. Yes - entire childhood
1. Yes - only part of childhood
2. No

13. Is she at present a 4-H local leader? (Mark only one)

0. No
1. Yes, an administrative leader
2. Yes, a project leader
3. Yes, both administrative leader and project leader

14. Is she a former 4-H club member?

0. Yes
1. No

15. Does the female family head work outside the home? (Mark only one)

0. No
1. Yes, part time, salaried
2. Yes, full time, salaried
3. Yes, part time, self-employed
4. Yes, full time, self-employed
5. Combination of 1,2,3 or 4

SKIP TO QUESTION 17 IF SHE DOES NOT WORK OUTSIDE THE HOME

16. If she works outside the home, what type of work does she do? (Mark only one)

0. Professional or technical-Engineer, Doctor,Teacher,Lawyer,etc.
1. Farmer or farm manager
2. Manager - official, proprietor, etc.
3. Clerical - stenographer, clerk, etc.
4. Salesworker - retail, wholesale
5. Craftsman - construction, mechanic, repairman, etc.
6. Operative - driver, operator, etc.
7. Service - guard, waitress, cook, etc.
8. Laborer - construction, manufacturing
9. Retired

17. Is the head of the family a farmer?

0. No
1. Yes, part time
2. Yes, full time

SKIP TO QUESTION 20 IF THE HEAD OF THE FAMILY IS NOT A FARMER

18. If the head of the family is a farmer, what type of farm is it?

0. Dairy
1. Poultry
2. Beef
3. Cash-Grain
4. Fruit
5. General
6. Truck crop
7. Tree farmer
8. Swine
9. Other

19. How many acres are included in the farming operation?

0. 0-10 acres
1. 10-50 acres
2. 51-100 acres
3. 101-250 acres
4. 251-500 acres
5. 501-750 acres
6. 751-1000 acres
7. 1000 acres or over

20. How many children ages 10 to 18 live in your household?

0. None
1. One
2. Two
3. Three
4. Four
5. Five
6. Six
7. Seven
8. Eight
9. Nine or more

21. How many of these children are, or have been, 4-H club members?

0. None
1. One
2. Two
3. Three
4. Four
5. Five
6. Six
7. Seven
8. Eight
9. Nine or more

22. Try to think about what you feel is the purpose of 4-H club work. Keeping this purpose in mind, decide how well this purpose is accomplished by the local 4-H club.

0. Very well
1. Well enough
2. Can't decide
3. Not well enough
4. Not very well

Below is a list of possible contributions which 4-H club can make in a child's life.

23. Mark the space in answer 23 for the item below that you feel is the most desirable contribution which 4-H is making to youth. (Select only one)

24. Mark the space in answer 24 for the item below that you feel is the least desirable contribution which 4-H is making to youth. (Select only one)

0. Learn new things
1. To teach children to work together
2. To give youth something to do
3. Develop youth for future citizenship
4. To show youth opportunities for future occupations
5. To develop youth leadership ability
6. To create responsibility in youth
7. To demonstrate to youth desirable personal values for living
8. It is enjoyable for children
9. Something not listed above

25. How satisfied were you with the group of 4-H projects available for your child in 1966?

0. Very satisfied
1. Satisfied
2. Satisfied with some, dissatisfied with others
3. Dissatisfied
4. Very dissatisfied

26. How satisfied were you with the materials (records and resource material) in the various 4-H projects in 1966?

0. Very satisfied
1. Satisfied
2. Satisfied with some, dissatisfied with others
3. Dissatisfied
4. Very dissatisfied

27. Who influenced your child the most to join 4-H club? (Mark only one)

0. Agricultural Agent or Home Ec Agent
1. Brothers or sisters
2. 4-H Club Agent
3. 4-H Local Leader
4. Friends of theirs
5. Mass media-newspaper, radio, T.V.
6. No one
7. Others
8. Parents
9. School teacher

28. Think back to when your child first joined 4-H club, or before he joined. He became aware of available projects from some source. Indicate on the answer sheet which of the following you believe was his first source of knowledge about these projects. (Mark only one)

    0. A fellow club member
    1. A local leader
    2. A 4-H agent
    3. Parent
    4. Brother or sister
    5. Agricultural extension agent or Home Ec agent
    6. Newspaper, radio or T.V.
    7. Materials published by Michigan State University
    8. His own personal knowledge and interest
    9. Other

29. Think back to when your child first heard of a newly offered project. It may have been any project. Indicate on the answer sheet which of the following you believe was his first source of knowledge about this project. (Mark only one)

    0. A fellow club member
    1. A local leader
    2. A 4-H agent
    3. Parent
    4. Brother or sister
    5. Agricultural extension agent or Home Ec agent
    6. Newspaper, radio or T.V.
    7. Materials published by Michigan State University
    8. His own personal knowledge and interest
    9. Other

30. Who do you think was the strongest influence that caused your child to decide to enroll in a particular project this past year? (Mark only one)

    0. A fellow club member
    1. A local leader
    2. A 4-H agent
    3. Parent
    4. Brother or sister
    5. Agricultural extension agent or Home Ec agent
    6. Newspaper, radio or T.V.
    7. Materials published by Michigan State University
    8. His own personal knowledge and interest
    9. Other

31. What do you think was the main reason your child enrolled in his project this past year? (Mark only one)

0. All of his or her friends were taking it
1. Don't know of any reason
2. My child admired other club members already in the project
3. An older brother or sister left him a start in this project
4. Knowledge from newspaper, radio or T.V.
5. My child read about the project in materials published by Michigan State University
6. My child thought the project would be an easy one
7. My child thought it would be educational or interesting
8. We as parents wanted the child to work with the project
9. The local leader suggested the project

Below are some 4-H project situations. What are your feelings regarding your child conducting a similar poultry project?

32. A club member gave three different groups of baby quails different rations. He observed and recorded mortality, feed consumption and body weight for each quail each week. At the end of the growing period he computed rate of gain and feed efficiency.

0. I definitely would not like him to do it
1. I would not like him to do it
2. I just don't know
3. I would like him to do it
4. I definitely would like him to do it

33. A club member studied the processing of turkeys, following a flock of birds from the grower to the processor to the wholesaler and to the retailer. This study included dressing yields, prices received at various stages, and the different forms of turkey available to the consumer.

0. I definitely would not like him to do it
1. I would not like him to do it
2. I just don't know
3. I would like him to do it
4. I definitely would like him to do it

34. A club member constructed a small incubator that would hold 3 dozen eggs. He subjected the incubating eggs to x-rays and at the end of the incubation period he noted the number of dead in shells, number of live chicks and their condition. He attempted to determine when the dead in shell actually died and what was the cause of death.

0. I definitely would not like him to do it
1. I would not like him to do it
2. I just don't know
3. I would like him to do it
4. I definitely would like him to do it

35. A club member obtained 12 birds - a male and a female of six different breeds and varieties. He made six different matings, crossing two of the different varieties in each mating and noted the offspring appearance.

0 I definitely would not like him to do it
1. I would not like him to do it
2. I just don't know
3. I would like him to do it
4. I definitely would like him to do it

36. A club member kept records, both production and financial, on his father's flock of 10,000 cage layers.

0. I definitely would not like him to do it
1. I would not like him to do it
2. I just don't know
3. I would like him to do it
4. I definitely would like him to do it

37. A club member grew out 50 baby chickens. He dressed the males for fryers and kept the 20 pullets for egg production.

0. I definitely would not like him to do it
1. I would not like him to do it
2. I just don't know
3. I would like him to do it
4. I definitely would like him to do it

38. Do you think poultry projects are unpopular with 4-H club members?

0. Yes
1. No

SKIP TO QUESTION 40 IF YOU DO NOT THINK POULTRY PROJECTS ARE UNPOPULAR

39. If you think poultry projects are unpopular with 4-H club members, why? (Mark only one)

0. Poultry project materials are not suitable
1. Poultry projects require too much in the way of facilities
2. Poultry projects require too much time
3. Club members are not familiar with possible opportunities in poultry agri-business
4. Poultry projects are not profitable, moneywise
5. Poultry is associated with farming
6. Club members are interested in other projects
7. Club members have not been encouraged to enroll in poultry
8. Present poultry projects do not equip youth for adulthood
9. Some other reason not listed above

Complete the question below in the space provided on this sheet. Return this portion with the machine scoring answer sheet.

40. What are some jobs that are available to a person trained in poultry science? Give specific jobs - not general as truck driver, laborer, etc.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____