



12-2001

## **Perceptions of the Putnam County Explorer & Junior 4-H program by local public school educators**

Robert Lee Strong

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To the Graduate Council:

I am submitting herewith a thesis written by Robert Lee Strong entitled "Perceptions of the Putnam County Explorer & Junior 4-H program by local public school educators." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Agriculture and Extension Education.

Roy R. Lessly, Major Professor

We have read this thesis and recommend its acceptance:

Martha Jo Tolley, Randol Waters

Accepted for the Council:

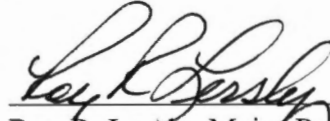
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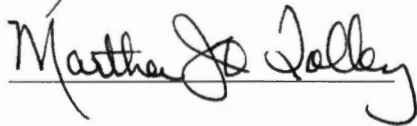
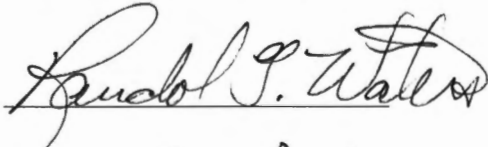
To the Graduate Council:

I am submitting herewith a thesis written by Robert L. Strong entitled "Perceptions of the Putnam County Explorer and Junior 4-H Program by Local Public School Educators." I have examined the final copy of this thesis and content and recommend that it be accepted in partial fulfillment of the requirements of the degree of Master of Science, with a major in Agricultural and Extension Education.

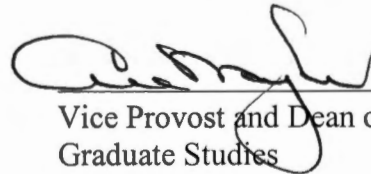


Roy R. Lessly, Major Professor

We have read this thesis  
and recommend its acceptance



Accepted for the Council:



Vice Provost and Dean of  
Graduate Studies

PERCEPTIONS OF THE PUTNAM  
COUNTY EXPLORER & JUNIOR  
4-H PROGRAM  
BY LOCAL PUBLIC SCHOOL EDUCATORS

A Thesis

Presented for the

Master of Science Degree

The University of Tennessee, Knoxville

Robert L. Strong

December 2001



AG-VET-MED.

Thesis  
2001  
.S77

## DEDICATION

The author dedicates this study to his parents, Robert and Connie Strong. The author appreciates their support, thoughtfulness, love and encouragement during the completion of this study. Thanks Mom and Dad.

## ACKNOWLEDGMENTS

Great appreciation is given to the author's advisor, Dr. Roy R. Lessly, Professor Emeritus of Agricultural and Extension Education, for his guidance and understanding in directing this study. Sincere appreciation is expressed to the members of his committee, Ms. Martha Jo Tolley, Professor Emeritus Four-H Department, and Dr. Randol Waters, Agricultural and Extension Education, for their suggestions and assistance, and Dr. Waters assistance provided with data analysis.

Appreciation is also extended to Mr. George M. Killgore, Fentress County Extension Leader, for his encouragement and assistance during this study. Gratitude is also extended to Mrs. Margaret M. Pile, Fentress County Extension Agent, for her assistance and encouragement for this study.

The author would like to thank Pat Dulworth, Senior Secretary Putnam County Extension Office, for her assistance, cooperation, and words of encouragement. Additionally, appreciation is extended to Scott Chadwell, Putnam County Extension Leader, for his guidance and support for this study. Also, appreciation is expressed to the school educators who thoughtfully donated their time by completing and returning the questionnaire.

Loving appreciation is expressed to my wife, Desiree, for her love, support and understanding during the completion of this study.

## ABSTRACT

The purpose of this study was to gain an understanding of the perceptions of Putnam County Explorer and Junior 4-H Program by Local Public School Educators regarding The University of Tennessee Agricultural Extension 4-H educational program. The study focused on respondent's perceptions regarding the Objectives of 4-H, Communication Strategies and Image of the agent, Knowledge of the 4-H Curriculum, the Tennessee 4-H Priority Program Areas. The study strived to determine the relationships between these variables and selected demographic variables including: gender, age, number of years employed, present position, area the respondents were raised, and whether their children were in 4-H.

The study was descriptive/coorelational. The target audience was school personnel including principals, assistant principals, fifth and sixth grade teachers, and fourth grade teachers in the Putnam County public school system. A total of 115 questionnaires were hand delivered to each school. Of the 87 returned, 24% were principals or assistant principals, 46% were fifth and sixth grade teachers, and 30% were fourth grade teachers.

A closed ended Likert-type scale was used for the decision making statements on the survey. Questionnaire data were tabulated by the researcher using the Statistical Package for the Social Sciences (SPSS for windows version 10.07). The findings were deduced through the use of descriptive statistics, the *t*-test and *f*-test, and Duncan's Multiple Range Test for multiple comparisons. The *t*-test and *f*-test were used to determine the level of significance of the findings for the Post Hoc comparisons. The level of significance was  $p \leq .05$ .

The instrument consisted of two parts. Part I collected respondent's perceptions concerning Objectives of 4-H, Communication Strategies and Image of the agent, Knowledge of the 4-H Curriculum, the Tennessee 4-H Priority Program Areas. Part II collected demographic information regarding the respondents: age, gender, level of education, years employed, present position, where they were raised and whether their children were 4-H members.

The educators participating in this research indicated that 4-H members were acquiring public speaking and self-expression skills through their participation in the 4-H program. Respondents indicated that e-mail, personal visits, personal letters, and telephone calls were the most effective methods for the 4-H agent to communicate with school personnel. The findings in the study indicate that educators preferred personal contact over mass media as a means of communicating with the 4-H agent.

Educators indicated that the 4-H agent should keep school personnel informed of the 4-H mission and provide recognition (plaques, banquets, etc.) to 4-H volunteer leaders. Furthermore, educators reported using the history and language arts materials more than any other 4-H curriculum. Respondents indicated that an in-school 4-H program provides youth an opportunity to gain leadership skills, and teaches citizenship skills.

Female educators agreed more favorably that members acquired the 4-H objectives, with the image of the agent statements, and with the ability of 4-H to address priority program areas than did the male educators. Respondents 36 to 45 years old indicated more agreement that the agent train volunteers to plan and conduct 4-H club

meetings than did educators over 55 years old. Of the 12 respondents that participated in the study over age 55, nine were principals. Principals agreed less strongly that the agent train volunteers to plan and conduct 4-H club meetings than did teachers.

Principals more strongly agreed that the agent should keep school personnel informed of the 4-H mission, devote time to public relations, and provide recognition to volunteers than did fourth and fifth and sixth grade educators.

Also, educators who had been employed 11 to 20 years and 21 years or more agreed more strongly that the agent should keep school personnel informed of the 4-H mission than did educators who had been employed 10 years or less. Principals, that participated in the study, had been working eleven years or longer.

Fourth grade teachers agreed more favorably that the agent “use volunteers to administer the curriculum” than did principals or fifth and sixth grade teachers.

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# CHAPTER I

## INTRODUCTION AND PROBLEM

### Introduction

This study concentrated on the Explorer and Junior 4-H Club Educators in the Putnam County Public School System. The teamwork of school educators, volunteer leaders and agents is essential for the growth of the overall local 4-H Club program.

The Smith-Lever Act of 1914 created the Cooperative Extension Program in each state. Prior to Smith-Lever, Boy's and Girl's Corn Clubs served as the 4-H outlet for educating local youth regarding rural life. At the time, local teachers (mostly rural) were charged with teaching subjects that gave these youth an understanding of rural life.

4-H has been described by Ladwig (1987) as, "the oldest and largest nontraditional educational effort in public education in the United States for nearly 80 years. 4-H has existed, in part, to help young people become mature, competent adults." He goes on to say, "4-H is the only youth program that has direct access to technological advances from land grant university research in agriculture, home economics, and related sciences". The Putnam County 4-H program is dependent on a cooperative relationship with the public schools. Considering the number of youth and volunteers that reap the benefits of 4-H, there must be perceptions that exist.

## Need for the Study

Fry's (1978) study concluded that schools have played an important part in the success of the 4-H program and have provided an effective way of bringing 4-H to youth of all socio-economic backgrounds. At this time, Tennessee is among the few states left that currently conduct 4-H clubs in local public schools. At the time this study was conducted, there was a lack of up-to-date information concerning the perceptions of school personnel regarding 4-H programs. Involving people in planning, conducting and evaluating the 4-H program is the basis for an educational program designed to meet the needs of the clientele. There is a need for 4-H to compliment formal education by helping youth develop skills for finding and utilizing information to deal with present and future decisions.

4-H agents give leadership to the development of the local youth program and can receive cooperation from school educators in county-wide 4-H club activities. In today's world of budget constraints and alternative programs, program impact must be measured. Stakeholders demand support material regarding those who have benefitted and how 4-H has changed their lives.

In the past, the program has focused on increasing the number of its members. At present, more focus is given to providing quality programs designed to educate youth than to have an audience with great numbers.

Nationwide, the relationship of 4-H to formal education has been and continues to be important to 4-H, nationwide. School personnel play a key role in the decision to permit or not to permit 4-H to compliment the formal education effort. It is important

that school personnel have positive perceptions regarding 4-H education, or they may consider that 4-H can not meet in their school in the future.

Local school personnel could assist in recruiting more youth to 4-H projects and programs. In regards to enrollment, the number of members decreases when youth reach junior high school and tends not to recover. An agent normally has contact with most 4-H members just once a month. Whereas, teachers come in contact with these same youth on a daily basis, and could encourage students to stay enrolled in the 4-H program.

It is hoped that the perceptions of school personnel regarding 4-H could be measured and some of the factors and characteristics related to their perceptions could be determined. This information would be useful to county agents as well as district and state staff in determining the merits of certain programs.

### Purpose of the Study

Identifying the perceptions of Putnam County public school educators toward the local 4-H Club program was the major purpose of this study. Its main focus was to determine the educational quality that local educators believe the 4-H program has and to determine whether or not the 4-H program is meeting the needs of local youth. Specific goals of the study include:

- 1) To determine the school educators perceptions of:
  - a) the objectives of the 4-H program
  - b) communication strategies and image of the agent
  - c) knowledge of the 4-H curriculum

d) Tennessee 4-H priority program areas

2) To develop a demographic profile of teachers in explorer clubs (4<sup>th</sup> grade), teachers in junior clubs (5<sup>th</sup> and 6<sup>th</sup> grades) and administrators who work with the local public school 4-H program. The selected characteristics include the respondents:

a) gender

b) age

c) level of education

d) present position

e) number of years employed

f) area they were raised

g) children in 4-H

3) To determine the relationships between the local school educator's perceptions and the following selected characteristics.

a) gender

b) age

c) present position

d) number of years in employed

e) area they were raised

f) children in 4-H

## CHAPTER II

### REVIEW OF LITERATURE

The purpose of this review was to study the perceptions that public school educators have regarding the educational aspect of the 4-H program. This chapter reviews research of perception, the Cooperative Extension Service, and 4-H. This review provides a framework for the study, a definition of perception and factors most likely to influence perceptions.

Specifically, the literature in the following areas were reviewed:

- 1) theory and research on the definition of and influences on perception
- 2) objectives and values of 4-H
- 3) educators perception of the role of the 4-H agent
- 4).cooperative effort between 4-H and public schools

#### Perception Defined

Perception literature was reviewed with the intent of developing a definition of perception consistent with this study. Furthermore, a purpose of the literature review was to determine areas of 4-H that should be studied, and to determine characteristic factors of school personnel most likely to influence perceptions. The literature provided many definitions of the phenomenon of perception.

Many scientists agree with the premise that perception is a result of differing philosophy of psychology, and that human sensory organs are a vital part of the process.

Social scientists have associated perception with studies of human behavior, but many did not arrive at a specific definition.

Burkett (1980) studied the perceptions of the Virginia 4-H educational program by superintendents, principals, and teachers. He began his study by defining perception. He cited his definition of perception from Hilgard on page 16. For this study, this seemed to be the best overall definition of perception.

Perception is the process of becoming aware of objects, qualities or relations by way of sense organs. While sensory content is always present in perception, what is perceived is influenced by set and prior experience, so that perception is more than a passive registration of stimuli impinging on sense organs.

There are constantly changing communication patterns. “One’s perception of the world is largely shaped by the information one has about that world. Today’s youth require more and more information faster and faster. No longer is our world limited to what others want the public to read, see, or hear. Instant access to almost any information is becoming more realistic every day”, Weatherford and Peck (1990).

Collins (1977) states, “ a study of perception should really make us aware of the difference between an observer’s subjective interpretation of a phenomenon and the phenomenon itself. Perception is the study of processes by which an organism responds to features of the environment with regularities in its behavior.

Esslinger (1966) stated that “different segments of the public have different images of the 4-H program, possibly indicating a difference in contact or involvement with the program. Burkett (1980) indicated that the Cooperative Extension Service is perceived somewhat differently by different target populations. The Extension Service



was perceived primarily as an educational organization with a primary purpose of serving rural people.

As the literature indicated, once perceptions are formed they are difficult to change. Esslinger (1966) found that “it is necessary to determine how, and upon what, an image is formed by the public. A predominately favorable image may be called “prestige” and may range from low to high. “Prestige may rest upon the quality of the goods and services produced by the organization, as judged by those capable of evaluating the product”.

Blalock (cited in Clinkscales 1984) reported that the degree of knowledge about Extension, degree of appraisal of the organization’s value, and opinions about the scope of Extension’s responsibilities had a significant influence on the legislator’s overall perceptions of the Extension Service. White (1970) concluded that the more involvement with Extension organizations, the more likely legislators were to have a positive perception of the organization. Moore (1970) found that “the older the people were, the higher their level of education, the more favorable their perceptions of the Cooperative Extension Service.

There are several factors that influence perception. The following are factors given by Sherif and Sherif (cited in Burkett, 1980 p. 17).

Perceptual structuring is not only a “cognitive” affair. It is jointly determined by the totality of functionally related external factors and internal factors coming into the structuring process at a given time. The external factors are stimulating situations outside of the individual objects, events, and other persons, groups, cultural products and the like. The internal factors are motives, emotions, attitudes, general states of the organism and effects of past experiences.

## 4-H Value

Weatherford and Peck (1990) said “the world’s largest, dynamic, informal educational program for young people today is 4-H. Additionally, 4-H exists to help young people become mature competent adults. 4-H enables youth to develop life skills by acquiring new knowledge and technological skills useful in practical situations.”

These life skills may be categorized in three types:

- 1) competency- developing skills and knowledge
- 2) coping- dealing with stress
- 3) contributory- sharing skills which allow others to overcome personal circumstances

Esslinger’s (1966) study found that not only was 4-H effective in developing life skills in leading group meetings, but it also improved members skills in self-expression and public speaking. Brown and Boyle (cited in Esslinger 1966) said “ that educators saw the purpose of 4-H as developing skills; however, many also mentioned developing leadership and teaching group skills (how to get along with others).”

Rockwell (1981) stated “among the most easily definable and documentable consequences of participation in 4-H programs are individual’s gain in knowledge, skills, attitudes, values and personal satisfaction.”

The Evaluation of Economic and Social Consequences of Cooperative Extension Programs (1980) stated that 4-H impacts participants in perceptual and cognitive skill development as well. These skills stimulate knowledge and perception to produce understanding and this is a strength of 4-H. Small livestock projects that produce

knowledge that applies to pets, and some projects deal directly with cognitive development, which involves evaluation and decision making.

Weatherford and Peck (1990) stated that “4-H improves the quality of life without regard to special commercial interest is the overall aim of 4-H. Van Horn, Flanagan, Thomson (Dec.1998) found that “4-H provides public speaking, camping, and judging contests that give opportunities to practice and apply new knowledge and ideas. Camping offers opportunities for young people to develop leadership skills beyond the club environment by working with youth from different communities and facing issues such as motivation, team building, and interpersonal relationships.”

Gamon (1994) stated that “the 4-H program is heavily contest oriented. Record books, judging events, and county and state fairs are examples. Often there are presentations and working exhibits.” Horton and Konen (Dec. 1997) found that “4-H acts as a catalyst for recruiting and sustaining community partners as well as for preparing and supporting classroom teachers and partners. Clearly, 4-H can play a role in initiating and nurturing effective science learning environments.”

Van Horn, Flanagan and Thomson (Dec.1998) explains that “4-H clubs often elect officers and committee chairs, allowing youth the opportunity to learn and apply various life skills like communication and leadership. Project groups allow youth to learn how to form organizations and decision-making groups that prepare them for adult roles.”

Weatherford and Peck (1990) indicated that “4-H learning experiences are designed to promote growth in knowledge, skills, and attitudes within the family, which in turn strengthens the family and society. The program aspires to create, positive, reinforcing and stimulating environments which can develop social skills. 4-H’s

objective is to enable youth to become a competent adult within all phases of life and society is the essence of 4-H for both young and old.”

Tyler (cited in Rockwell 1981) felt “that 4-H may have considerable influence on careers and planning toward an occupation, desire for higher education and preparation for adult leadership roles.” Clinkscales (1994) indicated that “school personnel with prior 4-H experience, responded more favorably that 4-H was able to develop youth’s abilities than did school personnel without 4-H experience.”

A Wisconsin study (cited in The Evaluation of Economic and Social Consequences of Cooperative Extension Programs 1980) indicated more positive attitudes toward adult education among adult former 4-H members than non-members.

Most believe that only youth reap the benefits of 4-H. However, adults are also able to be rewarded by 4-H. In regards to volunteers, Weatherford and Peck (1990) stated “volunteers receive the latest information, develop their own leadership skills and experience growth. Adults find themselves growing in their own areas of self-fulfillment while they are developing youth.”

Weatherford and Peck (1990) said “4-H complements the formal school system by creating learning experiences that are:

- 1) Continuous
- 2) Allow Youth to Make Decisions
- 3) Provide a Sense of Worth
- 4) Relevant to the Real World

## 4-H Agent Role

Fry's (1978) study indicated that "there should be more linkage with new local organizations and groups. A change in image will require new attitudes toward goals, and we need to consider the optimum strategy for maximizing the relationship of 4-H to the formal school program. Both the Extension Service and the public schools realize that 4-H club work is an important educational supplement to the teaching of rural boys and girls, and not a substitute for schoolwork."

Esslinger (1966) stated that the agent who works with 4-H will be involved in the image the public schools of the 4-H club program in the county. Mauk and Cornett (cited in Esslinger 1966) indicated that Extension work is most appreciated by those who have had more agent contact. Additionally, Esslinger studied the Extension Agents role. Over half of the people he surveyed stated that it was important for the agent to work individually with the 4-H members. He also found that the amount of contact that the school personnel had with 4-H was not dependent on the presence or absence of the 4-H agent in the county.

Weatherford and Peck (1990) found that 4-H agents should incorporate knowledge transfer, leadership and life skills development into every 4-H project and program. Furthermore, they should explore new ways to deliver 4-H experiences using the latest in educational, electronic and technological advances.

4-H agents should incorporate 20 to 30 year old adults into volunteer roles and tap their vitality, enthusiasm, and contributory skills that were developed when they were 4-H'ers. School personnel feel that agents need to increase the use of volunteers to support

the program, and, to publicize the diversity of the programs offered. Agents should maintain a strong public relations program.

Burkett's (1980) study included responsibilities and roles of the Extension agent. The school officials he studied felt that the agents should recruit volunteers, and recognize them for their involvement in the program. The personnel felt positive that maintained good communications through personal letters, newsletters, and personal visits. Teachers believed they were too busy to be involved in 4-H program planning and agreed that the agent should be accountable for program planning.

Clinkscales (1984) found that the perception of the agent's roles did not differ significantly among secondary school and elementary school personnel.

#### Cooperation Between 4-H and Schools

Fry (cited in Burrows and Zameba, 1982) recommended that "4-H change its identification from an information "out-of-school" educational, character, and skills-building youth program to a non-formal, educational, character, and skills-building youth program." Using each others strengths, 4-H and schools can provide instructional resources, things, and places to explore and hands-on-experience.

Clinkscales (1984) studied perception research as it relates to 4-H. He found two factors that had significance as it relates to perception in 4-H. First, group membership is encouraged by friends and family. Second, consideration should be given to the way that projects are used as instructional tools in schools if they are relevant to the community.

School personnel that had 4-H experience perceived the curriculum more favorably than did school personnel with no experience.

He found that 4-H in schools had several advantages:

- 1) Project work can supplement class work
- 2) Teachers can act as leaders
- 3) School facilities can be used for meetings or events

He recommended forming a liaison committee to review curriculum and use school personnel to help plan and evaluate the in-school program. The agent's role should be like a manager, and his or her responsibility is organizing the clubs and to teach project related skills.

Zaremba's (1982) study found that teachers in Connecticut believed making 4-H more visible would make it stronger. Teachers like the fact that newsletters kept them informed about opportunities in the program.

Esslinger (1966) researched to see if school personnel felt that 4-H conflicts with school. Most respondents that were surveyed said that 4-H did not conflict with school. There were conflicts that could have occurred: time, members neglect school work, method conflict and work duplication. Esslinger recommended that agents inform school personnel of the program's objectives and functions:

- 1) Agents job description
- 2) Dates and objectives of 4-H events
- 3) The value of the 4-H curriculum

School personnel saw conflicts in time between 4-H work and school work. He found that school administrators favored holding 4-H meetings in schools, and excusing

members from school for state and national events. Brown and Boyle study (cited in Esslinger 1966) stated that “4-H was different from other organizations because of the variety of depth in 4-H projects and they were more practical.

The potential for “4-H in schools” is unlimited. If schools encourage students to take advantage of community opportunities outside the regular classroom studies they are better able to relate school studies to the rest of their lives. Increased visibility and accountability that adequately informs school personnel about activities will make the 4-H and classroom bond stronger. For almost 100 years, 4-H has provided hands-on experience to supplement school curriculum. It is believed that 4-H can provide additional learning opportunities to supplement learning. Four-H will be more effective if interaction is allowed in small groups. Teacher still like “hands-on” education that reinforces classroom subjects, and is relevant to the community.



## CHAPTER III

### PROCEDURES AND METHODOLOGY

This chapter describes the research design and population, the identifiable variables, instrumentation utilized, and how the data were collected and analyzed.

#### Research Design

The research was conducted through the use of a questionnaire distributed through each local school administrator. The study was a combination of descriptive and coorelational research. Information was collected to determine the perceptions of Putnam County school educators in regards to the in-school 4-H program.

The dependent variables in the study included educators perceptions of:

- a) the objectives of the 4-H program
- b) communication strategies and image of the agent
- c) knowledge of the 4-H curriculum
- d) Tennessee 4-H priority program areas

The independent variables in the study were:

- a) number of years employed
- b) children in 4-H
- c) gender
- d) present position
- e) age

f) area they were raised

g) level of education

### Population

The target population for this study consisted of two groups: teachers and school administrators. The population for this study was comprised of 89 school teachers and 26 administrators in Putnam County public schools. This group seemed to be the logical choice to survey due to the fact that over 90% of the members in the local program are in their schools. Among the 89 teachers, 31 taught at the fourth grade level, 29 at the fifth grade and 29 were sixth grade. Each potential respondent received a questionnaire from their respective school principal.

The purpose of this survey was discussed in advance with the principal and the senior secretary. The principal gave the questionnaires in a variety of ways: In the teacher's mail box, in meetings, or just distributing them directly to the teacher. Each respondent was instructed to return the questionnaire to their school's senior secretary by a specified date.

Information concerning the nature of and how to complete the instrument was attached to each instrument. Each instrument was coded for follow-up to be conducted, if necessary. Respondents were assured confidentiality in their responses and were informed that their participation in the study was strictly voluntary. After a week, a follow-up survey was submitted to non-respondents. The follow-up survey secured another eleven surveys. This gave a total of 87 completed questionnaires.

## Instrumentation

The instrument utilized for this study contained two parts. Part one consisted of questions that measured respondents perceptions of various parts of the 4-H program such as 4-H objectives, public image of the agent, Tennessee Priority Program Areas, and the 4-H curriculum. Part two consisted of questions that identified respondent's biographic information like gender, age, level of education, present position, number of years employed, if their children were in 4-H, and rural/urban background.

The following provides a description of each set of variables used in part one of the questionnaire in this study .

### Objectives of 4-H

This set of abilities were identified to measure the educator's perception of what 4-H members gain through 4-H project work. Areas of potential gain include management skills, career knowledge, personal and social attitudes, and knowledge they could share with their parents. Each participant responded to each variable through a Likert-type rating which ranged from 5 thru 1, with 5 meaning strongly agree, and 1 standing for strongly disagree.

### Public Image of the 4-H Agent

These statements ventured to acquire the respondent's perceptions of the agent's image. They were asked to evaluate the effectiveness of communications techniques used by agents. These techniques included radio, telephone calls, personal letters, newspaper columns, e-mail and personal visits. Respondents were also asked to indicate their level of agreement with the agent's role in areas such as public relations, volunteer recruitment, marketing The University of Tennessee, and recognition of youth. The five point Likert-

type scale (5= effective/strongly agree to 1 = not effective/strongly disagreed) was used with this set of intervally scaled variables.

#### 4-H Curriculum

Tennessee 4-H has educational materials and project books for various age groups. These materials aid youth in attaining particular goals and objectives within the respective project. Educators were asked to indicate their knowledge in nine different areas of the curriculum. They were asked to state:

- 1) did not know about it
- 2) have used the curriculum
- 3) knew about it but did not use it

All three of these statements were treated as nominally scaled variables. The second part of the instrument was designed to accumulate demographic information about respondents. The study sought to find and describe the relationships between these demographic variables and perceptions identified in the first part. The independent variables were: gender, age, level of education, present position, number of years employed, background of respondents, and their exposure to 4-H. Gender, type of school, present position, number and background of respondents were all nominally scaled variables. Exposure to 4-H can be measured both nominally and intervally.

Following is a brief description of each set of independent variables measured that were utilized in this study.

Gender. (male or female) This was a dichotomous nominally scaled variable.

Type of School System. (kindergarten thru 4<sup>th</sup> or 4<sup>th</sup> thru 6<sup>th</sup> grade) This was a dichotomous nominally scaled variable.

Rural vs. Urban Background. This was another dichotomus nominally scaled variable that identified where respondents spent their childhood (rural or urban).

Exposure to 4-H. Respondent's exposure to 4-H was measured in two different ways.

First respondents had among seven different statements to answer about their exposure to 4-H: was a member, children were members, was a leader, served on a advisory council, spouse was a member, read about 4-H, seen 4-H project displays, had no contact with 4-H. If they selected all seven responses then it indicates that they have had a high amount of exposure. If they selected no responses that would indicate no exposure to 4-H. This variable was treated as intervally scaled. The literature indicated that being a 4-H leader was important in determining respondents perceptions.

### Data Analysis

The measure of central tendency and measure of coorelation were reported because this was a descriptive/correlational study. The questionnaire data were tabulated by the researcher using the Statistical Package for the Social Sciences (SPSS for windows, version 10.0.7.). The responses were ranked, with some answers calculated as a percent of the total population sample. The *t*-test and *f*-test were used to determine the level of significance of the findings for the Post Hoc comparisons. The level of significance was  $p \leq .05$ . The analysis of the data revealed key perceptions of public school educators in regards to Putnam County 4-H.

## CHAPTER IV

### FINDINGS

This study consisted of both descriptive and correlational research. Public school educators in the Putnam County school system were the target population. To be a participant, school personnel must be a teacher or principal at a Putnam County school that has grades four, five, six or four through six. One hundred and fifteen questionnaires were distributed through the school's principals. Eighty-seven surveys were returned providing a response rate of approximately 76 percent.

Tables included in this chapter present mean responses for the "level of effectiveness" and the "level of agreement". To aid in the discussion of these tables the following scale identifies the range limits for the respondents questionnaire answers.

<u>Range</u>	<u>Level of Effectiveness</u>	<u>Level of Agreement</u>
5.0 - 4.5	Very Effective	Strongly Agree
4.49 - 3.5		Agree
3.49 - 2.5		Undecided
2.49 - 1.5		Disagree
1.49 - 1.0	Not Very Effective	Strongly Disagree

The *t*-test and *f*-test were used to determine the level of significance of the findings for the Post Hoc comparisons. The level of significance was  $p \leq .05$ .

#### Perceptions Regarding 4-H - Objective One

The first objective of the study was to measure Putnam County Public School Educator's, who potentially impact the Putnam County in-school 4-H program, perceptions of the objectives of 4-H, communication strategies and image of the agent,

knowledge of the 4-H curriculum, and Tennessee 4-H Priority Program Areas. Data regarding these perceptions are presented and discussed in the following four tables.

#### 4-H Objectives

Table I data presents the perceptions of Putnam County Local Public School Educators regarding the Putnam County 4-H objectives. Data regarding respondents perceptions of what was gained by Putnam County youth as a result of participation in 4-H were collected using the 12 statements under the objectives section of the questionnaire. As reported in Table I, respondents strongly agreed or agreed with 8 of the 12 objective statements. Perception scores ranged from 4.70 to 3.53, and relatively low standard deviation scores indicated that respondents shared consensus regarding these scores. As reported in Table I, the objectives statement with the highest level of agreement was “4-H members acquire public speaking & self-expression skills”. Another objective that respondents strongly agreed members gained from was acquire citizenship skills (community service, government). The 4-H objective receiving the lowest mean score was “4-H members manage their free time”. Respondents were relatively undecided regarding acquire social behavior, personal standards and values, acquire cooperation skills, and apply practical skills in science. Of the twelve variables, 8 out of 12 received a mean score of 3.5 or above which indicated that they agreed or strongly agreed that 4-H positively contributed to members.



Table I. Putnam County Local Public School Educator's Perception of The Objectives of 4-H

4-H Objective	mean* (n=87)	s.d.	rank
acquire cooperation skills	3.44	.52	10
acquire "people skills" in cooperation	3.59	.56	6
make intelligent decisions	3.56	.49	7
acquire knowledge & desire for higher education	3.93	.43	5
acquire social behavior, personal standards and values	3.41	.50	11
acquire skills & knowledge that can share with parents	4.06	.44	4
acquire positive attitudes of themselves and feelings of self-worth	4.44	.50	3
acquire public speaking & self-expression skills	4.70	.49	1
acquire citizenship skills (community service, government)	4.55	.52	2
learn practical skills in science	3.53	.55	8
apply practical skills in science	3.46	.50	9
manage their free time	3.06	.23	12

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree



### Communication Strategies and the Image of the 4-H Agent

Data in Table II reports Putnam County Local Public School Educators preferred strategies of communicating with the 4-H agent and their perceptions of the image of the 4-H agent. Data regarding respondents preferred communication strategies were collected using six statements under the communication strategy section of the questionnaire. As reported in Table II, respondents indicated that four of the six preferred strategies were effective for communicating with the 4-H agent. With regards to those four statements, average perception scores ranged from 4.97 to 4.70, and relatively low standard deviation scores indicated that respondents shared considerable consensus regarding these scores. Respondents indicated the use of radio was not effective as a preferred strategy of communicating with the 4-H agent. With regards to this statement, respondent's perception score was 1.26 with a high standard of deviation of .99.

As reported in Table II, respondents indicated the agents use of "personal letters", "personal visits", "telephone calls", and "e-mail" were effective strategies of communicating with them. Table II also includes data regarding respondents perceptions of the image of the 4-H agent. Respondents strongly agreed or agreed with five of the eight image statements with perception scores ranging from 4.59 to 3.56, and relatively low standard deviation scores indicated that respondents shared consensus regarding these scores.

As reported in Table II, respondents strongly agreed with the statement "4-H agent should keep school personnel informed of 4-H mission". Respondents agreed that the agent should "provide recognition (plaques, banquet, etc.) for 4-H volunteers", "serve

Table II. Putnam County Local Public School Educators Preferred Strategies of Communicating with The 4-H Agent and Their Perceptions of The Image of The 4-H Agent

Strategy/Image	mean (n=87)	s.d.	rank
<u>Communication strategy</u>			
personal letters	4.85*	.39	3
telephone calls	4.70	.49	4
personal visits	4.86	.35	2
radio	1.26	.62	5
newspaper column	2.72	.99	6
e-mail	4.97	.18	1
<u>Image of the 4-H Agent: Agents should</u>			
use volunteers to administer curriculum	3.17**	.65	8
keep school personnel informed of 4-H mission	4.59	.56	1
devote time to public relations	3.26	.52	6
market themselves as an off campus UT faculty member	3.79	.61	4
serve as a program manager that provides resource material and train volunteers	3.80	.52	3
recruit volunteers for in-school & out-of-school 4-H programs	3.56	.52	5
train & utilize teens to conduct in-school 4-H programs	3.20	.55	7

Table II. (Continued)

Strategy/Image	mean (n=87)	s.d.	rank
provide recognition (plaques, banquet, etc.) for 4-H volunteers	4.33	.50	2

\* mean - calculated from values ranging from 5 = Very Effective to 1 = Not Very Effective

\*\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

as a program manager that provides resource material”, “market themselves as an off-campus UT faculty member” and “recruit volunteers for in-school and out-of-school 4-H programs”. Respondents were relatively undecided regarding “4-H agent should use volunteers to administer curriculum”, “4-H agent should devote time to public relations” and “4-H agent should train and utilize teens to conduct in-school 4-H programs”.

#### 4-H Curriculum

Data in Table III reports Putnam County Local Public School Educators Perceptions of their knowledge and use of 4-H materials in their curriculum. Data regarding respondents knowledge and use of 4-H materials in their curriculum were collected using nine specific 4-H materials under the curriculum areas section of the questionnaire. As reported in Table III, 66 respondents or 75.9% indicated they used the history curricula, and 21 or 24.1% indicated they knew about it but did not use.

Fifty-eight respondents or 66.7% reported using the language arts curricula, while 27 or 31% indicated they knew about language arts but did not use it. Forty-one or 47.1% of respondents indicated that they utilized the arts curricula, while 46 respondents or 52.9% did not use. Regarding the health curricula, 40 or 46% of respondents indicated they have used it, while 44 or 50.6% of respondents indicated they knew about it but did not use the material. One out of 87 respondents or 1.1% indicated they have used the economics curricula. None of the respondents reported using the energy and mathematics curriculum.

Table III. Putnam County Local Public School Educators Perceptions of Their Knowledge and Use of 4-H Materials in Their Curriculum

Curriculum Areas	Local Educator	
	Number (n=87)	Percent
<b>Animal Science</b>		
did not know	4	4.6
used	12	13.8
knew about but did not use	71	81.6
<b>Arts</b>		
did not know	0	0.0
used	41	47.1
knew about but did not use	46	52.9
<b>Economics</b>		
did not know	49	56.3
used	1	1.1
knew about but did not use	37	42.6
<b>Energy</b>		
did not know	23	26.4
used	0	0.0
knew about but did not use	64	73.6
<b>Health</b>		
did not know	3	3.4
used	40	46.0
knew about but did not use	44	50.6
<b>History</b>		
did not know	0	0.0
used	66	75.9
knew about but did not use	21	24.1

Table III. (Continued)

Curriculum Areas	Local Educator	
	Number (n=87)	Percent
<b>Language Arts</b>		
did not know	2	2.3
used	58	66.7
knew about but did not use	27	31.0
<b>Mathematics</b>		
did not know	23	26.4
used	0	0.0
knew about but did not use	64	73.6
<b>Plant Science</b>		
did not know	3	3.4
used	24	27.6
knew about but did not use	60	69.0

## Tennessee 4-H Priority Program Areas

Data in Table IV reports Putnam County Local Public School Educators Perceptions of The Ability of An In-school 4-H Program to Address Selected Tennessee 4-H Priority Program Areas. Data regarding respondents perceptions of the ability of an in-school 4-H program to address selected Tennessee 4-H priority program areas were collected using the five statements under the priority program section of the questionnaire. As reported in Table IV, respondents strongly agreed or agreed with four of the five statements regarding the ability of an in-school 4-H program to address selected Tennessee 4-H priority program areas. With regards to those four statements, perception scores ranged from 4.90 to 4.18, and standard deviation scores ranging from .29 to .66 indicating that respondents shared consensus regarding these scores.

As reported in Table IV, respondents strongly agreed with “an in-school 4-H program provides youth with an opportunity to gain leadership skills”, and “an in-school 4-H program teaches citizenship skills (community service, how government works)”. Respondents agreed that “an in-school 4-H program teaches water quality and environmental issues”, and “an in-school 4-H program teaches family and economic well-being management skills”. Respondents indicated that they were relatively undecided that “4-H agents should identify & train volunteers to plan, conduct & evaluate an in-school 4-H program”.

### Respondent Demographic Profile - Objective Two

The second objective of the study was to develop a demographic profile regarding those teachers in explorer clubs (4<sup>th</sup> grade), teachers in junior clubs (5<sup>th</sup> and 6<sup>th</sup> grades),

Table IV. Putnam County Local Public School Educators Perceptions of The Ability of An In-school 4-H Program to Address Selected Tennessee 4-H Priority Program Areas.

Priority Program Areas	mean* (n=87)	s.d.	rank
agents should identify & train volunteers to plan, conduct & evaluate an in-school 4-H program	3.32	.67	5
an in-school 4-H program teaches of citizenship skills(community service, how government works)	4.59	.49	2
an in-school 4-H program teaches water quality & environmental issues	4.46	.50	3
an in-school 4-H program teaches family & economic well-being management skills	4.18	.66	4
an in-school 4-H program provides youth with an opportunity to gain leadership skills	4.90	.29	1

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree



and school administrators (principals & assistant principals) who potentially impact the Putnam County public school 4-H program. Table V reports the demographic characteristics of those who participated in the study. As indicated in Table V, 26 or 100% of fourth grade teachers, 35 or 87.5% of fifth and sixth grade teachers and 12 or 57.1% of principals were female. Five or 12.5% of fifth & sixth grade teachers were male, and 9 or 42.9% of principals were male. Of the respondents under 25 years old, 20 or 50% are fifth and sixth grade teachers. Of those 36 to 45 years old, 7 or 26.9% are fourth grade teachers, and 10 or 25% are fifth & sixth grade teachers. Of those 46 to 55 years old, 11 or 42.3% are fourth grade teachers, and 9 or 42.9% are principals. Of the respondents over 55 years old, 9 or 42.9% were principals.

As reported in Table V, 14 or 53.8% of fourth grade teachers, and 24 or 60% of fifth & sixth grade teachers held a bachelor's degree. Ten or 38.5% of fourth grade teachers, and 14 or 35% of fifth & sixth grade teachers held a master's degree while all principals had a master's degree plus hours towards another degree. In regards to tenure, 21 or 52.5% of fifth & sixth grade teachers had worked 10 or less years. Ten or 38.5% of fourth grade teachers have been employed for 11 to 20 years, and 15 or 71.4% of principals had been working for 21 or more years. Furthermore, 11 or 42.3% of fourth grade teachers had worked for 21 or more years.

Twenty-six or 100% of the fourth grade teachers were raised in a rural area while 18 or 45% of fifth & sixth grade teachers, and 11 or 52.4% of principals were raised in a rural environment. Twenty-two or 55% of fifth & sixth grade teachers, and 10 or 47.6% of principals were raised in an urban area. Twenty-six or 100% of fourth grade teachers, 39 or 97.5% of fifth & sixth grade teachers, and 21 or 100% of principals had been 4-H

Table V. Demographic Profile of The Putnam County Local Public School Educators

Characteristic	<u>4<sup>th</sup> grade teachers</u>		<u>5<sup>th</sup> &amp; 6<sup>th</sup> grade teachers</u>		<u>Principals</u>	
	Number (n=26)	Percent	Number (n=40)	Percent	Number (n=21)	Percent
<u>Gender</u>						
male	0	0.0	5	12.5	9	42.9
female	26	100.0	35	87.5	12	57.1
<u>Age</u>						
under 25	6	23.1	20	50.0	0	0.0
26 - 35	0	0.0	0	0.0	0	0.0
36 - 45	7	26.9	10	25.0	3	14.3
46 - 55	11	42.3	9	22.5	9	42.9
over 55	2	7.7	1	2.5	9	42.9
<u>Level of Education</u>						
bachelor's degree	14	53.8	24	60.0	0	0.0
bachelor's plus hrs	0	0.0	0	0.0	0	0.0
master's degree	10	38.5	14	35.0	0	0.0
master's plus hrs	2	7.7	2	5.0	21	100.0

Table V. (Continued)

Characteristic	<u>4<sup>th</sup> grade teachers</u>		<u>5<sup>th</sup> &amp; 6<sup>th</sup> grade teachers</u>		<u>Principals</u>	
	Number (n=26)	Percent	Number (n=40)	Percent	Number (n=21)	Percent
<u>Years of Employment</u>						
10 or less yrs	5	19.2	21	52.5	0	0.0
11 - 20 yrs	10	38.5	13	32.5	6	28.6
21 or more yrs	11	42.3	6	15.0	15	71.4
<u>Area they were Raised</u>						
rural	26	100.0	18	45.0	11	52.4
urban	0	0.0	22	55.0	10	47.6
<u>Awareness of 4-H</u>						
was a 4-H member						
yes	26	100.0	39	97.5	21	100.0
no	0	0.0	1	2.5	0	0.0
<u>children are/where in 4-H</u>						
yes	18	69.2	19	47.5	17	81.0
no	8	30.8	21	52.5	4	19.0

Table V. (Continued)

Characteristic	4 <sup>th</sup> grade teachers		5 <sup>th</sup> & 6 <sup>th</sup> grade teachers		Principals	
	Number (n=26)	Percent	Number (n=40)	Percent	Number (n=21)	Percent
am/was a 4-H leader						
yes	25	96.2	28	70.0	10	47.6
no	1	3.8	12	30.0	11	52.4
serve(ed) on advisory council						
yes	9	34.6	5	12.5	3	14.3
no	17	65.4	35	87.5	18	85.7
spouse was a 4-H member						
yes	23	88.5	25	62.5	16	76.2
no	3	11.5	15	37.5	5	23.8
read about 4-H						
yes	26	100.0	39	97.5	21	100.0
no	0	0.0	1	2.5	0	0.0

Table V. (Continued)

Characteristic	4 <sup>th</sup> grade teachers		5 <sup>th</sup> & 6 <sup>th</sup> grade teachers		Principals	
	Number (n=26)	Percent	Number (n=40)	Percent	Number (n=21)	Percent
seen 4-H project displays						
yes	25	96.2	39	97.5	20	95.2
no	1	3.8	1	2.5	1	4.8
no contact with 4-H						
yes	0	0.0	1	2.5	0	0.0
no	26	100.0	39	97.5	21	100.0

members. Eighteen or 69.2% of fourth grade teachers, 19 or 47.5% of fifth & sixth grade teachers, and 17 or 81% of principals had children who had been in 4-H. Twenty-five or 96.2% of fourth grade teachers, 28 or 78% of fifth & sixth grade teachers, and 10 or 47.6% of principals were or had been a 4-H leader.

As reported in Table V, 9 or 34.6% of fourth grade teachers had served on a advisory council while 35 or 87.5% of fifth & sixth graders, and 18 or 85.7% of principals had not served on a advisory council. Twenty-three or 88.5% of fourth grader's, 25 or 62.5% of fifth & sixth grader's, and 16 or 76.2% of principal's had a spouse that had been a 4-H member. Only one or 2.5% of fifth & sixth grade teachers have not read about 4-H. One or 3.8% of fourth grade teachers, one or 2.5% of fifth & sixth grade teachers, and one or 4.8% of principals have not seen 4-H project displays, and only one or 2.5% of fifth & sixth grade teachers have had no contact with 4-H.

#### Relationships Between Educator's Perceptions and Selected Characteristics -

##### Objective Three

The third objective of the study was to determine relationships between the 4-H objectives, communication strategies and image of the agent, 4-H curriculum, and Tennessee 4-H Priority Program Areas and the selected characteristics: gender, age, present position, years employed, area raised and children in 4-H.

##### Gender

As reported in Table VI, there was a significant relationship for 8 out of 12 statements between educator's perceptions of the objectives of 4-H and their gender:

Table VI. Relationships Between Educator’s Perceptions of The Objectives of 4-H and Their Gender

4-H Objective	Male			Female			t**
	n	mean*	s.d.	n	mean*	s.d.	
acquire cooperation skills	14	3.14	.36	73	3.50	.53	3.041**
acquire “people skills” in cooperation	14	3.29	.47	73	3.64	.56	-2.237**
make intelligent decisions	14	3.29	.47	73	3.62	.49	-2.330**
acquire knowledge & desire for higher education	14	3.71	.47	73	3.97	.41	-1.927
acquire social behavior, personal standards and values	14	3.14	.36	73	3.47	.50	-2.846**
acquire skills & knowledge that can share with parents	14	3.86	.36	73	4.10	.45	-1.884
acquire positive attitudes of themselves and feelings of self-worth	14	4.07	.27	73	4.51	.50	-4.072**
acquire public speaking & self-expression skills	14	4.29	.47	73	4.78	.45	-3.756**
acquire citizenship skills (community service, government)	14	4.07	.28	73	4.64	.51	-6.148**
learn practical skills in science	14	3.50	.52	73	3.53	.56	-.214
apply practical skills in science	14	3.43	.51	73	3.47	.50	-.253

Table VI. (Continued)

4-H objective	Male			Female			t**
	n	mean*	s.d.	n	mean*	s.d.	
manage their free time	14	3.00	.00	73	3.07	.25	-2.301**

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

\*\*  $p \leq .05$



“acquire cooperation skills” ( $p=.005$ ), “acquire “people skills” in cooperation” ( $p=.028$ ), “make intelligent decisions” ( $p=.022$ ), “acquire social behavior, personal standards and values” ( $p=.009$ ), “acquire positive attitudes of themselves and feelings of self-worth” ( $p<.001$ ), “acquire public speaking & self-expression skills” ( $p<.001$ ), “acquire citizenship skills (community service, government)”, ( $p<.001$ ), “manage their free time” ( $p=.024$ ). For all eight statements significantly related to gender, the female respondents more strongly agreed with the statements than did the male respondents.

Data in Table VII reports the relationships between educators preferred strategies of communicating with the 4-H agent and their perceptions of the image of the 4-H agent and their gender. As shown in Table VII, all respondents indicated that four of the six preferred strategies were effective for communicating with the 4-H agent. However, when tested with the *t*-test only the strategy of communicating with a news column was significantly related to gender. Male respondents indicated the use of a news column was a less effective communication strategy than did the female respondents.

As reported in Table VII, four of the eight statements were significantly related to the respondents gender. Female respondents more strongly agreed with the statements of “utilize volunteers to administer curriculum” ( $p=.014$ ), “market themselves as a UT faculty member” ( $p=.003$ ), “program manager providing resource material & train volunteers” ( $p=.017$ ), and “train & utilize teens for in-school 4-H programs” ( $p=.037$ ) than did the male respondents.

Table VII. Relationships Between Educator's Perceptions of The Preferred Strategies of Communicating with The 4-H Agent and Their Perceptions of The Image of The 4-H Agent and Their Gender

Strategy/Image	Male			Female			t**
	n	mean*	s.d.	n	mean*	s.d.	
<u>Strategy</u>							
personal letters	14	4.79	.43	73	4.86	.38	-6.78
telephone calls	14	4.64	.50	73	4.71	.49	-4.89
personal visits	14	4.71	.47	73	4.90	.31	-1.349
radio	14	1.36	.74	73	1.25	.60	.610
news column	14	2.21	1.05	73	2.82	.96	-2.133**
e-mail	14	4.93	.27	73	4.97	.16	-.821
<u>Image of the Agent</u>							
utilize volunteers to administer curriculum	14	2.76	.70	73	3.25	.62	-2.500**
keep school personnel informed of 4-H mission	14	4.64	.50	73	4.58	.58	.410
devote time to public relations	14	3.29	.47	73	3.26	.53	.168
market themselves as a UT faculty member	14	3.36	.50	73	3.88	.60	-3.043**
program manager providing resource material & train volunteers	14	3.50	.52	73	3.86	.51	-2.438**
recruit volunteers for 4-H programs	14	3.50	.52	73	3.58	.52	-.493

Table VII. (Continued)

Strategy/Image	Male			Female			t**
	n	mean*	s.d.	n	mean*	s.d.	
train & utilize teens for in-school 4-H programs	14	2.93	.47	73	3.25	.55	-2.238**
provide recognition (plaques, banquets, etc.)for volunteers	14	4.29	.47	73	4.34	.51	-.389

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

\*\*  $p \leq .05$

Data in Table VIII reports the relationships between educators perceptions of the ability of an in-school 4-H program to address selected Tennessee 4-H priority program areas and their gender. There was a significant relationship between four of the five statements concerning the ability of an in-school 4-H program to address selected Tennessee priority program areas and the respondents gender. Female respondents more strongly agreed with the statements, agents should train volunteers to conduct in-school 4-H meetings ( $p < .001$ ), in-school 4-H program teaches citizenship skills ( $p < .001$ ), in-school 4-H program teaches the importance of water quality ( $p < .001$ ), in-school 4-H program teaches family economics & well-being ( $p = .003$ ) than did male respondents.

#### Age groups

Data in Table IX reports the relationships between educator's perceptions of the objectives of 4-H and their age group. Of the 87 respondents, 26 were under age 25, 20 were ages 36 to 45, 29 were 46 to 55, and 12 were age 55 or older. It should be noted that there were no educators in the 26 to 35 age group that participated in the study. Therefore, that category has been eliminated in the following tables. While all respondents, regardless of age group, strongly agreed or agreed with 8 of the 12 objective statements none of these perceptions were significantly related to their age group. Younger respondents did not tend to agree or disagree with these statements any different than did the older respondents.

Data in Table X reports the relationships between educator's perceptions of communication strategies and image of the 4-H agent and their age group. When tested with the *f*-test, there was no significant relationships between the respondents age group

Table VIII. Relationships Between Educator's Perceptions of The Ability of An In-school 4-H Program to Address Selected Tennessee 4-H Priority Program Areas and Their Gender

Priority Program Areas	Male			Female			t**
	n	mean*	s.d.	n	mean*	s.d.	
agents should train volunteers to conduct in-school 4-H meetings	14	2.86	.36	73	3.41	.68	-4.402**
in-school 4-H program teaches citizenship skills	14	4.07	.28	73	4.68	.47	-6.817**
in-school 4-H program teaches the importance water quality	14	4.07	.27	73	4.53	.50	-5.003**
in-school 4-H program teaches family economics & well-being	14	3.71	.47	73	4.27	.65	-3.061**
in-school 4-H program gives youth an opportunity to gain leadership skills	14	4.86	.36	73	4.92	.28	-.713

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

\*\*  $p \leq .05$

Table IX. Relationships Between Educator's Perceptions of The Objectives of 4-H and Their Age Groups

4-H Objective	n	mean*	s.d.	f**
acquire cooperation skills				
under 25	26	3.35	.49	.58
36 - 45	20	3.55	.61	
46 - 55	29	3.45	.51	
over 55	12	3.42	.52	
acquire "people skills" in cooperation				
under 25	26	3.50	.58	1.00
36 - 45	20	3.55	.60	
46 - 55	29	3.59	.50	
over 55	12	3.83	.58	
make intelligent decisions				
under 25	26	3.54	.51	.87
36 - 45	20	3.60	.50	
46 - 55	29	3.48	.51	
over 55	12	3.75	.45	
acquire knowledge & desire for higher education				
under 25	26	3.92	.56	.24
36 - 45	20	4.00	.46	
46 - 55	29	3.90	.31	
over 55	12	3.92	.29	
acquire social behavior, personal standards and values				
under 25	26	3.27	.45	1.13
36 - 45	20	3.50	.51	
46 - 55	29	3.48	.51	
over 55	12	3.42	.51	

Table IX. (Continued)

4-H Objective	n	mean*	s.d.	f**
acquire skills & knowledge that can share with parents				
under 25	26	4.08	.63	.74
36 - 45	20	4.15	.37	
46 - 55	29	3.97	.33	
over 55	12	4.08	.29	
acquire positive attitudes of themselves and feelings of self-worth				
under 25	26	4.35	.49	.84
36 - 45	20	4.40	.50	
46 - 55	29	4.55	.51	
over 55	12	4.42	.51	
acquire public speaking & self-expression skills				
under 25	26	4.69	.55	.51
36 - 45	20	4.80	.41	
46 - 55	29	4.69	.47	
over 55	12	4.58	.51	
acquire citizenship skills (community service, government)				
under 25	26	4.50	.58	.35
36 - 45	20	4.65	.49	
46 - 55	29	4.55	.51	
over 55	12	4.50	.52	

Table IX. (Continued)

4-H Objective	n	mean*	s.d.	f**
learn practical skills in science				
under 25	26	3.46	.51	.80
36 - 45	20	3.50	.69	
46 - 55	29	3.52	.51	
over 55	12	3.75	.45	
apply practical skills in science				
under 25	26	3.38	.50	1.67
36 - 45	20	3.40	.50	
46 - 55	29	3.45	.51	
over 55	12	3.75	.45	
manage their free time				
under 25	26	3.00	.00	1.45
36 - 45	20	3.05	.22	
46 - 55	29	3.07	.26	
over 55	12	3.17	.39	

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

\*\*  $p \leq .05$



Table X. Relationships Between Educator's Perceptions of Communication Strategies and The Image of The 4-H Agent and Their Age Group

Strategy/Image	n	mean*	s.d.	f**
<b>Strategy</b>				
personal letters				
under 25	26	4.81	.49	.72
36 - 45	20	4.85	.37	
46 - 55	29	4.83	.38	
over 55	12	5.00	.00	
telephone calls				
under 25	26	4.73	.45	.80
36 - 45	20	4.75	.44	
46 - 55	29	4.72	.45	
over 55	12	4.50	.67	
personal visits				
under 25	26	4.92	.27	1.66
36 - 45	20	4.90	.31	
46 - 55	29	4.86	.35	
over 55	12	4.67	.49	
radio				
under 25	26	1.15	.46	.57
36 - 45	20	1.25	.64	
46 - 55	29	1.31	.60	
over 55	12	1.42	.90	
news column				
under 25	26	2.54	.99	1.13
36 - 45	20	2.55	1.15	
46 - 55	29	2.97	.82	
over 55	12	2.83	1.11	
e-mail				
under 25	26	5.00	.00	1.17
36 - 45	20	5.00	.00	
46 - 55	29	4.93	.26	
over 55	12	4.92	.29	

Table X. (Continued)

Strategy/Image	n	mean*	s.d.	f**
<b>Image of the Agent</b>				
volunteers to administer curriculum				
under 25	26	3.08	.48	2.03
36 - 45	20	3.30	.73	
46 - 55	29	3.31	.66	
over 55	12	2.83	.72	
keep school personnel informed of 4-H mission				
under 25	26	4.35	.63	2.46
36 - 45	20	4.65	.49	
46 - 55	29	4.69	.54	
over 55	12	4.75	.45	
devote time to public relations				
under 25	26	3.12	.43	2.56
36 - 45	20	3.20	.52	
46 - 55	29	3.31	.54	
over 55	12	3.58	.51	
market themselves as an off campus UT faculty member				
under 25	26	3.62	.57	1.24
36 - 45	20	3.90	.72	
46 - 55	29	3.90	.62	
over 55	12	3.75	.45	
serve as a program manager that provides resource material and train volunteers				
under 25	26	3.77	.51	.15
36 - 45	20	3.85	.59	
46 - 55	29	3.83	.54	
over 55	12	3.75	.45	

Table X. (Continued)

Strategy/Image	n	mean*	s.d.	f**
recruit volunteers for in-school & out-of-school 4-H programs				
under 25	26	3.42	.50	1.30
36 - 45	20	3.60	.50	
46 - 55	29	3.69	.54	
over 55	12	3.50	.52	
train & utilize teens to conduct in-school 4-H programs				
under 25	26	3.12	.33	1.16
36 - 45	20	3.30	.66	
46 - 55	29	3.28	.65	
over 55	12	4.67	.49	
provide recognition (plaques, banquet, etc.) for 4-H volunteers				
under 25	26	4.15A	.46	4.48**
36 - 45	20	4.50BC	.51	
46 - 55	29	4.24AB	.44	
over 55	12	4.67C	.49	

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

\*\*  $p \leq .05$  - means with different letters are significantly different as calculated using the Duncan's Multiple Range Test.

and their perceptions of effective communication strategies. Younger respondents were no more likely to agree with a selected communication strategy than the older respondents.

In regards to image of the agent, when tested by the *f*-test only one of the eight image statements was significantly related to the respondents age group. Over 55 age group more strongly agreed with “provide recognition to volunteers” than the 46 to 55 age group and under 25 age group. The under 25 age group agreed less strongly with “provide recognition to volunteers” than the 36 to 45 age group and the over 55 age group.

Table XI reports the relationships between educators perceptions of the ability of an in-school 4-H program to address selected Tennessee 4-H priority program areas and their age group. When tested with the *f*-test the statement “train volunteers to plan and conduct 4-H club meetings” ( $p=.048$ ) was the only statement significantly related to age group. Respondents in the 36 to 45 age group more strongly agreed that the agent should train volunteers to plan and conduct 4-H club meetings than did those in the over 55 age group.

Data in Table XII presents the relationships between educator’s perceptions of the objectives of 4-H and their present position. Of the 87 respondents, 21 were principals, 40 were fifth and sixth grade teachers, and 26 were fourth grade teachers. When tested using the *f*- test 7 of the 12 statements were significantly related to the respondents academic position. Fourth grade teachers more strongly agreed with the five statements: “acquire cooperation skills”( $p=.031$ ), “make intelligent decisions” ( $p<.001$ ), “acquire positive attitudes of themselves and feelings of self-worth” ( $p<.001$ ), “acquire public

Table XI. Relationships Between Educator's Perceptions of The Ability of An In-school 4-H Program to Address Selected Tennessee 4-H Priority Program Areas and Their Age Group

Priority Program Areas	n	mean*	s.d.	f**
<b>train volunteers to plan &amp; conduct 4-H club meetings</b>				
under 25	26	3.31AB	.62	2.75**
36 - 45	20	3.60B	.60	
46 - 55	29	3.31AB	.71	
over 55	12	2.92A	.67	
<b>in-school 4-H program enhances citizenship skills</b>				
under 25	26	4.46	.51	1.98
36 - 45	20	4.80	.41	
46 - 55	29	4.59	.50	
over 55	12	4.50	.52	
<b>in-school 4-H program teaches water quality</b>				
under 25	26	4.38	.50	.99
36 - 45	20	4.60	.50	
46 - 55	29	4.48	.51	
over 55	12	4.33	.49	
<b>in-school 4-H program teaches family economic well-being</b>				
under 25	26	4.19	.63	.39
36 - 45	20	4.10	.79	
46 - 55	29	4.28	.65	
over 55	12	4.08	.51	

Table XI. (Continued)

Priority Program Areas	n	mean*	s.d.	f**
in-school 4-H program gives an opportunity to gain leadership skills				
under 25	26	4.85	.37	1.08
36 - 45	20	5.00	.00	
46 - 55	29	4.90	.31	
over 55	12	4.92	.29	

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

\*\*  $p \leq .05$  - means with different letters are significantly different as calculated using the Duncan's Multiple Range Test.

Table XII. Relationships Between Educator's Perceptions of The Objectives of 4-H and Their Present Position

4-H Objective	n	mean*	s.d.	f**
<b>acquire cooperation skills</b>				
principal	21	3.29A	.46	3.62**
teacher 5 & 6	40	3.38A	.54	
teacher 4	26	3.65B	.49	
<b>acquire "people skills" in cooperation</b>				
principal	21	3.71	.56	2.25
teacher 5 & 6	40	3.45	.60	
teacher 4	26	3.69	.47	
<b>make intelligent decisions</b>				
principal	21	3.33A	.48	9.97**
teacher 5 & 6	40	3.48A	.51	
teacher 4	26	3.88B	.33	
<b>acquire knowledge &amp; desire for higher education</b>				
principal	21	3.86	.36	.66
teacher 5 & 6	40	3.93	.53	
teacher 4	26	4.00	.28	
<b>acquire social behavior, personal standards and values</b>				
principal	21	3.33	.48	2.07
teacher 5 & 6	40	3.35	.48	
teacher 4	26	3.58	.50	
<b>acquire skills &amp; knowledge that can share with parents</b>				
principal	21	4.10	.30	1.41
teacher 5 & 6	40	3.98	.53	
teacher 4	26	4.15	.37	

Table XII. (Continued)

4-H Objective	n	mean*	s.d.	f**
acquire positive attitudes of themselves and feelings of self-worth				
principal	21	4.38A	.50	7.82**
teacher 5 & 6	40	4.28A	.45	
teacher 4	26	4.73B	.45	
acquire public speaking & self-expression skills				
principal	21	4.48A	.51	9.14**
teacher 5 & 6	40	4.63A	.54	
teacher 4	26	5.00B	.00	
acquire citizenship skills (community service, government)				
principal	21	4.33A	.48	15.33**
teacher 5 & 6	40	4.40A	.55	
teacher 4	26	4.96B	.20	
learn practical skills in science				
principal	21	3.95B	.38	10.32**
teacher 5 & 6	40	3.43A	.50	
teacher 4	26	3.35A	.56	
apply practical skills in science				
principal	21	3.76B	.44	5.60**
teacher 5 & 6	40	3.38A	.49	
teacher 4	26	3.34A	.49	



Table XII. (Continued)

4-H Objective	n	mean*	s.d.	f**
manage their free time				
principal	21	3.05	.22	1.21
teacher 5 & 6	40	3.03	.16	
teacher 4	26	3.12	.33	

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

\*\*  $p \leq .05$  - means with different letters are significantly different as calculated using the Duncan's Multiple Range Test.

speaking & self-expression skills” ( $p < .001$ ), “acquire citizenship skills (community service, government)” ( $p < .001$ ), than were the fifth and sixth grade teachers or principals. Principals more strongly agreed with the statements: “learn practical skills in science” ( $p < .001$ ), “apply practical skills in science” ( $p = .005$ ) than did the fourth grade teachers or the fifth and sixth grade teachers.

Data in Table XIII presents the relationships between educator’s perceptions of communication strategies and the image of the 4-H agent and their present position. When tested with the *f*- test only one of the strategies was related to the respondents academic position. Fourth grade teachers and fifth and sixth grade teachers more strongly agree the “personal visits” was an effective communication strategy than did the principals.

As indicated in Table XIII, there was significant relationship between seven out of eight image of the agent statements and the respondent’s academic position. Principals more strongly agreed that the agent should keep school personnel informed of the 4-H mission ( $p = .005$ ), and devote time to public relations ( $p < .001$ ). Principals, also, more strongly agreed that the agent should provide recognition for 4-H volunteers ( $p = .020$ ) than did fifth and sixth grade teachers. Fourth grade teachers more strongly agreed that the agent should use volunteers to administer curriculum ( $p = .024$ ), market themselves as a off-campus UT faculty member ( $p < .001$ ) than principals and fifth and sixth grade teachers. Also, fourth grade teachers more strongly agreed that the agent should serve as a program manager that provides resource material and train volunteers ( $p = .008$ ) than did principals. Principals more strongly disagreed that the agent should train and utilize teens to conduct in-school 4-H programs ( $p = .014$ ) than fourth or fifth and sixth grade teachers.

Table XIII. Relationships Between Educator's Perceptions of Communication Strategies and The Image of The 4-H Agent and Their Present Position

Strategy/Image	n	mean*	s.d.	f**
<b>Strategy</b>				
personal letters				
principal	21	4.86	.36	.786
teacher 5 & 6	40	4.80	.46	
teacher 4	26	4.92	.27	
telephone calls				
principal	21	4.52	.60	2.67
teacher 5 & 6	40	4.70	.46	
teacher 4	26	4.85	.37	
personal visits				
principal	21	4.62A	.50	8.80**
teacher 5 & 6	40	4.90B	.30	
teacher 4	26	5.00B	.00	
radio				
principal	21	1.43	.81	2.76
teacher 5 & 6	40	1.33	.66	
teacher 4	26	1.04	.20	
news column				
principal	21	2.62	1.12	.170
teacher 5 & 6	40	2.78	1.00	
teacher 4	26	2.73	.92	
e-mail				
principal	21	5.00	.00	1.84
teacher 5 & 6	40	4.93	.27	
teacher 4	26	5.00	.00	

Table XIII. (Continued)

Strategy/Image	n	mean*	s.d.	f**
<u>Image of the Agent</u>				
volunteers to administer curriculum				
principal	21	3.05A	.86	3.91**
teacher 5 & 6	40	3.05A	.50	
teacher 4	26	3.46B	.58	
keep school personnel informed of 4-H mission				
principal	21	4.90B	.30	5.70**
teacher 5 & 6	40	4.55A	.55	
teacher 4	26	4.38A	.64	
devote time to public relations				
principal	21	3.67B	.58	10.26**
teacher 5 & 6	40	3.15A	.43	
teacher 4	26	3.12A	.43	
market themselves as a off-campus UT faculty member				
principal	21	3.71A	.56	9.94**
teacher 5 & 6	40	3.58A	.59	
teacher 4	26	4.19B	.49	
serve as a program manager that provides resource material and train volunteers				
principal	21	3.57A	.60	5.18**
teacher 5 & 6	40	3.78AB	.53	
teacher 4	26	4.04B	.34	

Table XIII. (Continued)

Strategy/Image	n	mean*	s.d.	f**
recruit volunteers for in-school & out-of-school 4-H programs				
principal	21	3.62	.59	1.09
teacher 5 & 6	40	3.48	.51	
teacher 4	26	3.65	.49	
train & utilize teens to conduct in-school 4-H programs				
principal	21	2.90A	.62	4.50**
teacher 5 & 6	40	3.25B	.44	
teacher 4	26	3.35B	.56	
provide recognition (plaques, banquet, etc.) for 4-H volunteers				
principal	21	4.57B	.51	4.12**
teacher 5 & 6	40	4.20A	.41	
teacher 4	26	4.35AB	.56	

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

\*\*  $p \leq .05$  - means with different letters are significantly different as calculated using the Duncan's Multiple Range Test.

Data in Table XIV, reports the relationships between educators perceptions of the ability of an in-school 4-H program to address selected Tennessee 4-H priority program areas and their present position. As reported in Table XIV, when tested using the *f*-test three out of five statements were significantly related to the respondent's academic position. Fourth grade teachers more strongly agreed that the agent should train volunteers to plan and conduct 4-H club meetings ( $p=.006$ ) than did principals. Also, fourth grade teachers more strongly agreed with the statements an in-school 4-H program enhances citizenship skills ( $p=.017$ ) and an in-school 4-H program teaches water quality ( $p=.003$ ) than did principals and fifth and sixth grade teachers.

Data in Table XV, presents the relationships between educator's perceptions of the objectives of 4-H and the number of years they had been employed. When tested with the *f*-test, respondents perceptions were not significantly related to the number of years they had worked. Respondents who had been employed 10 years or less did not tend to agree or disagree with these statements any different than did respondents who had worked 21 years or more.

Data in Table XVI, reports the relationships between educator's perceptions of communication strategies and image of the 4-H agent and the number of years they had been employed. When tested with the *f*-test, there was a significant relationship between the number of years worked and the need for the agent to keep school personnel informed of 4-H. Respondents who had worked 11 or more years agreed more strongly with this statement than did respondents who had worked 10 years or less.

Table XIV. Relationships Between Educator's Perceptions of the Ability of An In-school 4-H Program to Address Selected Tennessee 4-H Priority Program Areas and Their Present Position

Priority Program Areas	n	mean*	s.d.	f**
train volunteers to plan & conduct 4-H club meetings				
principal	21	3.00A	.77	5.40**
teacher 5 & 6	40	3.30AB	.61	
teacher 4	26	3.62B	.57	
in-school 4-H program enhances citizenship skills				
principal	21	4.43A	.51	4.27**
teacher 5 & 6	40	4.53A	.51	
teacher 4	26	4.81B	.40	
in-school 4-H program teaches water quality				
principal	21	4.29A	.46	6.34**
teacher 5 & 6	40	4.38A	.49	
teacher 4	26	4.73B	.45	
in-school 4-H program teaches family economic well-being				
principal	21	4.14	.57	.380
teacher 5 & 6	40	4.25	.59	
teacher 4	26	4.12	.82	
in-school 4-H program gives an opportunity to gain leadership skills				
principal	21	4.90	.30	.050
teacher 5 & 6	40	4.90	.30	
teacher 4	26	4.92	.27	

\*mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

\*\* p < .05 - means with different letters are significantly different as calculated using the Duncan's Multiple Range Test.

Table XV. Relationships Between Educator's Perceptions of The Objectives of 4-H and The Number of Years They Have Been Employed

4-H Objective	n	mean*	s.d.	f**
acquire cooperation skills				
10 or less	26	3.38	.50	.39
11 - 20	29	3.41	.57	
21 and more	32	3.50	.51	
acquire "people skills" in cooperation				
10 or less	26	3.50	.58	2.22
11 - 20	29	3.48	.57	
21 and more	32	3.75	.51	
make intelligent decisions				
10 or less	26	3.54	.51	.40
11 - 20	29	3.52	.51	
21 and more	32	3.63	.49	
acquire knowledge & desire for higher education				
10 or less	26	3.92	.56	.15
11 - 20	29	3.97	.42	
21 and more	32	3.91	.30	
acquire social behavior, personal standards and values				
10 or less	26	3.31	.47	.86
11 - 20	29	3.45	.51	
21 and more	32	3.47	.51	
acquire skills & knowledge that can share with parents				
10 or less	26	4.08	.63	.10
11 - 20	29	4.07	.37	
21 and more	32	4.03	.31	



Table XV. (Continued)

4-H Objective	n	mean*	s.d.	f**
acquire positive attitudes of themselves and feelings of self-worth				
10 or less	26	4.35	.49	2.60
11 - 20	29	4.34	.48	
21 and more	32	4.59	.50	
acquire public speaking & self-expression skills				
10 or less	26	4.69	.55	.34
11 - 20	29	4.76	.44	
21 and more	32	4.66	.48	
acquire citizenship skills (community service, government)				
10 or less	26	4.46	.58	.64
11 - 20	29	4.62	.49	
21 and more	32	4.56	.50	
learn practical skills in science				
10 or less	26	3.50	.51	.84
11 - 20	29	3.45	.63	
21 and more	32	3.63	.49	
apply practical skills in science				
10 or less	26	3.42	.50	2.02
11 - 20	29	3.34	.48	
21 and more	32	3.59	.50	

Table XV. (Continued)

4-H Objective	n	mean*	s.d.	f**
manage their free time				
10 or less	26	3.00	.00	2.32
11 - 20	29	3.03	.19	
21 and more	32	3.13	.34	

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

\*\*  $p \leq .05$

Table XVI. Relationships Between Educator's Perceptions of Communication Strategies and The Image of The 4-H Agent and The Number of Years They Had Been Employed

Strategy/Image	n	mean*	s.d.	f**
<b>Strategy</b>				
<b>personal letters</b>				
10 or less	26	4.81	.49	.36
11 - 20	29	4.90	.31	
21 and more	32	4.84	.37	
<b>telephone calls</b>				
10 or less	26	4.73	.45	1.37
11 - 20	29	4.79	.41	
21 and more	32	4.59	.56	
<b>personal visits</b>				
10 or less	26	4.92	.27	2.75
11 - 20	29	4.93	.26	
21 and more	32	4.75	.44	
<b>radio</b>				
10 or less	26	1.15	.46	.57
11 - 20	29	1.31	.71	
21 and more	32	1.31	.64	
<b>news column</b>				
10 or less	26	2.50	.95	1.42
11 - 20	29	2.69	1.07	
21 and more	32	2.94	.95	
<b>e-mail</b>				
10 or less	26	5.00	.00	2.74
11 - 20	29	5.00	.00	
21 and more	32	4.90	.30	

Table XVI. (Continued)

Strategy/Image	n	mean*	s.d.	f**
<b>Image of the Agent</b>				
use volunteers to administer curriculum				
10 or less	26	3.15	.46	.25
11 - 20	29	3.24	.69	
21 and more	32	3.13	.75	
keep school personnel informed of 4-H mission				
10 or less	26	4.35A	.63	3.60**
11 - 20	29	4.69B	.47	
21 and more	32	4.69B	.54	
devote time to public relations				
10 or less	26	3.15	.37	2.03
11 - 20	29	3.21	.56	
21 and more	32	3.41	.56	
market themselves as a off-campus UT faculty member				
10 or less	26	3.62	.57	1.71
11 - 20	29	3.83	.66	
21 and more	32	3.91	.59	
serve as a program manager that provides resource material and train volunteers				
10 or less	26	3.77	.51	.15
11 - 20	29	3.79	.56	
21 and more	32	3.84	.51	

Table XVI. (Continued)

Strategy/Image	n	mean*	s.d.	f**
recruit volunteers for in-school & out-of-school 4-H programs				
10 or less	26	3.42	.50	1.50
11 - 20	29	3.59	.50	
21 and more	32	3.66	.55	
train & utilize teens to conduct in-school 4-H programs				
10 or less	26	3.15	.37	.11
11 - 20	29	3.21	.62	
21 and more	32	3.22	.61	
provide recognition (plaques, banquet, etc.) for 4-H volunteers				
10 or less	26	4.19	.49	1.79
11 - 20	29	4.34	.48	
21 and more	32	4.44	.50	

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

\*\*  $p \leq .05$  - means with different letters are significantly different as calculated using the Duncan's Multiple Range Test.

Data in Table XVII, shows the respondents perceptions of the ability of an in-school 4-H program to address selected Tennessee 4-H priority program areas and the number of years they had been employed. When tested with the *f*-test there was no significant relationships between the number of years the respondents had been employed and their perceptions of the selected Tennessee 4-H priority program areas. Respondents who had been employed 10 years or less were no more likely to agree with a selected priority program area than respondents who had worked 21 years or more.

Data in Table XVIII, presents the relationships between educator's perceptions of the objectives of 4-H and the area in which the educators were raised. Of the 87 respondents, 55 were raised in a rural area, and 32 were raised in a urban area. When tested with the *t*-test there was no significant relationship between educator's perceptions of the objectives of 4-H and the area in which the educators were raised.

Data in Table XIX, presents the relationships between educator's perceptions of communication strategies and the image of the 4-H agent and the area in which the educators were raised. When tested using the *t*-test only one of the six communication strategies was significantly related to the area in which the respondents where raised. Respondents raised in rural areas more strongly agreed that personal visits was an effective means of communication than did those raised in urban areas.

Data in Table XIX, also indicates that when tested using the *t*-test only one of the eight image of the agent statements was significantly related to the area in which the respondents where raised. Respondents raised in rural areas more likely to agree that the

Table XVII. Relationships Between Educator's Perceptions of The Ability of An In-school 4-H Program to Address Selected Tennessee 4-H Priority Program Areas and The Number of Years They Had Been Employed

Priority Program Areas	n	mean*	s.d.	f**
train volunteers to plan & conduct 4-H club meetings				
10 or less	26	3.35	.63	1.85
11 - 20	29	3.48	.57	
21 and more	32	3.16	.77	
in-school 4-H program enhances citizenship skills				
10 or less	26	4.50	.51	1.70
11 - 20	29	4.69	.47	
21 and more	32	4.56	.50	
in-school 4-H program teaches water quality				
10 or less	26	4.42	.50	.10
11 - 20	29	4.48	.51	
21 and more	32	4.47	.51	
in-school 4-H program teaches family economic well-being				
10 or less	26	4.27	.60	1.14
11 - 20	29	4.03	.78	
21 and more	32	4.25	.57	
in-school 4-H program gives an opportunity to gain leadership skills				
10 or less	26	4.85	.37	1.20
11 - 20	29	4.97	.19	
21 and more	32	4.91	.30	

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

\*\*  $p \leq .05$

Table XVIII. Relationships Between Educator's Perceptions of The Objectives of 4-H and The Area The in Which Educators Were Raised

4-H Objective	Rural			Urban			t**
	n	mean*	s.d.	n	mean*	s.d.	
acquire cooperation skills	55	3.50	.50	32	3.34	.55	1.27
acquire "people skills" in cooperation	55	3.62	.53	32	3.53	.62	.69
make intelligent decisions	55	3.64	.49	32	3.44	.50	1.82
acquire knowledge & desire for higher education	55	3.93	.38	32	3.94	.50	-.107
acquire social behavior, personal standards and values	55	3.40	.49	32	3.44	.50	-.340
acquire skills & knowledge that can share with parents	55	4.04	.43	32	4.09	.47	-.583
acquire positive attitudes of themselves and feelings of self-worth	55	4.49	.50	32	4.34	.48	1.350
acquire public speaking & self-expression skills	55	4.73	.49	32	4.66	.48	.660
acquire citizenship skills (community service, government)	55	4.60	.53	32	4.47	.51	1.131
learn practical skills in science	55	3.49	.54	32	3.59	.56	-.845
apply practical skills in science	55	3.45	.50	32	3.47	.51	-.127



Table XVIII. (Continued)

4-H Objective	Rural			Urban			t**
	n	mean*	s.d.	n	mean*	s.d.	
manage their free time	55	3.07	.26	32	3.03	.18	.795

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

\*\*  $p \leq .05$

Table XIX. Relationships Between Educator's Perceptions of Communication Strategies and The Image of The 4-H Agent and The Area in Which The Educators Were Raised

Strategy/Image	Rural			Urban			t**
	n	mean*	s.d.	n	mean*	s.d.	
<b>Strategy</b>							
personal letters	55	4.84	.42	32	4.88	.34	-.444
telephone calls	55	4.75	.44	32	4.63	.55	1.053
personal visits	55	4.93	.26	32	4.75	.44	2.075**
radio	55	1.22	.53	32	1.34	.75	-.912
news column	55	2.75	.87	32	2.69	1.20	.239
e-mail	55	4.95	.23	32	5.00	.00	-1.765
<b>Image of the Agent</b>							
use volunteers to administer curriculum	55	3.20	.68	32	3.13	.61	.516
keep school personnel informed of 4-H mission	55	4.53	.60	32	4.69	.47	-1.376
devote time to public relations	55	3.25	.52	32	3.28	.52	-.231
market themselves as a off-campus UT faculty member	55	3.89	.60	32	3.63	.61	1.985*
serve as a program manager for resource materials	55	3.82	.48	32	3.78	.61	.315

Table XIX. (Continued)

4-H Objective	Rural			Urban			t**
	n	mean*	s.d.	n	mean*	s.d.	
recruit volunteers for in-school & out-of-school 4-H programs	55	3.58	.50	32	3.53	.57	.434
train & utilize teens to conduct in-school 4-H programs	55	3.24	.51	32	3.13	.61	.916
provide recognition (plaques, banquet, etc.) for 4-H volunteers	55	4.33	.51	32	4.34	.48	-.148

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

\*\*  $p \leq .05$

agent should market themselves as an off-campus UT faculty member than those raised in urban areas.

Data in Table XX, presents the relationships between educator's perceptions of the ability of an in-school program to address selected Tennessee 4-H priority program areas and the area in which the educators were raised. When tested using the *t*-test there was no significant relationship between the area in which the respondents were raised and their perceptions of the ability of an in-school program to address selected Tennessee 4-H priority program areas. Rural respondents were no more likely to agree with a priority program area than urban respondents.

Data in Table XXI, presents the relationships between educator's perceptions of the objectives of 4-H and whether their children were 4-H members. Of the 87 respondents, 54 had children in 4-H, and 33 did not have children in 4-H. When tested using the *t*-test there was no significant relationship between whether the respondent's children were in 4-H and their perceptions of the objectives of 4-H. Respondents who had children in 4-H were no more likely to agree with the objectives of 4-H than did respondents who did not have children in 4-H.

Data in Table XXII, presents the relationships between educator's perceptions of communication strategies and image of the 4-H agent and whether their children were 4-H members. When tested with the *t*-test there was no significant relationships between whether the respondent's children were in 4-H and their perceptions of effective communication strategies. Respondents who had children in 4-H were no more likely to agree with a selected communication strategy than were the respondents who did not have children in 4-H.

4-H Program to Address Selected Tennessee 4-H Priority Program Areas and The Area in Which The Educators Were Raised

Priority Program Areas	Rural			Urban			t**
	n	mean*	s.d.	n	mean*	s.d.	
agents should train volunteers to conduct in-school 4-H meetings	55	3.31	.63	32	3.34	.75	-.230
in-school 4-H program teaches citizenship skills	55	4.64	.49	32	4.50	.51	1.242
in-school 4-H program teaches the importance water quality	55	4.53	.50	32	4.34	.48	1.683
in-school 4-H program teaches family economics & well-being	55	4.15	.68	32	4.25	.62	-.714
in-school 4-H program gives youth an opportunity to gain leadership skills	55	4.89	.31	32	4.94	.25	-.719

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

\*\*  $p \leq .05$

Table XXI. Relationships Between Educator's Perceptions of The Objectives of 4-H and Whether Their Children Were 4-H Members

4-H Objective	Yes			No			t**
	n	mean*	s.d.	n	mean*	s.d.	
acquire cooperation skills	54	3.46	.54	33	3.39	.50	.597
acquire "people skills" in cooperation	54	3.61	.56	33	3.55	.56	.527
make intelligent decisions	54	3.59	.50	33	3.52	.51	.700
acquire knowledge & desire for higher education	54	3.94	.30	33	3.91	.58	.325
acquire social behavior, personal standards and values	54	3.46	.50	33	3.33	.48	1.202
acquire skills & knowledge that can share with parents	54	4.04	.33	33	4.10	.58	-.487
acquire positive attitudes of themselves and feelings of self-worth	54	4.50	.50	33	4.33	.48	1.543
acquire public speaking & self-expression skills	54	4.74	.44	33	4.64	.55	.924
acquire citizenship skills (community service, government)	54	4.59	.50	33	4.48	.57	.932
learn practical skills in science	54	3.56	.57	33	3.48	.51	.583
apply practical skills in science	54	3.50	.50	33	3.39	.50	.957

Table XXI. (Continued)

4-H Objective	Yes			No			t**
	n	mean*	s.d.	n	mean*	s.d.	
manage their free time	54	3.07	.26	33	3.03	.17	.845

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

\*\*  $p \leq .05$

Table XXII. Relationships Between Educator's Perceptions of Communication Strategies and The Image of The 4-H Agent and Whether Their Children Were 4-H Members

Strategy/Image	Yes			No			t**
	n	mean*	s.d.	n	mean*	s.d.	
<b>Strategy</b>							
personal letters	54	4.89	.32	33	4.79	.48	1.066
telephone calls	54	3.61	.56	33	3.55	.56	-.391
personal visits	54	4.83	.38	33	4.91	.29	-1.050
radio	54	1.31	.67	33	1.18	.53	.973
news column	54	2.87	.95	33	2.48	1.03	1.773
e-mail	54	4.94	.23	33	5.00	.00	-1.766
<b>Image of the Agent</b>							
use volunteers to administer curriculum	54	3.20	.71	33	3.12	.55	.609
keep school personnel informed of 4-H mission	54	4.69	.51	33	4.42	.61	2.051**
devote time to public relations	54	3.33	.55	33	3.15	.44	1.695
market themselves as a off-campus UT faculty member	54	3.89	.63	33	3.64	.55	1.893
serve as a program manager that provides resource material and train volunteers	54	3.85	.53	33	3.73	.52	1.075



Table XXII. (Continued)

Strategy/Image	Yes			No			t**
	n	mean*	s.d.	n	mean*	s.d.	
recruit volunteers for in-school & out-of-school 4-H programs	54	3.63	.52	33	3.45	.51	1.531
train & utilize teens to conduct in-school 4-H programs	54	3.24	.58	33	3.12	.48	1.034
provide recognition (plaques, banquet, etc.) for 4-H volunteers	54	4.41	.50	33	4.21	.48	1.808

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

\*\*  $p \leq .05$

As indicated in Table XXII, respondents, that had children in 4-H, strongly agreed or agreed with five of the eight image of the agent statements. When tested by the *t*-test only one of the eight image statements was significantly related to whether the respondents had children in 4-H. Respondents who had children in 4-H more strongly agreed that the agent should “keep school personnel informed of the 4-H mission” than did respondents whose children were not in 4-H.

Data in Table XXIII, presents the relationships between educator’s perceptions of the ability of an in-school 4-H program to address selected Tennessee 4-H program areas and whether their children were 4-H members. When these data were tested with the *t*-test there was no significant relationships between whether the respondents had children in 4-H and their perceptions of the ability of an in-school 4-H program to address selected Tennessee 4-H program areas. Respondents who had children in 4-H were no more likely to agree with the ability of an in-school 4-H program to address selected Tennessee 4-H priority program areas than did respondents whose children were not in 4-H.

Table XXIII. Relationships Between Educator's Perceptions of the Ability of An In-school 4-H Program to Address Selected Tennessee 4-H Priority Program Areas and Whether Their Children Were 4-H Members

Priority Program Areas	Yes			No			t**
	n	mean*	s.d.	n	mean*	s.d.	
agents should train volunteers to conduct in-school 4-H meetings	54	3.31	.72	33	3.33	.60	-.124
in-school 4-H program teaches citizenship skills	54	4.67	.48	33	4.45	.51	1.970
in-school 4-H program teaches the importance water quality	54	4.52	.50	33	4.36	.49	1.417
in-school 4-H program teaches family economics & well-being	54	4.24	.61	33	4.09	.72	1.033
in-school 4-H program gives youth an opportunity to gain leadership skills	54	4.94	.23	33	4.85	.36	1.356

\* mean- calculated from values ranging from 5 = Strongly Agree to 1 = Strongly Disagree

\*\*  $p \leq .05$

## CHAPTER V

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents a summary of the major findings of the study. A discussion of the purpose and objectives, methodology, major findings, implications and conclusions, and recommendations for further study will also be presented.

#### Purpose and Objectives

The purpose of this study was to gain an understanding of the perceptions of Putnam County Explorer and Junior 4-H Program by Local Public School Educators regarding The University of Tennessee Agricultural Extension 4-H educational program. The study focused on respondent's perceptions regarding the Objectives of 4-H, Communication Strategies and Image of the agent, Knowledge of the 4-H Curriculum, the Tennessee 4-H Priority Program Areas. The study strived to determine the relationships between these variables and selected demographic variables including: gender, age, number of years employed, present position, area the respondents were raised, and whether their children were in 4-H.

#### Methods and Procedures

The study was descriptive/coorelational. The target audience was school personnel including principals, assistant principals, fifth and sixth grade teachers, and fourth grade teachers in the Putnam County public school system. A total of 115 questionnaires were hand delivered to each public school. Of the 87 returned, 24% were

principals or assistant principals, 46% were fifth and sixth grade teachers, and 30% were fourth grade teachers.

The instrument consisted of two parts. Part I collected respondent's perceptions concerning Objectives of 4-H, Communication Strategies and Image of the agent, Knowledge of the 4-H Curriculum, the Tennessee 4-H Priority Program Areas. Part II collected demographic information regarding the respondents: age, gender, level of education, years employed, present position, where they were raised and whether their children are/where 4-H members.

### Major Findings

Major findings of the data presented in the study are organized under headings related to the study objectives and the tables presented in the earlier chapter.

#### Perceptions of School Personnel Concerning Selected 4-H Variables

Findings in this section are divided into four subsections including: (1) objectives of 4-H, (2) communication strategies and image of the agent, (3) curriculum, (4) priority program areas.

#### Objectives of 4-H

Respondents strongly agreed or agreed with 8 of the 12 4-H objectives. "4-H members acquire public speaking & self-expression skills" was the variable that received the highest mean score with a 4.70. The variable that received the lowest mean score was "4-H members manage their free time" with a 3.06.

### Communication Strategies and Image of the Agent

Respondents strongly agreed that e-mail, personal visits, personal letters, and telephone calls were effective methods for the 4-H agent to communicate with school personnel. In regards to communication strategies, e-mail received the highest mean score of 4.97, and radio the lowest with a 1.26.

In regards to image of the agent, respondents strongly agreed that “the 4-H agent should keep school personnel informed of the 4-H mission”, and with a mean of 4.59. The variable that received the second highest mean score was “the agent should provide recognition to volunteers” with a 4.33. The variable receiving the lowest mean score was “the agent should use volunteers to administer the curriculum” with a 3.17.

### Curriculum

More than 66% of the respondents had used history and language arts curriculum. Over 42% knew about but did use the animal science, arts, economics, energy, health, mathematics and plant science curriculum. Only one of the 87 respondents had used the economics curricula. None of the 87 respondents had used the energy or mathematics curriculum.

### Priority Program Areas

Respondents strongly agreed that “an in-school 4-H program provides youth with an opportunity to gain leadership skills”, and “an in-school 4-H program teaches citizenship skills (community service, how government works)”. Respondents were undecided that “agents should identify & train volunteers to plan, conduct & evaluate an in-school 4-H program”. The priority program area that had the highest mean score was “an in-school 4-H program provides youth with an opportunity to gain leadership skills”



with a 4.90. The priority program area that had the lowest mean score was “agents should identify and train volunteers to plan and evaluate an in-school program” with a 3.32.

### Demographic Profile of Respondents

Findings in this section are divided into six subsections including: (1) gender, (2) age, (3) level of education, (4) number of years employed, (5) area raised, (6) awareness of 4-H.

#### Gender

Twenty-six or 100% of fourth grade teachers, 35 or 87.5% of fifth and sixth grade teachers and 12 or 57.1% of principals were female. Five or 12.5% of fifth & sixth grade teachers were male, and 9 or 42.9% of principals were male.

#### Age

Of the respondents under 25 years old, 20 or 50% were fifth and sixth grade teachers. Of those 36 to 45 years old, 7 or 26.9% were fourth grade teachers, and 10 or 25% were fifth & sixth grade teachers. Of the respondents 46 to 55 years old, 11 or 42.3% were fourth grade teachers, and 9 or 42.9% were principals. Of the respondents over 55 years old, 9 or 42.9% were principals.

#### Level of Education

Fourteen or 53.8% of respondents were fourth grade teachers, and 24 or 60% of fifth & sixth grade teachers held a bachelor’s degree. Ten or 38.5% of fourth grade teachers, and 14 or 35% of fifth & sixth grade teachers held a master’s degree while all principals had a master’s degree plus hours towards another degree.

### Number of Years Employed

Twenty-one or 52.5% of fifth & sixth grade teachers had worked 10 or less years. Ten or 38.5% of fourth grade teachers have been employed for 11 to 20 years, and 15 or 71.4% of principals had been working for 21 or more years. Furthermore, 11 or 42.3% of fourth grade teachers had worked for 21 or more years.

### Area Raised

Twenty-six or 100% of the fourth grade teachers were raised in a rural area while 18 or 45% of fifth & sixth grade teachers, and 11 or 52.4% of principals were raised in a rural environment. Twenty-two or 55% of fifth & sixth grade teachers, and 10 or 47.6% of principals were raised in an urban area.

### Awareness of 4-H

Twenty-six or 100% of fourth grade teachers, 39 or 97.5% of fifth & sixth grade teachers, and 21 or 100% of principals had been 4-H members. Eighteen or 69.2% of fourth grade teachers, 19 or 47.5% of fifth & sixth grade teachers, and 17 or 81% of principals had children who had been in 4-H. Twenty-five or 96.2% of fourth grade teachers, 28 or 78% of fifth & sixth grade teachers, and 10 or 47.6% of principals were or had been a 4-H leader. 9 or 34.6% of fourth grade teachers had served on a advisory council. Twenty-three or 88.5% of fourth grader's, 25 or 62.5% of fifth & sixth grader's, and 16 or 76.2% of principal's had a spouse that had been a 4-H member. Only one or 2.5% of fifth & sixth grade teachers have not read about 4-H. One or 3.8% of fourth grade teachers, one or 2.5% of fifth & sixth grade teachers, and one or 4.8% of principals have not seen 4-H project displays, and only one or 2.5% of fifth & sixth grade teachers have had no contact with 4-H.



### Relationship Between Respondents Perceptions and Selected Demographic Variables

Findings in this section are divided into six subsections including: (1) gender, (2) age groups, (3) present position, (4) number of years employed, (5) area raised, (6) whether children were in 4-H.

#### Gender

There was a significant relationship for 8 out of 12 statements between educator's perceptions of the objectives of 4-H and their gender: "acquire cooperation skills" ( $p=.005$ ), "acquire people skills in cooperation" ( $p=.028$ ), "make intelligent decisions" ( $p=.022$ ), "acquire social behavior, personal standards and values" ( $p=.009$ ), "acquire positive attitudes of themselves and feelings of self-worth" ( $p<.001$ ), "public speaking & self-expression skills" ( $p<.001$ ), "acquire citizenship skills (community service, government)" ( $p<.001$ ) and "manage their free time" ( $p=.024$ ). For all eight statements significantly related to gender the female respondents more strongly agreed with the statements than did the male respondents.

All respondents indicated that four of the six communication strategies were effective for communicating with the 4-H agent. The strategy of communicating with a news column was significantly related to gender. Male respondents indicated the use of a news column was a less effective strategy for communicating with the 4-H agent than the female respondents. Four of the eight image of the agent statements were significantly related to gender. Female respondents more strongly agreed with the statements of "utilize volunteers to administer curriculum" ( $p=.014$ ), "market themselves as a UT faculty member" ( $p=.003$ ), "program manager providing resource material & train

volunteers” ( $p=.017$ ), and “train & utilize teens for in-school 4-H programs” ( $p=.037$ ) than did the male respondents.

There was a significant relationship between four of the five statements concerning the ability of an in-school 4-H program to address selected Tennessee priority program areas and the respondents gender. Female respondents more strongly agreed with the statements “agents should train volunteers to conduct in-school 4-H meetings” ( $p<.001$ ), “in-school 4-H program teaches citizenship skills” ( $p<.001$ ), “in-school 4-H program teaches the importance of water quality” ( $p<.001$ ), and “an in-school 4-H program teaches family economics & well-being” ( $p=.003$ ) than did the male respondents.

#### Age Groups

All respondents strongly agreed or agreed with 8 of the 12 objective statements. None of these perceptions were significantly related to their age groups. Younger respondents did not tend to agree or disagree with these statements any different than did the older respondents.

All respondents strongly agreed or agreed with four of the six communication strategies as an effective means of communication. However, there was no significant relationships between the respondents age group and their perceptions of effective communication strategies. Younger respondents were no more likely to agree with a selected communication strategy than the older respondents.

“Train volunteers to plan and conduct club meetings” ( $p=.048$ ) was the only statement significantly related to age group between educator’s perceptions of the ability of an in-school 4-H program to address selected Tennessee 4-H priority program areas.

Respondents in the 36 to 45 age group more strongly agreed that the agent should “train volunteers to plan and conduct 4-H club meetings than did those in the over 55 age group.

### Present Position

There was a significant relationship in 8 of the 12 statements regarding the objectives of 4-H and the respondents present position. Fourth grade teachers more strongly agreed with the five statements: “acquire cooperation skills” ( $p=.031$ ), “make intelligent decisions” ( $p<.001$ ), “acquire positive attitudes of themselves and feelings of self-worth” ( $p<.001$ ), “acquire public speaking and self expression skills” ( $p<.001$ ), and “acquire citizenship skills” ( $p<.001$ ), than did fifth or sixth grade teachers or principals. Principals more strongly agreed with the statements “learn practical skills in science” ( $p<.001$ ), and “apply practical skills in science” ( $p=.005$ ) than did the fourth grade teachers or the fifth and sixth grade teachers.

There was only one communication strategy significantly related to the respondents present position. Fourth grade teachers and fifth and sixth grade teachers more strongly agreed that “personal visits” ( $p<.001$ ) was an effective communication strategy than did the principals. There was a significant relationship between seven of the eight image of the agent statements and the respondents present position. Fourth grade teachers more strongly agreed with the statements: “volunteers to administer curriculum” ( $p=.024$ ), “market themselves as a off-campus UT faculty member” ( $p<.001$ ) than did fifth and sixth grade teachers and principals. Furthermore, fourth grade teachers more strongly agreed that the agent should “serve as a program manager that provides resource material and train volunteers” ( $p=.008$ ) than did principals. Principals more strongly agreed with the statements: “school informed of 4-H mission” ( $p=.005$ ), “devote time to public

relations” ( $p < .001$ ) and “provide recognition to volunteers” ( $p = .020$ ) than did fourth or fifth and sixth grade teachers. Principals more strongly disagreed with the statement: “train and utilize teens to conduct in-school 4-H programs” ( $p = .014$ ) than did fourth or fifth and sixth grade teachers.

There was a significant relationship between three of the five statements concerning the ability of an in-school 4-H program to address selected Tennessee 4-H priority program areas and the respondents present position. Fourth grade teachers more strongly agreed with the statement the agent should “train volunteers to plan and conduct 4-H club meetings” ( $p = .006$ ) than did the principals. Also, fourth grade teachers more strongly agreed that “in-school 4-H program enhances citizenship skills” ( $p = .017$ ), and “in-school 4-H program teaches water quality” ( $p = .003$ ) than did principals and fifth and sixth grade teachers.

### Years Employed

There were no significant relationships between educator’s perceptions of the objectives of 4-H and the number of years they had been employed. There was a significant relationship between one of the image of the 4-H agent statements and the number of years the educators had been employed. Respondents who had been employed 11 to 20 years and 21 or more years more strongly agreed with the statement: “keep school personnel informed of the 4-H mission” ( $p = .032$ ) than did respondents who had been employed 10 years or less. There was no significant relationship between educator’s perceptions of the ability of an in-school 4-H program to address selected Tennessee 4-H priority program areas and the number of years they had been employed.



### Area Raised

Rural respondents more strongly agreed with 6 of the 12 4-H objective statements: “acquire cooperation skills”, “acquire people skills in cooperation”, “make intelligent decisions”, “acquire positive attitudes of themselves and feelings of self-worth”, “acquire public speaking & self-expression skills”, and “acquire citizenship skills” than did urban respondents. There was no significant relationship between educator’s perceptions of the objectives of 4-H and the area in which the educators were raised.

There was a significant relationship between educator’s perceptions of communication strategies and the area in which the educators were raised. Rural respondents more strongly agreed that “personal visits” was an effective means of communication than did urban respondents. Also, there was one significant relationship between educator’s perceptions of the image of the 4-H agent and the area in which the educators were raised. Rural respondents more likely to agreed that the agent “should market themselves as a off-campus UT faculty member” ( $p=.050$ ) than did urban respondents. There was no significant relationship between educator’s perceptions of the ability of an in-school 4-H program to address selected Tennessee 4-H priority program areas and the area in which the educators were raised.

### Children in 4-H

Respondents, who had children in 4-H, strongly agreed with 8 of the 12 4-H objective statements: “acquire people skills in cooperation”, “make intelligent decisions”, “acquire knowledge & desire for higher education”, “acquire positive attitudes of themselves and feelings of self-worth”, “acquire public speaking and self-expression

skills”, “acquire citizenship skills”, “learn practical skills in science”, and “apply practical skills in science” than did respondents who did not have children in 4-H. There was no significant relationships between educator’s perceptions of the objectives of 4-H and whether their children were 4-H members.

There was no significant relationships between educator’s perceptions of communication strategies and whether their children were 4-H members. However, there was a significant relationship between educator’s perceptions of the image of the agent and whether their children were 4-H members. Respondents, who had children in 4-H, more strongly agreed that the agent should “keep school informed of 4-H mission” than did respondents who did not have children in 4-H. There was no significant relationship between educator’s perceptions of the ability of an in-school 4-H program to address selected Tennessee 4-H priority program areas and whether their children were 4-H members.

### Implications

The educators participating in this research indicated that 4-H members were acquiring public speaking and self-expression skills through their participation in the 4-H program. Teachers use the county public-speaking contest and demonstration contest as English grades for 4-H members in their English class. The Putnam County 4-H program is known for its success with the public speaking and demonstration contests. These findings indicate that Putnam County Extension Agents, working with the local educators, are doing an acceptable job of teaching 4-H members to acquire public

speaking and self-expression skills. Therefore, Putnam County Extension Agents should continue to focus on teaching public speaking and self-expression skills to 4-H members.

Respondents indicated that e-mail, personal visits, personal letters, and telephone calls were the most effective methods for the 4-H agent to communicate with school personnel. These findings indicate that the educators preferred personal contact over mass media as a means of communicating with the 4-H agent. Personal contact does not have to be face to face. E-mail can achieve the goals of personal contact without the agent being face to face with the educators. Sending educators an e-mail is more advantageous for the agent rather than personal visits because of time and budget restraints, and what was expressed in this study.

Educators reported using the history and language arts materials more than any other 4-H curriculum. This may be due in fact to the Putnam County 4-H Clover Bowl Contest using the history curriculum, and the county public speaking program using the language arts curriculum. Educators must use these materials so their 4-H club can participate in these projects. Therefore, the 4-H agent should concentrate on implementing contests or projects that directly involve 4-H curriculum.

Respondents indicated that an in-school 4-H program provides youth an opportunity to gain leadership skills, and teaches members citizenship skills. These findings indicate that in-school 4-H programs are providing youth an opportunity to gain leadership skills, and teaching the members citizenship skills. This may be due to the fact that a group of members are elected as officers or leaders to run their club's meeting. Occasionally in club meetings, members donate items (toys, food, books, etc.) to members of the community that are less fortunate. The Putnam County Extension Agents

should continue to provide in-school 4-H programs for youth to have an opportunity to gain leadership skills and learn citizenship skills.

Female educators agreed more favorably that members acquired the 4-H objectives, with the image of the agent statements, and with the ability of 4-H to address priority program areas than did the male educators. This may be because female educators are in charge of the 4-H program in the Putnam County school system. Therefore, female educators spend more time with the 4-H agent than do male educators. The agent needs to spend more time with the male educators to explain the objectives of 4-H and how to use the 4-H curriculum in the classroom.

Respondents 36 to 45 years old indicated more agreement that the statement “agent train volunteers to plan and conduct 4-H club meetings” than did educators over 55 years old. Of the 12 respondents that participated in the study over age 55, nine were principals. Principals agreed less strongly that the agent train volunteers to plan and conduct 4-H club meetings than did teachers.

Principals more strongly agreed that the agent should keep school personnel informed of the 4-H mission, devote time to public relations, and provide recognition to volunteers than did fourth or fifth and sixth grade educators. Also, educators who had been employed 11 to 20 years and 21 years or more indicated more approval for the agent keeping school personnel informed of the 4-H mission than did educators who had been employed 10 years or less. Principals, that participated in the study, had been working eleven years or longer. Educators may have answered the questions in the survey based on how they perceive their current academic position. These statements refer to



administrative duties and public relations. Principals are more involved with public relations and administrative duties than are fourth or fifth and sixth grade educators.

Fourth grade teachers agreed more favorably that the agent “use volunteers to administer the curriculum” than did principals or fifth and sixth grade teachers. The agents use volunteers to administer 4-H curriculum in fourth grade 4-H clubs. Volunteers are not used to administer fifth and sixth grade 4-H clubs. Because the fourth grade educators have experience with volunteers administering the curriculum may be the reason they agreed more favorably with the statement. Overall, respondents view the Putnam County 4-H Program as favorable and indicate the program should be continued.

#### Recommendations for Further Study

Perceptions of state legislators and county government officials regarding 4-H should be studied. These individuals are directly involved with the funding of the 4-H program. Studying their perceptions could better the program on a political and financial level as well as increase awareness of the program.

Study perceptions of youth that are members of the program. Members in junior and senior high could assist in providing further program improvement. Members in grades four through six could provide relevant information to the programs that they are already members. Data gathered could determine the direction of future projects within the local, state or national program.

The perceptions of Putnam County Educators in grades 7 through 12 should be studied. These personnel do not work as close with members as educators in grades four through six. This could give an indication of how many youth have the desire to remain

in 4-H, and how agents can better serve the program's older members and junior and senior high educators.

The perceptions of 4-H volunteers should be studied. Studying this valuable group may provide more insight as to how agents can better assist volunteers. Also, studying their perceptions of the program, could determine the direction of future projects within the local program.

Most school educators know very little regarding 4-H curricula. The specific reasons why educators are not using the 4-H curriculum should be studied. This could determine which curriculum the educators would like to have to use in their classrooms as well as why they are not utilizing the current curricula.

This study should be replicated to determine if educator's perceptions of the Putnam County in-school 4-H program have changed. Additionally, this study could be done in other counties in Tennessee, as well as other states to determine educator's perceptions regarding the 4-H program.

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APPENDIX

900 Bunker Hill Rd. Rm-4  
Cookeville, Tn. 38501  
Ph. 526-4561  
11-1-00

Dear 4-H Teacher and Administrative School Leaders:

4-H and public schools work together to improve the lives of young people. The objective of this study is to determine the 4-H and public school partnership and identify ways to better future programs. Your cooperation in this matter is greatly appreciated.

This study will be used to determine the effectiveness of the Putnam County 4-H program. Your input in this survey is of great importance. However, your participation is voluntary. Below, you will find a set of general instructions. Hopefully, reading the instructions will speed you through the survey. Then, before each section you will find detailed instructions for that section.

#### INSTRUCTIONS

1. All answers are confidential.
2. Your participation is voluntary.
3. No names are needed. The code number in the upper right hand corner will identify your school and be used to make sure you have an opportunity to respond.
4. Please answer all questions to the best of your knowledge.
5. Please complete and return to your school secretary.

Your assistance in this matter is greatly appreciated. Thanks!

Sincerely,

Robert L. Strong  
UT Assistant Extension Agent



Your Code  
Number \_\_\_\_\_

Part I.

Section I  
Values and Objectives of 4-H

The following items relate to some objectives and values of 4-H. Indicate the importance of the objective in your opinion by circling an appropriate response.

- 5 - STRONGLY AGREE
- 4 - AGREE
- 3 - UNDECIDED
- 2 - DISAGREE
- 1 - STRONGLY DISAGREE

	Strongly Agree		Strongly Disagree	
	-----			
Youth who participate in Putnam County 4-H, may develop their ability to:				
1. Acquire experience in cooperation	5	4	3	2 1
2. Acquire “people skills” and cooperation	5	4	3	2 1
3. Make intelligent decisions	5	4	3	2 1
4. Acquire career knowledge & desire for higher education	5	4	3	2 1
5. Acquire socially accepted behavior, personal standards, and values for living	5	4	3	2 1
6. Acquire skills & knowledge that could be shared with their parents	5	4	3	2 1
7. Acquire positive attitudes toward themselves and feelings of self-worth	5	4	3	2 1
8. Acquire public speaking and self-expression skills	5	4	3	2 1
9. Acquire citizenship skills(Community Service, How Government Works)	5	4	3	2 1

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 10. Learn practical skills in science          | 5 | 4 | 3 | 2 | 1 |
| 11. Apply practical skills in science          | 5 | 4 | 3 | 2 | 1 |
| 12. Manage their own affairs & their free time | 5 | 4 | 3 | 2 | 1 |

Section II

Public Image of the Agent

13. 4-H agents have a wide range of communication methods available to them. Indicate how effective the following communication methods were for communicating with you personally by circling the appropriate response for each item.

	Very Effective			Not Very Effective	
	5	4	3	2	1
Personal Letters	5	4	3	2	1
Telephone Calls	5	4	3	2	1
Personal Visits	5	4	3	2	1
Radio	5	4	3	2	1
Newspaper Column	5	4	3	2	1
E-mail	5	4	3	2	1

The following statements relate to the 4-H agent's role and responsibilities. Please indicate your agreement/disagreement with each statement by circling an appropriate response.

	Strongly Agree		Strongly Disagree		
	5	4	3	2	1
14. The utilization of volunteers by 4-H agents is essential to administer the 4-H curriculum	5	4	3	2	1
15. The 4-H agent should keep school personnel informed of the purpose and mission of 4-H	5	4	3	2	1
16. The 4-H agent should devote time and effort to public relations	5	4	3	2	1

17. The 4-H agent should market himself/herself as an off campus faculty member of The University of Tennessee 5 4 3 2 1
18. The 4-H agent should serve as a program manager providing resource material and training for volunteers 5 4 3 2 1
19. A major responsibility of the 4-H agent is to recruit volunteers to serve with 4-H in-school & out-of-school programs 5 4 3 2 1
20. 4-H agents should train and utilize teens, with leadership qualities, to conduct in-school 4-H for younger youth 5 4 3 2 1
21. The 4-H agent should provide formal recognition(certificates, plaques, banquet, etc.) for volunteers of 4-H for their efforts 5 4 3 2 1

### Section III

#### 4-H Curriculum & Schools

22. Following is a list of some 4-H project materials available through the Putnam 4-H program. In parenthesis are some school classes in the Putnam County Public School System. Please designate your response that best describes your knowledge and value of the available 4-H materials as it relates to your curriculum.

#### 4-H Curriculum Areas:

	Did Not Know	Used	Known Not Used
ANIMAL SCIENCE (beef cattle, horses, sheep, swine)	1	2	3
ART (arts, crafts)	1	2	3
ECONOMICS (credit, consumer budgeting)	1	2	3
ENERGY (automotive, electric, small engines)	1	2	3
HEALTH (diet, nutrition)	1	2	3
HISTORY (citizenship)	1	2	3
LANGUAGE ARTS (public speaking, communications)	1	2	3
MATHEMATICS (sewing, cooking, woodworking)	1	2	3
PLANT SCIENCE (garden, home horticulture, field crops)	1	2	3

Following are some statements that express the opinions regarding the ability of an in-school 4-H program to address some Tennessee 4-H priority program areas. Please indicate your agreement/disagreement by circling an appropriate response.

	Strongly Agree				Strongly Disagree
	-----				
23. The 4-H agents should identify and train more volunteer leaders to plan, conduct and evaluate 4-H club meetings	5	4	3	2	1
24. An in-school 4-H program could enhance the teaching of citizenship skills (how government works, and promote the importance and awareness of community service)	5	4	3	2	1
25. An in-school 4-H program could improve the teaching of awareness in water quality and other environmental issues	5	4	3	2	1
26. An in-school 4-H program could improve the teaching of family and economic well-being management skills	5	4	3	2	1
27. An in-school 4-H program could provide youth an opportunity to gain leadership skills	5	4	3	2	1

Part II.

I would like to know something about You as a respondent to this survey.

1. Indicate whether you are a male or female (check one)

\_\_\_\_\_ male                      \_\_\_\_\_ female

2. Age on your last birthday falls within: (please check the appropriate statement)

- \_\_\_\_\_ under 25 years
- \_\_\_\_\_ 25-35 years
- \_\_\_\_\_ 36-45 years
- \_\_\_\_\_ 46-55 years
- \_\_\_\_\_ over 55 years

3. Indicate your completed level of formal education (check one)

- Bachelor's degree
- Bachelor's degree plus hours toward Master's degree
- Master's degree
- Master's degree plus hours above Master's
- Educational Specialist degree
- Doctorate degree

4. Your present position (check only one)

- Principal
- Assistant Principal
- Teacher - 5<sup>th</sup> & 6<sup>th</sup> grades
- Teacher - 4<sup>th</sup> grade

5. Number of years you have been employed in public education (write in)

\_\_\_\_\_ years

6. Indicate the area you were born and lived until you were 18 years old. ("Rural" are areas or towns of 10,000 people or less and "Urban" to be towns and cities over 10,000 in population). Check the appropriate response.

Rural  Urban

7. The following items relate to your experience with the 4-H program. Please check each appropriate statement.

- I was a 4-H member
- My children are in 4-H; or were in 4-H
- I am/was a 4-H leader
- I am serving (or have served) on a 4-H Advisory Committee
- My spouse was a 4-H member
- I have read about 4-H
- I have seen 4-H project displays/exhibits
- I have had no contact with 4-H

THANK YOU FOR YOUR COOPERATION!

## VITA

Robert Lee Strong Jr. was born on November 16, 1973. He was raised in a rural area near Lebanon, Tennessee by parents Robert and Connie Strong. He attended school in Wilson County where he graduated from Lebanon High School in 1992.

In 1996, he graduated from Middle Tennessee State University with a Bachelor of Science degree. At Middle Tennessee State, he served as President of Agricultural Council, and Secretary of the Block and Bridle Club. Also, he served on various university committees throughout his undergraduate tenure at Middle Tennessee State University.

He began his career with The University of Tennessee Agricultural Extension Service on November 1, 1996. On September 1, 1998 he became an Assistant Extension Agent in Putnam County Tennessee. He received the "Cumberland District 4-H Agent of the Year Award" on April 16, 2000.

He left the Extension Service on February 3, 2001. He is currently working for the Dell Computer Corporation in the Home Sales Division.

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