EFFECTIVENESS OF THE 4-H LIFE SKILLS APPROACH TO LEADERSHIP DEVELOPMENT

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PREFACE

This study is concerned with determining the effectiveness of the 4-H Life Skills Approach to Leadership Development to teach skills necessary to perform leadership roles as compared to traditional methods utilized in 4-H. The research focused on the frequency and direction of skills change during a test period as perceived by youth and the adults working with the youth. The treatment was compared to a control.

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The author dedicates this document and the study to my wife Betty and our daughters, Ann, Pat, and Susan. Thanks.

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CHAPTER I

INTRODUCTION

The 4-H Program originated as the youth educational arm of the Cooperative Extension Service. The Cooperative Extension Service, since its beginning in 1914, has dedicated itself to the service of people. Programs, which began with the Cooperative Extension Service and later were known as 4-H, began with an emphasis in agriculture. This emphasis continued for many years and is still inherent to 4-H Program offerings. As the program grew and areas of offering expanded, the emphasis centered on the total development of boys and girls. The growth and development of boys and girls from the very early stages has been accomplished through the utilization of a cadre of volunteer leaders who have been trained and are supported by salaried Extension staff.

The overall objective of 4-H, as stated in Oklahoma 4-H for Century III is in two parts:

1. Provide the opportunity for all youth to develop their own greatest potential,

2. Provide for adult education through development and training of leaders to share the program with youth (10, p. 9).

This listing of objectives points to the dual emphasis of 4-H youth programs. The mission, as presented by Hoopfer (20), states:

> 4-H programs strive through a human growth and development model to help people, both youth and adults, gain

> additional knowledge, skills and attitudes for and as participating self-directing, productive and contributing members of society (p. 1).

Both the two part objectives and the mission statement refer to the development of both youth and adults. In addition, both refer to or imply the development of potential and/or skills. Through the years, as goals for the 4-H Program have emerged, the development or the teaching of skills has included the teaching or development of leadership abilities, both in youth and adults conducting the program.

Leadership is of ultimate importance to any organization and to society. There have been many studies to examine the importance and methods of leadership development. Early studies about leadership reflect on the leader as someone who has, or is born with the ability or qualities, related to being a leader. These traits or abilities were thought to be inherent in the leader. Support for this stance was attempted through studies dealing with leadership from a trait standpoint. Certain groups of traits were thought to be necessary to successful leadership; however, later studies and observations revealed that not all traits were present in all situations, and yet many leaders were found to be successful. This indicated that leadership was dictated by the specifics of the situation. The situational approach included variables of the position or setting of leadership, the behavior of the leader, as well as the personal characteristic of the leader. Accompanying this situational approach was the belief that most people could increase their effectiveness to perform in leadership roles by learning and developing skills.

Leadership development is of major concern to the Cooperative Extension Service, as was emphasized in the Oklahoma 4-H for Century III

staff guide (10). Occurring at approximately the same time, a 1976 survey by the Cooperative Extension Service of the Southern Region States identified leadership development as a priority concern for development. Further support to leadership development as a priority came from 4-H in Century III (13). This report recognized the need to teach youth life skills that would help them become self-directing, productive, and contributing members of society.

Acting on data obtained from the 1976 survey, the Southern Region Literature Committee appointed the Southern Region Leadership Subcommittee (SRLS) to develop materials to teach leadership to youth beginning at the nine year old level and extending throughout the 4-H experience. The SRLS in 1978 reviewed the available 4-H materials and found that current leadership materials approached leadership from a functional standpoint with little attention to how members were to learn to function as a leader. The materials did not include learning experiences to teach how to perform functions of leadership. The SRLS recommended a life skills approach as the most effective method to develop 4-H leadership.

There were a number of classifications of life skills in the literature and some are more appropriate than others for leadership skills. A determination of generic areas suitable for leadership was synthesized in 1979. More specific first and second priority life skills were grouped under these generic areas. The generic areas, as reported by Miller (23, p. 39) include: "The six generic categories included: understanding self, relationship, decision making, learning, group process, and management."

Following the work of this study the SRLS continued their work with the development of new materials to teach skills necessary to perform leadership skills. The materials contained learning experiences to attempt to teach the specific skills in each general category to the 4-H members. Learning experiences included simulated activities, supervised learning activities, apprenticing activities, exploring activities, and others. Attempts were made to include a variety of active learning experiences.

Statement of the Problem

The 4-H Leadership Life Skills (4-H LLS) materials were introduced to the Southern Region and to other states at a National Workshop in January of 1980. The materials presented a process and at the same time guided the learner and facilitator through a sequence of learning experiences, analyses, and evaluation.

Participants in the 4-H Program, adult and youth, indicate that leadership skills are taught through the many projects and activities of the 4-H club program. Numerous program materials and a variety of interacting approaches are used in 4-H. Program materials specifically designed for teaching leadership are also utilized in some settings. Some 4-H clubs or groups give special attention to attempting to teach leadership while others make no specific effort to teach leadership.

The central problem was to determine if the 4-H Life Skills Approach to Leadership Development (LSALD) as presented through the 4-H Leadership Life Skill materials was a more effective method of teaching skills necessary to perform leadership tasks than current methods.

Findings should determine whether additional research efforts and the writing of supporting materials to further develop the process are warranted or suggested.

Purpose of the Study

The primary purpose of the study was to determine if the 4-H Life Skill Approach to Leadership Development presented through the 4-H Leadership Life Skills materials was a more effective means of teaching certain priority life skills than current methods. The study provides information on which program development, resource allocation, and further assumptions and research could be based.

Objectives of the Study

In order to accomplish the purpose of the study the investigation was directed toward the following more specific research objectives:

1. To determine if there was a change in the leadership life skills of participating youth during the test period,
2. To determine if the 4-H youth perceive their skills level differently than their adult volunteer leaders,
3. To determine if there was a difference in the skills level between the treatment and control groups,
4. To determine if there was a difference in the skills level:
    a. between age groups,
    b. between Extension districts,
    c. between rural and urban places of residence, and
    d. if the participants were group officers.

Rationale for the Study

The beginning of 4-H was nearly simultaneous in a number of

locations (Iowa, Ohio, Kentucky, Oklahoma, Texas, and others). From this beginning near the start of the century, the program has grown into the current acclaimed and effective youth arm of the Cooperative Extension Service. Initially, the 4-H Program was concerned with the teaching of agricultural production skills, soon followed by skills necessary for a quality home life. The genius of the program and the uniqueness of its foundation in the land grant system has been copied by many nations around the world.

Even with the enviable record and acclaimed successes, it has become increasingly necessary for the Extension Service and 4-H Programs to be accountable for support and to justify the continued relationship to the land grant university system, the United States Department of Agriculture, and county governing bodies. On a national level, requirements were enacted for the annual accountability of the effectiveness of Extension programs in all subject areas. Concurrently, society changed and the needs of traditional Extension audiences and potential audiences have brought about the broadening and expanding of 4-H programs from the original production skills to more general youth development and the learning of skills necessary for living. This more general direction was more difficult to quantify actual results, and placed great pressure on the 4-H youth development programs. Though alumni of the 4-H Program attested to the benefits and effectiveness of 4-H to teach skills useful throughout life, there is still little research to verify these claims.

Since 4-H attempts to teach leadership skills, it was reasonable to develop instructional materials for teaching these skills. The

resulting Southern Region 4-H Leadership Life Skills materials were a product of efforts by a multistate development committee which wrote, piloted, and eventually distributed materials to be used to teach leadership life skills. The question then was raised--were the materials effective in the teaching of leadership life skills to youth participating in the 4-H Program? Research will provide evidence of:

1. The learning of leadership life skills,
2. The effectiveness of materials designed specifically to teach leadership life skills,
3. Strengths and weaknesses of the materials and approach,
4. Support data for further work in preparation of materials for use in teaching life skills, and
5. Data that can be used in making decisions regarding the allocation of resources to the continued development of the process and printing of materials.

Assumptions

The following assumptions are related to this research study and were made for the purpose of the study:

1. Increases in skills acquired during the test period were the result of leadership life skills training and other training methods,
2. The questionnaire used adequately assessed the participants' perception of leadership skills (Appendix A),
3. Acceptance of the concepts which are the basis of the materials utilized as the treatment (Appendix B).

Limitations

An attempt was made in this study to allow as much freedom in program operation as possible, both with the treatment and the control groups. The target population included all of the 4-H club members in

the state of Oklahoma. In an attempt to sample this group, the treatment was confined to groups within counties that had participated in an in-depth training program on the utilization of the 4-H LSALD and 4-H leadership life skills (LLS) materials. Counties which had not participated in the in-depth training or which were not using the 4-H LLS materials were utilized and the control counties were selected from that group.

The research recognized the following specific limitations as the study was conducted:

1. The method of facilitating the teaching/learning within the group was widely varied and heavily depended on the abilities of the volunteer leader,
2. There may have been no overt effort to include the teaching/learning of leadership in groups sampled for the control,
3. The sampling came from only one type of 4-H club program, commonly referred to as continuing type groups, and did not include more informally organized short term and mass media type delivery systems,
4. The size of the groups varied as did the ratio of adult volunteer leaders to youth,
5. Participation in the study was voluntary, and
6. Treatment groups were limited to those counties which participated in the training, while the control group was limited to counties which had not participated in the training.

Definitions

The following definitions were presented to avoid misunderstanding, to enhance continuity, and to provide clarity:

1. Cooperative Extension Service:

   The organization created by the Smith/Lever Act of 1914 and is a cooperative function between the United States Department of Agriculture, the land-grant

> university of each state, and the local county government. . . . The terms 'Extension,' 'Extension Service,' and 'Agricultural Extension' will also be used and are to be thought of as synonymous with the defined term (11, p. 7).

2. Cooperative Extension Staff: All county, district, and state extension staff with 4-H responsibilities. The term "salaried staff" and "agents" were also used and were used as synonymous terms.

3. 4-H:

> . . . a youth development program which utilizes a variety of program methods and areas of interest (known as projects) to reach and teach all youth 9 to 19 years of age regardless of race, color, national origin, residence or membership in any other organization (10, p. 6).

4. 4-H Club: A multiproject or single project continuing group which is usually organized for specific age groups and usually is operated under the leadership of officers and adult volunteer leaders.

5. 4-H Club Members: Youths, aged 9 to 19, that participate in a 4-H club. This did not include 4-H members who participated in short-term or mass media 4-H Programs.

6. 4-H Leadership Roles: "Elected or appointed positions in the 4-H Program" (7, p. 1).

7. Leadership:

> The art of influencing others in the making of decisions. It requires the performance of functions which help a group to achieve its directions. Leadership is developed, learned behavior and requires the ability to find, develop, and encourage the talent of others (29, p. 1).

8. Life Skills: ". . . our abilities that are useful for living everyday life. They include thinking, doing and feeling skills" (6, p. 1).

9. Process: A method of doing something, generally involving a number of steps to achieve an identified task or goal.

10. Volunteer Leaders: Adults or mature youth who were volunteering their time and were "engaged in helping children and youth learn in 4-H learning groups (often called 4-H clubs)" (26, p. 2). The terms "4-H leader," "adult volunteer," and "youth leader" were also used with synonymous meaning.

CHAPTER II

REVIEW OF LITERATURE

Introduction

Leadership and the development of leadership skills are universal issues of study and concern. The development of leadership activities of program participants has been integral to 4-H, though not always professed, since its beginning. Such abilities once developed or learned are used by the participant when the situation presents itself in later life. Such rationale has led to the use of the term "life skills."

The evolutionary stages of 4-H leadership and the development of leadership abilities and life skills education are concurrently related. A review of current thinking based on knowledge and practice was especially relevant to this study.

The review of literature and presentation of the background information was divided into three major areas and a summary. The areas included:

1. Contemporary 4-H programming,
2. Leadership development, and
3. Life skills education.

Contemporary 4-H Programming

A look into the first decade of our country's third century was

the purpose of 4-H in Century III (13). In addition, recommendations for direction and thrust that would keep 4-H strong and growing while maintaining the strengths of the traditional program was included in this task force effort. The foreward states:

> AN AMERICAN INVENTION, the 4-H Program of the Cooperative Extension Service originated near the beginning of the 20th century as a result of a vital need to improve life in rural areas. Introducing improved methods of farming and homemaking, 4-H taught youth to 'learn-by-doing.' Designed for both boys and girls, the first 4-H 'projects' included home canning of tomatoes as well as raising corn and hogs.
>
> There was a close affiliation between the school and the home in this early 4-H Program--adults in the family often being persuaded to adopt new practices as a result of the success experienced by the 4-H youth.
>
> In 1914 the Smith-Lever Act established the Cooperative Extension Service, an organizational entity of the United States Department of Agriculture and the Land-Grant College system. Created by this act and subsequent legislation to conduct educational programs of an 'informal, non-resident, problem oriented nature,' the Cooperative Extension Service provided the professional staff and support needed to direct the growth of the early 4-H program.
>
> Today's 4-H Program of the Cooperative Extension Service involves youth as the primary audience and adults and teens as volunteer leaders (p. 1).

This brief history and futuristic view of the current program was background for a concise statement of mission. The document states: "4-H's mission is to help young people become self-directing, productive and contributing members of society" (13, p. 3). The later work was expanded by a National 4-H Developmental Committee to include: ". . . to assist youth in acquiring knowledge, developing life skills, and forming attitudes which will enable them to become self-directing, productive and contributing members of society" (28, p. 1). A further expansion by Hoopfer (20, p. 1) included "both youth and adults" as a part of the learning and development group.

Such a broad mission statement was followed by more specific goals and/or objectives. Such a mission was more precisely described through the following list of goals proposed by the Goals and Objectives Developmental Committee:

1. Learn, understand, and apply leadership roles,
2. Acquire a positive self concept,
3. Learn to respect and get along with others,
4. Understand and use sound health practices for mental, physical, emotional, and social health,
5. Establish positive attitudes toward productive use of leisure,
6. Understand and practice responsible skills related to environment,
7. Participate in community affairs,
8. Acquire subject matter skills and knowledge in certain areas of science and technology,
9. Explore and evaluate career and job opportunities, and
10. Develop volunteers as individuals and leaders in the 4-H Program (28, pp. 1-9).

Several of the goal statements refer to commonly accepted skills, traits, or competencies related to leadership. However, the first goal was specifically directed to leadership roles. It was further explained in rationale related with the leadership role goal that:

> Leadership skills benefit both individuals and our society. Youth who develop leadership abilities are more able to participate in the democratic process. At the same time leadership skills help youth become self-directing, responsible citizens capable of making effective decisions.
>
> Leadership skills are learned. Four-H youth acquire leadership knowledge, skills and status in a learning environment enhanced by opportunities in organizations

> and educational activities supported by adult volunteer leaders, materials and services of the Land Grant System and a linked program structure that extends from local club and county, through state to national (28, p. 2).

The mission of the organization and goals became operationalized through actions and interactions of participants and resources. The National 4-H Curriculum Design Team described the curriculum as follows:

> The ultimate description of the 4-H curriculum is the impact 4-H has on the participants. It is everything participants experience in 4-H. It is the sum total of the situational factors and actors as they are received and interpreted by the individual (27, p. 1).

As stated earlier, 4-H is a learn-by-doing educational program and is frequently referred to as experiential learning. Such learning methods were integral to curriculum and were central to the program rather than information being central to the program. Such a learn-by-doing, experiential centered curriculum had several features as reported by the National 4-H Curriculum Design Team. These features include:

1. A two fold outcome: a) socially desirable behaviors and b) knowledge, skills, and understanding of subject matter which the individual elects to be involved with,
2. Subject matter is used as a means to an end and an end in itself,
3. The program content includes a series of purposeful experiences,
4. Emphasis is placed on real life learning activities and situations,
5. The individual is involved in planning their own learning,
6. Subject matter is cooperatively selected in the learning situations, and
7. Individual development is emphasized (28, p. 1).

From an analytical standpoint four categories were proposed by Stormer (32) as elements or components of 4-H curriculum. They included intructional content, organizational arrangement, climate or atmosphere, and instructional strategies. Each of the categories contributed a part to the total curriculum.

The academic base from which a total 4-H curriculum comes was two dimensional--experiential and subject matter related. The academic base for the experiential dimension of 4-H relates to the way humans learn, develop, interact, and organize. The National Curriculum Design Team listed the academic areas as:

1. Human Development,
2. Human Learning,
3. Human Interaction, and
4. Human Organization (32, p. 5).

The academic base for the subject related dimension of 4-H was stated to include the departments and specialists that professes knowledge and experience in subject related areas, such as animal science.

The current mission statement, the program goals and objectives, and the operationalizing through curriculum suggested the relationship of the contemporary 4-H program to leadership and to life skills. They each professed the evolution of 4-H. Leadership and life skills in education and youth programs were likewise evolving.

Leadership Development

"The concept of leadership remains elusive . . ." (21, p. 177). This continues to remain true today, "because it depends not only on the position, behavior, and the personal characteristics of the leader

but also on the character of the situation" (21, p. 177). Even the definitions of leadership are vague and confusing. A definition can be found to suit most situations and interpretations of leadership.

Many of the studies of leadership have focused on types of leadership and upon the leader. Early writings and studies about leadership reflected the leader as someone who has or is born with the ability or qualities related to being a leader. This stance was represented by studies dealing with leadership from a trait standpoint. Sets of traits were attributed to leaders and to leadership. These traits were thought to be necessary.

Studies and observations soon revealed that not all traits were present in all situations. This led to a view of leadership as dictated by the specific situation. The situational approach included variables of the position of leadership, behavior of the leader, as well as the personal characteristics of the leader.

Focus of this part of the review centers on leadership as related to management, decision making, and operation of an organization, business, or educational system. An attempt was made to review the most current literature. The question which remains is, "what types or characteristics of leaders are required or more successful?" In specific leadership situations it appeared that traits and environments were important. Leadership was apparently a blending of the leader and the situation as a social transaction (21).

There was no definite agreement; however, there appeared to be a trend in the direction of considering leadership from a multifactor approach. Considerable attention was given to the contingency

theory proposed by Fiedler and Mahar (14). Hanson (18, p. 98) states, "contingency theory is perhaps the most powerful current sweeping over the public and private sectors of management."

A number of the studies reviewed look at the effects of leader behavior on the performance of subordinates and the resulting effect of the performance of the organization. Such things as the leader's ability, group ability, type of task, importance of task, comparisons of formal and informal leadership structures, and relationships are being studied. Results that were quantified under controlled conditions gave some hint as to what might work best under particular conditions. The use of tools such as the Leader Behavior Description Questionnaire (LBDQ) and other widely accepted measurements are giving reliable data to the study of leadership in education, as well as other fields.

Brooks (3, p. 62) indicated that leadership and a tyrant are polar opposites, and referred to leadership as "the shrewd and effective, at the most, the wise and moral use of power." He divided leadership into transactional and transforming. The transactional referred to the negotiating, while the transforming referred to the action of the leader to allow those who were following to discover their own abilities.

Dufty and Williams (12), in their study entitled "Participation in Decision-Making," were primarily concerned with personal leadership styles. They found that participatory decision making was more widely used by heads of departments in an academic institution than by private enterprise and public service decision makers. The findings also indicated support to the contingency theory that effectiveness of leadership style was, in part, a function of the situation. They

concluded that "Styles of leadership involving a higher degree of participation than is customary in public or private bureaucracies are used without any apparent cost in terms of effectiveness" (p. 37).

Substantial support to the contingency theory training model was provided through 12 studies recorded by Fiedler and Mahar (14). They proposed that the effectiveness of the leader was dependent upon the match between the motivational structure of the leader and factors of the situation itself, including control and influence of the leader. Consistent results and improved performance were reported. "Each of the twelve validation studies of Leader Match training yielded statistically significant results of supporting the effectiveness of the training method" (p. 56).

The study of the effect of leader behavior on the performance and satisfaction of subordinates conducted by Gilmore, Beehr, and Richter (15) utilized the LBDQ in the collection of data. This scientific study revealed that a manipulation did cause a difference in the quality and quantity of work. As the leader initiated structure, the performance of subordinates did increase. Their findings verified that as high structure and low consideration were included, the quality of the work was low. However, when high structure and high consideration were both included, work quality was high. When the leader's behavior was manipulated there was a significant difference in the subordinate's performance level.

Hanson (18) gave support to Fiedler and Mahar's (14) contingency theory and provided a framework for adapting to the educational setting. Hanson concluded with "the intent of the contingency theory of

management is to establish an optimal 'match' between the environmental demands and the organizational response capabilities" (p. 113).

The amount of cooperation, the leader-group member relationship, and the ability of the leader and group members were studied by Kabanoff and O'Brien (22). This laboratory experiment included the manipulation of the leader ability as well as the type and difficulty of the task. They found coordinated structures were significantly more productive than non-coordinated structures. Groups with high ability leaders were more productive than groups with low ability leaders. When collaboration was permitted, the ability of the group leader did not have a significant effect on the group's performance. Their findings indicated:

> The creative ability of group members was a significant determinant of group productivity; the way in which group members cooperated or organized themselves was as important a determinant of group performance as member ability; and group organization significantly modified the effects of leader ability on performance (p. 530).

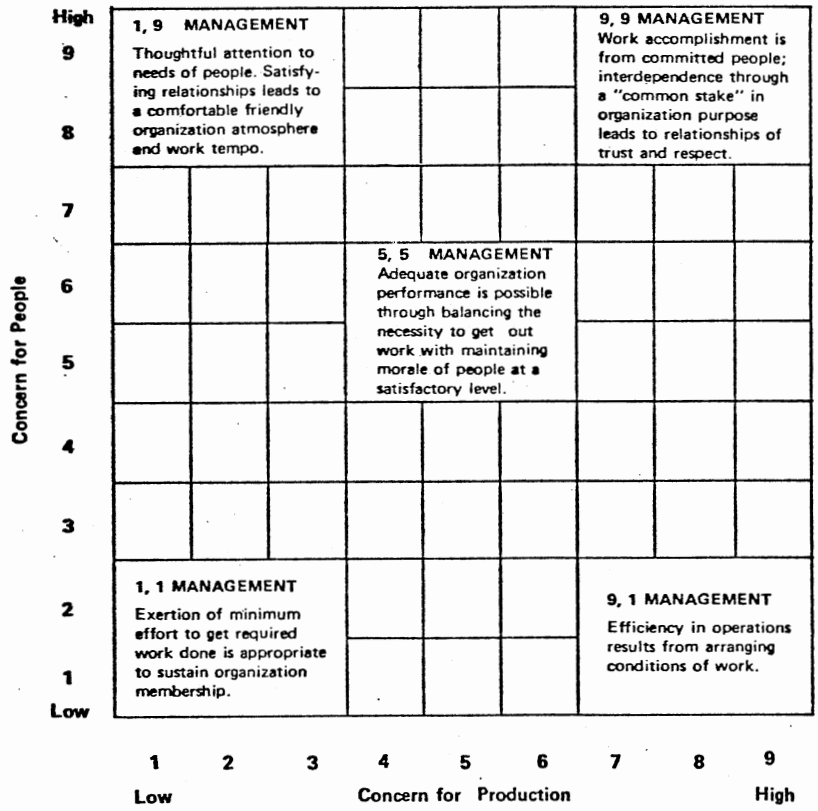
These findings suggested much more attention and research to the interaction of leaders, leadership style, ability of the leader, the group abilities, and the task demands was needed.

The idea of shared decision making and principal leader behavior was studied by Moyle (24). As a part of this study, the Path-Goal Theory of Leadership was utilized and three important categories were used: (1) instrumental leadership; (2) supportive leadership; and (3) participative leadership. He found that instrumental leadership, including items dealing with rules and regulations, was exerted with caution by the school principals, but a committee used in planning the curriculum viewed this as a positive leadership attribute. He

further found that supportive leadership behaviors were quite important to the teacher's job satisfaction as well as the effective functioning of the curriculum committee. His final finding was that participative leadership was undertaken in different ways. There was some selective sharing of information and an understanding on the part of the teachers that participative leadership implied, at times, the seeking of advice by the school principal.

The managerial theory of school superintendents and their attitude was studied by Tillman and Rencher (33). They investigated high and low achieving superintendents. Through a factor analysis approach and application to a management grid they were able to determine the management preference of superintendents regarding concern for people and concern for production. Results of the study showed that superintendents selected the 1, 9 (high consideration for people, low consideration for production) management formulation over the 9, 1 (low consideration for people, high consideration for production) formulation. The results further showed a strong preference of the high achieving superintendents for the 9, 9 (high consideration for people and production) management formulation as the most typical management style or style of leadership. The management grid is shown in Figure 1. The study indicated an implication to boards of education to "consider the advantages which might be gained by selecting superintendents who project the tendency toward the 9, 9 management leadership style" (33, p. 41).

Studies reviewed in this current examination of the literature support a contingency approach to leadership. Models, other than



Source: Fred A. Tillman, Jr., and Alvin C. Rencher, "Attitude Dimensions of Managerial Theories of School Superintendents," Journal of Experimental Education (1976).

Figure 1. The Managerial Grid

Fiedler and Mahar's (14) contingency model, indicated the leadership style or approach most effective was contingent on a number of factors from the environment and personality traits.

Specific confirmations of factors can result in high levels of production as Moyle (24) found when studying school principal behaviors and shared decision making. The instrumental leadership which included "behaviors which define roles and relationships, stress rules and regulations, schedule work to be done, stress standards of performance, and explain why tasks should be done" (p. 43) was acceptable and produced results. As long as the reasons for the rules and regulations was shared and understood, the productivity was satisfactory. This was verified by the positive feeling of subordinates on the curriculum committee even though they were required to operate within the rules. Another example was when suggestions and information were seen as reasonable input to participative leadership. They understood the reason for the limitations of involvement in the decisions process.

Fiedler and Mahar (14), in their explanation of the "Leader Match" training program which was built on the contingency model, indicated that it might be more appropriate to match leader style to the situation rather than attempt to change the behavior of the leader to fit the situation.

Many questions still remain unanswered in regard to leadership. As new questions are raised, the area to be studied is more tightly restricted.

4-H Leadership Development

Leadership was emphasized in 4-H Programs since the very early

days (13). Many current writings refer to the priority and emphasis of leadership development. With this emphasis one would expect to find many materials devoted to leadership development.

Many of the materials such as Teens Take the Lead were designed for older youth. This northeast regional publication identified six major concepts, including:

1. Leadership is learned,
2. Leadership is a helping process,
3. Leadership is shared,
4. Leadership is a relationship between peoples,
5. Leadership must be at the right time and place, and
6. Leadership is earned (9, p. 2).

This quality publication indicated that all six of these concepts of 4-H leadership can be learned by both adult and youth members through participation in 4-H projects and activities. Thus, the learning of leadership skills was related to the project or activity and learning was accomplished through trial leadership role.

Other frequently used materials for the teaching of skills necessary for leadership came from Virginia and Wisconsin. In both instances the 4-H learner operated as an assistant to another person followed by an apprenticing and finally accepting the full responsibility of the leadership position or role. Both of these materials are directed to the teenage youth. The adult was a model and/or the facilitator.

Many officer, junior and/or teen leader guides and manuals focused on the functions the aspiring leader should perform. When learning experiences other than apprenticing, trial of the job, or

helping were included, there was little sequencing and logic to the learning experiences.

The leadership development materials for the most part focused on the functional aspect of the leadership job or role. In a review of the existing 4-H literature, the Southern Region Leadership Subcommittee found that current 4-H leadership materials approached leadership from a functional standpoint. They further found that most materials did not include any type of learning experiences to teach how to perform the function described in the materials (31).

This void of learning experiences to perform functions led to recommendations by the Southern Region Leadership Subcommittee that a life skill approach be proposed for the teaching of skills necessary to perform leadership roles.

Life Skills Education

The use of the term "life skills" in education is not new. The understanding of the definition of life skills and the direct and indirect implications were supported by present research and past writings. "Life Skills," in itself, implies the learning of skills that can and will be used throughout life.

Miller (23) accumulated documentation that supports the use of life skills in education. She stated:

> Rubin (1969) supported the concepts that education for life and the development of skills related to the real needs of life are crucial. Rubin further stated that in judging success on producing skillful people, one must look at the way they respond to life circumstances rather than attempt to measure their ability to perform specific school tasks.

> Berman (1971) emphasized the need to develop process skills. She stated that children and educators must acquire process related skills in order to deal with change and the rapidly changing body of knowledge. Berman (1971) identified the following skills of a process related person: perceiving, knowing, communicating, showing concern and affection, decision-making, patterning, creating, and dealing with the ethical. Rubin (1969) also emphasized the importance of perceptual skills (p. 18).

The Canadians have done much work and utilized extensively a life skill process in education and particularly in manpower and vocational training. According to Himsl (19, p. 13), a definition of life skill is: "Life skills, precisely defined, means problem solving behaviors appropriately and responsibly used in the management of personal affairs." In the same writing, Himsl indicates a number of assumptions about life skills and life skills training:

> A course aimed at training people in the life skills, implies certain assumptions. In order to have a life skills course, the life skills must exist as identifiable and describable behaviors. In addition, it requires that some people already have those skills and that they can demonstrate them; it requires that others can imitate them, and through practice, apply them in their own life situations, changing their behavior from what they once were, and so, learn (pp. 13-14).

A further expansion of the definition was given by Gryba (17, p. 3) and was stated to mean "problem solving behaviors appropriately and responsibly used in the management of personal affairs." The discussion included "this definition implies developing skills that are relevant to one's life space, otherwise they would not be appropriate" (pp. 3-4). In the design of a life skill course for adolescence, the approach recognized that learning occurred in three learning domains: cognitive, affective, and psychomotor. According to Gryba (17):

> It assumes that students can achieve affective learning and behavioral learning by practicing in suitable

> learning experiences in much the same way as cognitive learning occurs when students are provided with learning experiences appropriate in the cognitive domain (pp. 4-5).

This learning process and the use of skills throughout life was seen by Conger (5, p. 1) in this manner: "Life skills training is an example of a social invention which is based on some very important theoretical formulations. . . ."

The use of the term "life skills" and the relating of 4-H activities to this type of learning can be traced to the late 1920's. Increasingly, the teaching learning process utilized in 4-H is referred to as a life skills process. The National 4-H Citizenship Development Committee indicated "the term 'life skills' to denote competencies that are deemed useful for living in an interdependent society" (25, p. 1). The concept "skills . . . denotes an amalgamation of psychomotor, affective and cognitive behaviors" (p. 1). Use of the word phrase "life skills" and the accompanying explanation closely follows that reported in other educational literature.

In work done by Hoopfer (20), the 4-H mission was expanded and integrated to include overall skills areas identified in 4-H and other educational media. These overall skill areas were proposed to include:

1. Learning how to learn,
2. Maintaining or acquiring a positive self concept,
3. Relating to others, and
4. Coping with physical, social, economic and political systems (p. 1).

An overall global model was proposed with overall life skills related to the mission and serving as an umbrella to all learning that takes place within the 4-H Program. More specific classifications of skills

included leadership, citizenship, vocational, and avocational life skills. It was indicated that these were not intended to be all inclusive and that some additional specific classifications could be added. It was added that these were not to be considered as sacred categorizations.

Hoopfer (20) went on to cite classifications of generic life skills isolated by Miller (23). Those generic classifications include:

1. Communications,
2. Decision making,
3. Getting along with others,
4. Learning to learn,
5. Management,
6. Understanding yourself, and
7. Working in groups.

The global model proposed by Hoopfer (20) illustrated the experential learning of even more specific skills that were subdivisions of the generic areas.

Resulting from the Southern Region Leadership Subcommittee (31), a process of learning life skills was developed. The generic classifications previously cited were simplified and included. These classifications, as presented in the Helper's Guide include:

1. Communications,
2. Decision making,
3. Getting along with others,
4. Learning,
5. Management,

6. Understanding yourself, and

7. Working in groups (6, p. 7).

In the members' publication Exploring 4-H Leadership, life skills were defined as ". . . thinking, doing, and feeling skills that help us succeed everyday" (8, p. 1). In addition, Exploring 4-H Leadership speaks of leadership being performed in the context of leadership roles defined as ". . . leadership positions in 4-H. They may be elected, chosen, or appointed. There may be many leadership roles in 4-H" (8, p. 1).

This rather different approach to the teaching of skills was shown to be acceptable to volunteer and salaried staff by Grimm-Peltomaki (16). In the conclusion to her study, she stated:

> Based on results and findings of this study, the researcher concludes that . . . members, leaders/helpers, and agents are receptive to incorporating the 'life-skills' approach to leadership development into the . . . program (p. 50).

Summary

This review of studies and current writings projected a 4-H Program situational statement that was futuristic in focus and showed relationships to leadership development and to a life skills approach to the teaching/learning process. The review of current writings in leadership development supported a multifactor or contingency type theory that was adaptable to a life skills method of teaching/learning and supported the contemporary mission of 4-H. Life skills education, though cited early in 4-H history, became inreasingly a part of program operation and shows definite processes that were apparently acceptable to volunteer and salaried staff.

CHAPTER III

DESIGN AND METHODOLOGY

Introduction

This chapter will describe the methods used and the procedures followed in conducting this study. It was necessary to determine the population that would be considered and the method of collecting information relative to the purpose of the study. In order to collect these data, the population was identified and an instrument was developed. A procedure was established for the data collection and methods were appointed to analyze and give meaning to the raw data.

The purpose of the study, to determine if the 4-H life skills approach to leadership development presented through the 4-H leadership life skills material is a more effective means of teaching certain generic life skills than current traditional methods, was stated through four objectives. To fulfill this purpose, the objectives were restated in a null hypothesis form for testing. The null hypotheses included:

1. There is no apparent difference between the pre tests and the post tests on leadership life skills for participating youth:
   a. as perceived by leaders,
   b. as perceived by members.
2. There is no significant difference in the perceptions youth have of their change in leadership life skills when compared

to that of their adult volunteer leaders' perceptions of the changes in the youths' leadership skills.

3. There is no significant difference in the leadership life skills change between the treatment and control groups:

   a. as perceived by leaders,

   b. as perceived by members.

4. There is no significant difference in the leadership life skills change:

   a. Between age groups:

      1. as perceived by leaders,

      2. as perceived by members,

   b. Between extension districts:

      1. as perceived by leaders,

      2. as perceived by members,

   c. Between rural and urban place of residence:

      1. as perceived by leaders,

      2. as perceived by members, and

   d. Between group officers and non-officers:

      1. as perceived by leader,

      2. as perceived by members.

Population

The population considered for this study was the entire enrollment in the 4-H Club Program of the state of Oklahoma. Because of the limitation of time and resources, it was considered more feasible to base the study on a representative sample of the population. A method of selecting a sample size for a large population was obtained by using a formula for sampling populations as defined by Cochran (4)

and others. The formula is given as:

$$n = \frac{\frac{t^2\ PQ}{D^2}}{1 + \frac{1}{N}\left[\frac{t^2\ PQ}{D^2} - 1\right]}$$

where:

n = sample size
t = 1.96
P = 0.5
Q = 1-P
D = 0.05
N = population size

In order to generalize with confidence to the total 4-H Club population, a confidence level of 0.95 was chosen. When the appropriate values were substituted into the formula, the resulting n = 380.91. The figure was rounded to 380 for the treatment and control sample size.

Treatment

The treatment utilized in this study was the introduction of Exploring 4-H Leadership, the entry level learning publication of the Southern Region 4-H Leadership Life Skills materials (8). The introduction of the materials was accomplished through the efforts of the local volunteer leader working with the youth of 4-H clubs. The local volunteer leaders were trained to use the materials by attending a county training session or one of several district training offerings.

The district training sessions were open to counties wishing to participate and that attended with a county team of adult volunteer leaders and agents. Counties were encouraged to participate and 40 of the 77 counties participated with county teams. The training sessions were one or two day workshops with active participation by the volunteers and agents. All participants at the training sessions were informed of the approaching research project and that several counties would be asked to be a part of the study.

The district 4-H agents were asked to obtain up to four volunteer counties from those receiving the training to make up the treatment group. The willingness of the volunteer leader to participate was a contributing factor to clubs being included.

Control

The control was to be the traditional operation of the 4-H Club with the 4-H project work, activities, events, and program that was planned by the club. The program of the control was conducted with the assistance of the local volunteer leader utilizing resources available for the program.

The 37 counties not receiving the treatment training were the source of the control for the study. The district 4-H agents were asked to obtain up to four volunteer counties with similar staffing, population, and socio-economic backgrounds to the treatment counties. An equal number of control counties to the number of treatment counties was necessary.

Proposed Sample

The sample for the study consisted of treatment and control counties. The sample size was to be 380 4-H members for the treatment and 380 4-H members for the control. Staff from 28 counties responded to the district 4-H agents and volunteered to participate. The proposed participating treatment counties and the paired proposed control counties are included in Table I.

TABLE I

PROPOSED PARTICIPATING TREATMENT COUNTIES AND PAIRED PROPOSED CONTROL COUNTIES

Treatment Counties	Control Counties
Central District	
Lincoln	Cleveland
Logan	Grady
McClain	Seminole
Tulsa	Oklahoma
Northeast District	
Craig	Mayes
McIntosh	Muskogee
Wagoner	Ottowa
Northwest District	
Garfield	Beaver
Kay	Dewey
Alfalfa	Grant
Southeast District	
Latimer	Coal
Southwest District	
Beckham	Comanche
Custer	Garvin
Washita	Greer

Each participating county sample size was suggested to be 40 youth and their volunteer leaders. Since only 28 youth per county would yield a sample greater than the proposed, it was planned to randomly drop youth back from the 40 per county to 28 per county. The counties were also to be over sampled to allow room for natural attrition rates.

The number of clubs to be included in each county sample was dependent upon the size of the club. It was suggested that all youth in a club be included.

Modified Sample

Substantial difficulty occurred in getting complete information from the proposed participating counties. Of the original 28 counties, usable information was received from 17 counties, representing four of the extension districts. A revised pairing of participating counties was developed using 16 counties. Counties with similar staffing, population, and socio-economic backgrounds were paired. Counties from one district were paired with similar control counties from another district since no usable control counties were available for a comparison. Neither of the counties from the Southeast District were included. The final pairing of counties is given in Figure 2.

The number of clubs involved in each of the counties varied. All individuals in a club were included in the sample. Therefore, one to five clubs were required to accumulate the sample.

The sample size from participating counties varied from 7 to 34 participants. Equal numbers of treatment participants were paired

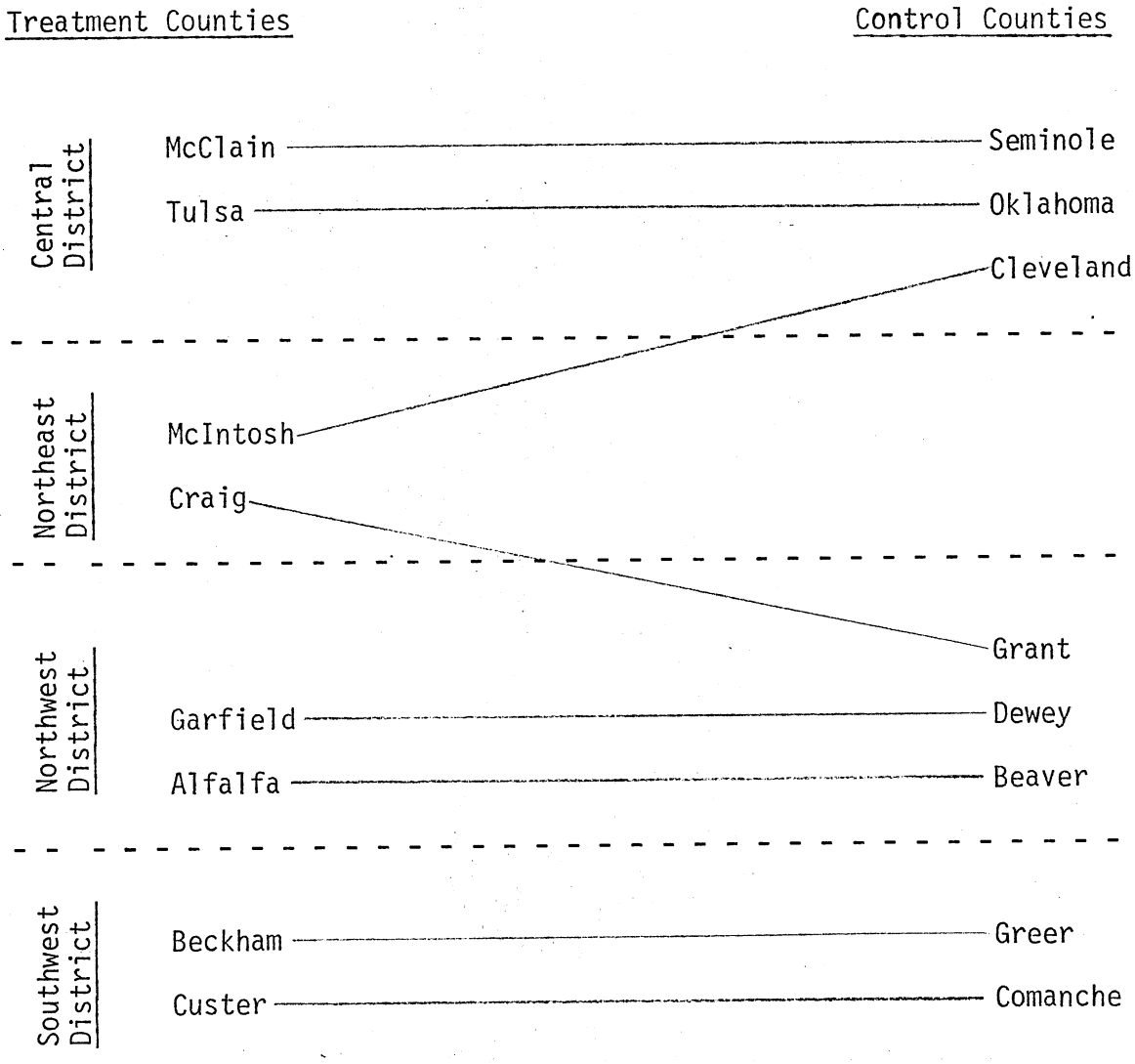


Figure 2. Participating Treatment Counties Paired with Participating Control Counties

with control participants. The smaller number of participants determined the sample number for the two counties. The counties with larger numbers of participants were randomly dropped back to an equal size. A table of random numbers was used to choose participants (2). The total participation in the study and the distribution is given in Table II.

The number of clubs involved in each of the counties ranged from one to five. The number of youth participating in each club depended on the size of that club and, when necessary, to reduce the size of the sample from a county. This reduction was done on the basis of randomly dropping participants from all clubs based on the student number. The number of adult volunteers involved with the study varied in proportion to the number of clubs in a county sample. The number of clubs in each county sample is given in Table II.

Several reasons were involved in the dropping of counties from the proposed to the actual participation. Those reasons included:

1. Answer sheets lost in mail--two counties,
2. Work with LLS material began before pre test given--one county,
3. No adult evaluation forms completed--three counties,
4. No action on one or both tests--four counties,
5. Pre and post test youth participants did not match--one county, and
6. Data complete but no treatment county to be compared with--one county.

Instrument

The purpose of the study was to determine the effectiveness of

TABLE II

COUNTIES, CLUBS, AND 4-H MEMBERS
PARTICIPATING IN THE STUDY

County	Number of Clubs	Number of Participants
McClain	3	27
Seminole	2	27
Tulsa	1	22
Oklahoma	3	22
McIntosh	1	23
Cleveland	2	23
Craig	5	21
Grant	4	21
Garfield	1	11
Dewey	2	11
Alfalfa	3	11
Beaver	5	11
Beckham	1	34
Greer	1	34
Custer	1	7
Comanche	2	7
Total - 16	37	312

the 4-H leadership life skills material to teaching generic skills essential to perform leadership roles and not the development of instruments that could be used in measuring the development of skills. It was, however, necessary, to develop an instrument that would give a determination of the level of perceived performance ability of a number of specific skills in each of the generic classifications. The evaluation tools included in the 4-H leadership life skills materials were selected as the basis for the data collection instrument.

The evaluation instruments that were included as a part of each of the generic classifications of skills included in the Agent/Leaders' Guide were brought together as is illustrated in Appendix C (7). The seven evaluation scales contained 60 statements of skills considered to be a part of leadership.

Exploring 4-H Leadership, the entry level learner publication used as the treatment, was revised (8). It was found that 25 of the 60 specific skills statements were included in the treatment materials. All seven of the generic skills classifications were included. The relatively brief evaluation statements used a simplified Likert scale (need to learn - need to improve - can do well).

The 25 items on the evaluation instrument were restated to include a stem statement and four response choices. The response choices ranged from a maximum response of very well, strongly agree, or very much, to a minimum response of very poorly, strongly disagree, or very little. No neutral position was included. There was some reordering of statements on the instrument to aid in clarity. The first draft of the instrument contained 25 statement items (Appendix D).

The instrument statements were reviewed and a determination was made that some statements included more than one central thought. Therefore, it was felt advisable to add additional statements that would allow each statement to contain a single thought. This was accomplished by adding two statements bringing the total to 27.

Refinement and clarification of the instrument was accomplished by requesting the district 4-H agents to review the instrument. A number of minor changes were suggested and were included in the final questionnaire (Appendix A). The district 4-H agents also asked a limited number of youth to review the instrument to determine if it was understandable for the age youth involved. Some vocabulary problems were encountered with younger youth.

In order to determine the effectiveness of the 4-H leadership life skills approach, it was necessary to establish the stage of development of skills at the beginning of a period. Then, after the introduction of the treatment materials, it was necessary to determine the skills level after that treatment. A pre test and a post test were used. The same instrument was administered at the beginning of the period and at the designated close of the period. The level of development of the youth was determined by the perception of the youth and the perception of the adult volunteer working with the youth. The pre and post test were the same test. The same test was also used for the youth and adult leaders. The time lapse between the pre test and the post test was a minimum of two months and a maximum of three months.

Data Collection

The Extension agents with 4-H responsibility in counties that had agreed to participate in the study were asked to attend a briefing session at which time the procedure was explained. Copies of the questionnaires and answer sheets were distributed as well as instruction sheets for use with the volunteer leaders who would actually be administering the questionnaire in most instances. A copy of the letter and instruction sheet is included in Appendix E. In this letter they were asked to return the pre test by January 23 and the post test by March 27. Because of club meeting schedules, both the pre test return date and the post test return date were extended to allow for up to a three month treatment time.

The answer sheets used to collect the responses from both the adult volunteer and the youth participants were standard testing sheets used by Oklahoma State University's Bureau of Tests and Measurements. General information data were collected on the information section of the questionnaire and in Section I of the response area. Section II, beginning with number 41, was used for marking the responses to the actual questionnaire. A copy of the answer sheet is included in Appendix F. Answer sheets required marking with a pencil in order to scan with the op-scan equipment. A similar response sheet is used in the computerized 4-H enrollment system (COPES) and similar sheets are used in public school standard testing programs. Therefore, the students were relatively familiar with this kind of response sheet.

The general information section of the answer sheet proved to be a source of confusion to the adult volunteer leader and to the 4-H

member. Since this was a standard answer sheet for use with the Okla-State University Bureau of Tests and Measurements, the participants placed the county number in the area provided for the course number, used the space provided for the section as the code number for the club, and used the student number section for the 4-H member's identification number. Careful attention was necessary to assure consistent identification. Some problems arose in transferring the information from the answer sheets to the computer center.

When the pre tests were not received by the time requested, a follow-up letter was mailed to counties who had not returned the pre test. There were also three counties that had not completed the pre test answer sheets on each individual by the adult volunteers. A follow-up letter was sent to these counties to request this information (Appendix G).

The post test instruction sheets and answer sheets were distributed in late February. A letter accompanied these items (Appendix H). The instruction sheet, questionnaires, and answer sheets, were the same as used in the pre test. When the post tests were not received by the designated time, a follow-up letter was mailed to those counties to encourage their return. Follow-up telephone countacts were also made to each of the counties, as well as a report given to the district 4-H agents for their follow through with a contact (Appendix I).

The raw data were scanned at the Oklahoma State University Bureau of Tests and Measurements and transferred to discs in the University Computer Center. Printouts of the raw data brought attention to a few missing scores. When there were missing scores, the researcher went

back to the answer sheets to obtain the response. The information was inserted into the data. There were a few questions (less than 10) left blank by the respondents. When there was a blank on the answer sheet a response equal to that of the corresponding respondent's score on the other test was included. For instance, when question 43 was blank on member 10-2-7 pre test, the same value was used as appeared on question 43 for member 10-2-7 on the post test. This produced a no change, but there were no cells with missing data in the data set.

Analysis Procedures

The purpose of this study was to determine if the 4-H life skills approach to leadership development was a more effective method than current traditional methods of teaching leadership life skills to 4-H members. The pre test and post test questionnaire completed by the 4-H members and leaders provided general information and perceived change in the leadership life skills of the member during the test period. The general information gathered included: the age of the 4-H members and whether the members were officers of the club in which they were participating. Through the coding of counties, it was also possible to divide the participants into districts and location to determine an urban or a rural county. The perceived levels of skills were obtained from the completion of a Likert scale questionnaire.

Completion of the questionnaire required subjective judgment on the part of the 4-H member and the adult volunteer leader. The 4-H members were to give their perception of their abilities to carry out the various skill statements. The leader was to give a perception of

each individual club member as to ability of the member to carry out the skill statements. The adult volunteer at the time of the pre test and the post test was the same individual but the level of association with the individual varied. The number of participants from a club was not constant nor were the number of clubs participating in paired counties consistent. The number of leaders involved with the youth varied in a direct proportion to the number of clubs.

A number of changes could conceivably occur in the general information category during the test period. The 4-H member could reach a birthday affecting the age and could either be elected as an officer or have their term as an officer expire. Because of these possible changes, a decision was reached to apply this information from the youth pre test only; likewise, information on district and location was standardized to the youth member pre test.

The 27 items on the questionnaire provided information on each of the generic skills classifications. The number of items for each of these skills classifications varied from one to seven items. The generic classifications and the questions included in the classifications appear in Table III. Each of the items had four possible responses; therefore, it was possible to obtain a quantitative score. There was an uneven number of items in each of the generic skills classifications, giving each question a different weighted value for the generic groupings. In the determination of overall change, all 27 items were considered, which gave an equal weighting to each question.

The intent of the study was to determine the change during the test period in the skills. In order to do this, the pre test was compared to the post test to determine the difference in the two ratings.

This difference could be either a plus, a zero, or a negative value. Rather than the quantity of that value, the information needed for this study constituted the frequency of the change in a positive direction, no change, or a negative direction. The same information was gathered and analyzed for both the member and the leader separately. Comparisons were made and analysis done for each of the seven generic skills classifications and on all questions combined.

TABLE III

GENERIC SKILLS CLASSIFICATIONS AND QUESTIONS

Classification	Question Number	Number of Questions Per Classification
1. Communications	41, 42, 43, 45, 46, 47, 48	7
2. Getting Along with Others (Relations)	49, 50, 51, 52	4
3. Understanding Yourself	53, 54, 55	3
4. Working with Groups	56, 57	2
5. Management	58, 65, 66, 67	4
6. Learning to Learn	44	1
7. Decision Making	59, 60, 61, 62, 63, 64	6

The Oklahoma State University Bureau of Tests and Measurements was utilized to transfer the information gathered from the answer sheets to discs that could be utilized through the University Computer Center (UCC). Data corrections and programming was done through a remote terminal. The University Computer Center utilized an International Business Machine (IBM) System 370, Model 158 computer. A Statistical Analysis System (SAS) 79 Program was utilized to perform the statistical computations (1).

An often used test of significance for this type of study is the t test. Because of the variations of the club sizes, number of leaders, and number of participants from counties, this procedure was not used. The T scores would tend to result in an inflated probability of significance, due to this increased variablity. Therefore, the more conservative chi square statistical procedures were utilized to test the hypotheses.

The SAS Program provided frequencies and chi square and explained in the User's Guide: "the FREQ procedure can produce one-way to n-way frequency and cross tabulation tables. Tables can be produced for either numeric or character variables" (1, p. 120). Included in the frequency procedures were both counts and percentages. The User's Guide also explained:

> The CHI SQ option can be specified for two-way to n-way tables. When it appears, the Chi-Square statistic, its degrees of freedom, and its significance probability are printed below two-way tables (including two-way tables representing a level of one or more other variables) (1, p. 120).

"Chi Square is a test of statistical significance. It helps to determine whether a systematic relationship exists between two variables"

(30, p. 223). A definition of chi square is given by Bartz (2):

> A technique that can be used to determine whether there is a significant difference between some theoretical or experimental frequencies and the corresponding observed frequencies in two or more categories . . . the formula for the calculation for chi square is
>
> $$\chi^2 = \sum \frac{(O - E)^2}{E}$$
>
> where O is the observed frequency in a given category and E is the expected frequency in a given category (pp. 294-295).

Further explanation of chi square is given in the Statistical Package for the Social Sciences (SPSS):

> . . . while some small deviations can be reasonably expected due to chance, large deviations, i.e., large values of Chi Square are unlikely. Since we do not know what the actual relationship is in the universe, we interpret small values of Chi Square to indicate the absence of a relationship often referred to as statistical independence. Conversely, a large Chi Square implies that a systematic relationship of some sort exists between the variables. . . . By itself Chi Square helps us only to decide whether our variables are independent or related. It does not tell us how strongly they are related (34, p. 224).

Change that occurred was assigned a plus, 0, or minus and the frequency of these changes for the generic skills classifications and for all questions were determined. The direction of change was compared by the various classifications through chi square analysis to determine if there was a relationship occurring in the data.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

The purpose of this study was to determine if the 4-H life skills approach to leadership development is a more effective means of teaching certain priority life skills than current approaches. A further purpose was to provide data for use in accountability and future decisions.

This chapter describes the sample and gives general characteristics of the respondents. The responses of the 4-H members and their leaders to the questionnaire are included. Finally, an analysis of the data is presented and interpreted regarding the previously stated hypotheses.

The study was based on a stratified random sample of Oklahoma 4-H youth and their leaders. The characteristics of the respondents who completed both the pre and post tests are included in this chapter. The changes that occurred in the level of life skills as perceived by both the leaders and the youth are reported. The sections that follow present data on the frequency and the direction of change perceived by the leaders and the 4-H members. Frequencies and direction change data for the control and treatment are presented. The final section presents data on the frequency and direction of change for

the treatments between age groups, extension districts, place of residence, and if the 4-H member was an officer.

General Characteristics of Respondents

The respondents are also referred to as participants. All of the respondents were from three extension districts. The distribution of the respondents in each of the districts is shown in Table IV. The districts included were the Central, Southwest, and Northwest districts.

The age of the responding youth ranged from 9 to 18 years. The age groupings were divided into pre-teen, 9-12 year olds; teens, 13-15 year olds; and older teens, 16-19 year olds. And is shown in Table IV, the greatest number of respondents were in the pre-teen age group and the fewest number in the older teen age group.

In the general information section of the questionnaire the youth were asked to indicate if they were presently serving as an officer in their local 4-H club. That information is given in Table IV. At least one youth was serving as an officer in each of the counties sampled.

Responses to Questionnaire

Data were collected on each of the 312 participants. A pre-test was given at the beginning of the test period to the 4-H members and a duplicate questionnaire was completed by the volunteer working with each of the youth. At the end of the test period the youth completed the same questionnaire and the adult volunteers completed the questionnaire on the individual youth. Mean scores for the responses on the pre test by the leaders and members for each of the skills

TABLE IV

DISTRIBUTION OF PARTICIPATING 4-H MEMBERS
BY AGE GROUP, DISTRICT, LOCATION, AND
OFFICE FOR EACH COUNTY AND TYPE

County	Co. #	Age Group *			District **				Location		Officers	
		PT	T	OT	C	SW	NW	O	Rural	Urban	Yes	No
Control												
Cleveland	1	15	4	4				23	23		7	16
Beaver	6	3	5	3			11		11		8	3
Dewey	7	2	5	4			11		11		7	4
Grant	9	13	5	3				21	21		12	9
Oklahoma	11	10	6	6	22					22	10	12
Seminole	12	5	12	10	27				27		8	19
Comanche	22	6	1			7			7		1	6
Greer	25	29	5			34			34		4	30
Totals		83	43	30	49	41	22	44	134	22	57	99
Treatment												
McClain	5	21	5	1	27				27		21	6
Garfield	8		6	5			11		11		4	7
Tulsa	13	13	7	2	22					22	7	15
Craig	14	3	10	8				21	21		14	7
McIntosh	16	1	15	7				23	23		5	18
Alfalfa	20	1	5	5			11		11		9	2
Beckham	21	23	6	5		34			34		7	27
Custer	23	7				7			7		3	4
Totals		69	54	33	49	41	22	44	134	22	70	86

* Age Group: PT = Pre Teen (9-12 years of age), T = Teen (13-15 years of age), OT = Older Teen (16-19 years of age).

** District: C = Central, SW = Southwest, NW = Northwest, O = Not compared in districts.

classifications and all skills were calculated. The same calculations were done for the post test. Differences were calculated by subtracting the pre test mean from the post test mean for leaders and members. The same procedure was repeated for the control and treatment. This information is given in Table V.

Change in Skills During the Test Period

The mean scores for all skills on the post test were greater than the pre test for both the leaders' and members' perceptions in the control and treatment. The differences are shown in Table V. The post test mean scores for all skill areas except in the control group were greater than the pre test mean scores. Skills classification 3 was understanding yourself, classification 4 was working with groups, and classification 7 was decision making.

The mean score differences for the treatment group were larger than the mean score differences for the control for each separate skills classification and for the all skills group. The data indicate a greater improvement for the treatment than the control group during the test period. The means and differences are presented in Table V.

The null hypothesis stated: There was no apparent difference between the pre test and the post test on leadership life skills for participating youth as perceived by leaders and members. The mean data in Table V indicates there was an apparent change that occurred during the test period for all skills, as perceived by both the leaders and members for the control and treatment groups.

TABLE V

MEAN SCORES BY SKILLS CLASSIFICATION
FOR PRE TEST, POST TEST,
AND DIFFERENCES

		Skills 1 Communications	Skills 2 Relations	Skills 3 Understanding Yourself	Skills 4 Working with Groups	Skills 5 Management	Skills 6 Learning to Learn	Skills 7 Decision Making	All Skills
					Control				
Pre-Test	Leader	1.952	2.090	2.115	2.135	1.926	2.109	1.960	2.041
	Member	2.117	2.335	2.329	2.407	2.128	2.314	2.245	2.268
Post-Test	Leader	2.060	2.176	2.207	2.260	2.080	2.237	2.080	2.157
	Member	2.145	2.385	2.310	2.388	2.168	2.321	2.239	2.279
Difference	Leader	0.108	0.086	0.092	0.125	0.154	0.128	0.120	0.116
	Member	0.028	0.050	-0.019	-0.019	0.040	0.007	-0.006	0.001
					Treatment				
Pre-Test	Leader	1.817	1.946	2.015	2.016	1.737	2.006	1.787	1.903
	Member	2.138	2.426	2.378	2.413	2.196	2.365	2.271	2.313
Post-Test	Leader	2.095	2.240	2.244	2.269	2.146	2.295	2.170	2.208
	Member	2.229	2.503	2.415	2.462	2.288	2.372	2.312	2.369
Difference	Leader	0.278	0.294	0.229	0.253	0.409	0.289	0.383	0.305
	Member	0.091	0.077	0.037	0.049	0.092	0.007	0.041	0.056

Frequency and Direction of Pre Test to Post Test Change as Perceived by Members and Leaders

The purpose of the study was to determine if the life skills approach to leadership development was a more effective means of teaching skills than current methods. Therefore, the frequency and direction of perceived abilities in each of the skills areas was calculated. Three values were established to represent change in the level of skills over the test period. Improvement was indicated by a plus, remaining the same over the test period was indicated by a 0, and a decline in the perceived abilities over the test period was indicated by a minus. Chi square was utilized to determine the significance of the results obtained. The statistical analysis included each of the skills classifications and all skills for both control and treatments. The frequencies, percentages, chi square, and probability for the change in all skills, as perceived by members and leaders for the control group, are reported in Table VI. For the control group there was no significant difference in the perception of the members and the leaders.

Table VII presents the same information for the treatment group. No significant difference in the perception of members and leaders was shown for the all skills classification.

There was a significant difference appearing in three of the skills classifications. Skills 3, understanding yourself, and skills 7, decision making for the control group, had the probability level of 0.038 and 0.044, respectively. Skills 7, decision making,

TABLE VI

COMPARISON OF CHANGE FROM PRE TEST TO POST TEST OF ALL SKILLS AS PERCEIVED BY MEMBERS AND LEADERS FOR CONTROL

			Member -	Member 0	Member +	TOTAL
Leaders	-	f	24	2	25	51
		%	15.38	1.28	16.03	32.69
	0	f	5	0	8	13
		%	3.21	0.00	5.13	8.33
	+	f	37	9	46	92
		%	23.72	5.77	29.49	58.97
TOTAL		f	66	11	79	156
		%	42.31	7.05	50.64	100.00

Chi Square = 3.350 Prob. = 0.501

TABLE VII

COMPARISON OF CHANGE FROM PRE TEST TO POST TEST OF ALL SKILLS AS PERCEIVED BY MEMBERS AND LEADERS FOR TREATMENT

			Member -	Member 0	Member +	TOTAL
Leaders	-	f	10	1	12	23
		%	6.41	0.64	7.69	14.74
	0	f	4	0	4	8
		%	2.56	0.00	2.56	5.13
	+	f	45	9	71	125
		%	28.85	5.77	45.51	80.13
TOTAL		f	59	10	87	156
		%	37.82	6.41	55.77	100.00

Chi Square = 1.530 Prob. = 0.821

showed a significant difference in the treatment group at the probability level of 0.005. Table VIII reports the findings for these three skills classifications.

The null hypothesis stated: There is no significant difference in the perceptions youth have of their change in leadership life skills to that of their adult volunteer leaders' perception of the changes in the youth's leadership skills. The data presented in Tables VII and VIII show the perceptions of the leaders and youth. The chi square was not significant for either the control or treatment. Therefore, the null hypothesis was not rejected.

Frequency and Direction of Change Between Control and Treatment

The changes in the members' skills between the treatment and control groups, as perceived by the leaders and members, are presented in Tables IX and X. Data on each of the generic skills classifications and all skills are included.

The null hypothesis stated: There is no significant difference in the leadership life skills change between the treatment and control groups: (a) as perceived by leaders, and (b) as perceived by members.

The data presented in Table IX show the frequencies and percentages for the direction of change for each of the skills classifications. and all skills. A comparison is shown for the treatment and control groups. Chi square and probabilities were calculated for each of the generic skills classification and all skills. The chi square for each of the skills classifications except skills 6 were significant for the

TABLE VII

COMPARISON OF CHANGE FROM PRE TEST TO POST TEST AS PERCEIVED BY MEMBERS AND LEADERS WHERE THERE WAS A SIGNIFICANT DIFFERENCE

Control, Skills 3, Understanding Yourself

			Member -	Member 0	Member +	TOTAL
Leaders	-	f	15	10	21	46
		%	9.62	6.41	13.46	29.49
	0	f	18	23	9	50
		%	11.54	14.74	5.77	32.05
	+	f	18	21	21	60
		%	11.54	13.46	13.46	38.46
TOTAL		f	51	54	51	156
		%	32.69	34.62	32.69	100.00

Chi Square = 10.141 Prob. = 0.038

Control, Skills 7, Decision Making

			Member -	Member 0	Member +	TOTAL
Leaders	-	f	23	10	17	50
		%	14.74	6.41	10.90	32.05
	0	f	12	0	9	21
		%	7.69	0.00	5.77	13.46
	+	f	26	18	41	85
		%	16.67	11.54	26.28	54.49
TOTAL		f	61	28	67	156
		%	39.10	17.95	42.95	100.00

Chi Square - 9.797 Prob. = 0.044

Treatment, Skills 7, Decision Making

			Member -	Member 0	Member +	TOTAL
Leaders	-	f	12	4	3	19
		%	7.69	2.56	1.92	12.18
	0	f	10	2	13	25
		%	6.41	1.28	8.33	16.03
	+	f	30	34	48	112
		%	19.23	27.79	30.77	71.79
TOTAL		f	52	40	64	156
		%	33.33	25.64	41.03	100.00

Chi Square = 14.781 Prob. = 0.005

TABLE IX

COMPARISON OF LEADERS' PERCEPTION OF CHANGE
FROM PRE TEST TO POST TEST IN SKILLS
BETWEEN TREATMENT AND CONTROL

Skills		Treatment +	Treatment 0	Treatment -	Control +	Control 0	Control -	X^2	P
1 Communication	f	108	19	29	76	32	48		
	%	34.6	6.1	9.3	24.4	10.3	15.4	13.567	.0011
2 Relations	f	84	48	24	64	42	50		
	%	26.9	15.4	7.7	20.5	13.5	16.0	12.238	.0022
3 Understanding Self	f	78	54	24	60	50	46		
	%	25.0	17.3	7.7	19.2	16.0	14.7	9.416	.0090
4 Group	f	64	75	17	43	83	30		
	%	20.5	24.0	5.5	13.8	26.6	9.6	8.122	.0172
5.Management	f	111	30	15	69	53	34		
	%	35.6	9.6	4.8	22.1	17.0	10.9	23.541	.0001
6 Learning to Learn	f	50	93	13	34	103	19		
	%	16.0	29.8	4.2	10.9	33.0	6.1	4.683	.0962
7 Decision Making	f	112	25	19	85	21	50		
	%	35.9	8.0	6.1	27.2	6.7	16.0	17.976	.0001
All Skills	f	125	8	23	92	13	51		
	%	40.1	2.6	7.4	29.5	4.2	16.4	16.804	.0002

TABLE X

COMPARISON OF MEMBERS' PERCEPTION OF CHANGE
FROM PRE TEST TO POST TEST IN SKILLS
BETWEEN TREATMENT AND CONTROL

		Treatment			Control				
Skills		+	0	-	+	0	-	X^2	P
1 Communication	f	82	28	46	67	23	66		
	%	26.3	9.0	14.7	21.5	7.4	21.2	5.572	.0617
2 Relations	f	64	51	41	70	38	48		
	%	20.5	16.4	13.1	22.4	12.2	15.4	2.718	.2569
3 Understanding Self	f	50	70	36	51	54	51		
	%	16.03	22.44	11.54	16.4	17.31	16.4	4.661	.0973
4 Group	f	45	77	34	39	78	39		
	%	14.4	24.7	10.9	12.5	25.0	12.5	0.777	.6779
5 Management	f	70	47	39	61	45	50		
	%	22.4	15.1	12.5	19.6	14.4	16.0	2.021	.3640
6 Learning to Learn	f	30	96	30	34	89	33		
	%	9.6	30.8	9.6	10.9	28.5	10.6	0.658	.7197
7 Decision Making	f	64	40	52	67	28	61		
	%	20.5	12.82	16.7	21.5	9.0	19.6	2.903	.2342
All Skills	f	87	10	59	79	11	66		
	%	27.9	3.2	18.9	25.3	3.5	21.2	0.825	.6619

leaders' perceptions. The null hypothesis was rejected for all skills and for six of the seven skills classifications. Therefore, there was a significant difference in the life skills change between the treatment and control groups, as perceived by the leaders.

The same data on the perception of the members were presented in Table X. The calculations of chi square and probabilities give quite different results from that of the leader. The members' perception on the change for treatment and control for each of the skills classifications and all skills with the chi square are not significant, as indicated by probabilities ranging from .0617 to .7197 for each of the skills and a probability of .6619 for all skills. These findings led to a failure to reject the null hypothesis for the members' perception on each of the skills and all skills. Therefore, there was no significant difference in the leadership life skills change between the treatment and control groups as perceived by the members.

The hypothesis was rejected based on the perceptions of the leaders. The leaders perceived that there was a significant difference in the change of skills between the treatment and control groups. The members perceived there was no significant difference.

Frequency and Direction of Changes for Treatment

Between Age Groups

The treatment respondents ranged in age from 9 to 18 years. The age spread was clustered into three groupings: (1) pre-teens, (2) teens, and (3) older teens.

The data were analyzed by each of the skills classifications and all skills for each of the age groups. The analysis was done for the leaders' and the 4-H members' perceptions.

The null hypothesis stated: There is no significant difference in the leadership life skills change among age groups, as perceived by leaders. The data in Table XI show that for all skills there was a significant difference by age groups. Of the individual skills classifications, three were shown to be significant and support rejecting the null hypothesis. This data is also presented in Table XI for skills 4, 5, and 7.

The null hypothesis stated: There is no significant difference in the leadership life skills change between age groups, as perceived by members. The data in Table XII on all skills failed to reject the null hypothesis since the chi square was not significant. Only skills 5 supported the rejection of the null hypothesis at a probability of 0.023. On the basis of these findings, the null hypothesis would be rejected for the leaders' perceptions while the null hypothesis would be accepted for the members' perceptions.

Between Extension Districts

The data were analyzed making comparisons of the responses by the treatment group for each of the extension districts and the paired counties that crossed district lines. Again, both the leaders' and the members' perceptions were analyzed separately for each of the skills classifications and for all skills.

The null hypothesis stated: There is no significant difference in the leadership life skills change between extension districts, as

TABLE XI

COMPARISON OF CHANGE FROM PRE TEST TO POST TEST OF ALL SKILLS AND SIGNIFICANT SKILLS GROUPS BY AGE GROUP AS PERCEIVED BY LEADERS

		All Skills			
		-	0	+	TOTAL
0-Teen	f	11	1	21	33
	%	7.05	0.64	13.46	21.15
Pre-Teen	f	6	3	60	69
	%	3.85	1.92	38.46	44.23
Teen	f	6	4	44	54
	%	3.85	2.56	28.51	34.62
TOTAL	f	23	8	125	156
	%	14.74	5.13	80.13	100.00

Chi Square = 12.376 Prob. = 0.015

		Skills 4 Working with Groups			
		-	0	+	TOTAL
0-Teen	f	5	19	9	33
	%	3.21	12.18	5.77	21.15
Pre-Teen	f	4	33	34	69
	%	1.28	21.15	21.79	44.23
Teen	f	10	23	21	54
	%	6.41	14.74	13.46	34.62
TOTAL	f	17	75	64	156
	%	10.90	48.08	41.03	100.00

Chi Square = 11.162 Prob. = 0.025

TABLE XI (Continued)

		Skills 5 Management -	0	+	TOTAL
0-Teen	f	6	7	20	33
	%	3.85	4.49	12.82	21.15
Pre-Teen	f	2	9	58	69
	%	1.28	5.77	37.18	44.23
Teen	f	7	14	33	54
	%	4.49	8.97	21.15	34.62
TOTAL	f	15	30	111	156
	%	9.62	19.23	71.15	100.00

Chi Square - 11.981 Prob. = 0.018

		Skills 7 Decision Making -	0	+	TOTAL
0-Teen	f	9	6	18	33
	%	5.77	3.85	11.54	21.15
Pre-Teen	f	5	9	55	69
	%	3.21	5.77	35.26	44.23
Teen	f	5	10	39	54
	%	3.21	6.41	25.00	34.62
TOTAL	f	19	25	112	156
	%	12.18	16.03	71.79	100.00

Chi Square = 10.588 Prob. = 0.032

TABLE XII

COMPARISON OF CHANGE FROM PRE TEST TO POST TEST OF ALL SKILLS AND SIGNIFICANT SKILLS GROUPS BY AGE GROUP AS PERCEIVED BY MEMBERS

		All Skills			
		-	0	+	TOTAL
0-Teen	f	10	2	21	33
	%	6.41	1.28	13.46	21.15
Pre-Teen	f	27	5	37	69
	%	17.31	3.21	23.72	44.23
Teen	f	22	3	29	54
	%	14.10	1.92	18.59	34.62
TOTAL	f	59	10	87	156
	%	37.82	6.41	55.77	100.00

Chi Square = 1.254 Prob. = 0.869

		Skills 5 Management			
		-	0	+	TOTAL
0-Teen	f	7	15	11	33
	%	4.49	9.62	7.05	21.15
Pre-Teen	f	12	19	38	69
	%	7.69	12.18	24.36	44.23
Teen	f	20	13	21	54
	%	12.82	8.33	13.46	34.62
TOTAL	f	39	47	70	156
	%	25.00	30.13	44.87	100.00

Chi Square = 11.310 Prob. = 0.023

perceived by leaders. The data in Table XIII indicates the differences were not significant for the all skills classification. However, a significance was shown for four separate skills. Those skills included understanding yourself, management, learning to learn, and decision making (Table XIII).

The null hypothesis stated: There is no significant difference in the leadership life skills change between extension districts, as perceived by members. The members' perceptions produced the data contained in Table XIV and was not significant and failed to reject the null hypothesis. Only one of the individual skills (skills 3, understanding yourself) was significant and supported the rejection of the null hypothesis. The findings presented in Tablex XIII and XIV failed to reject the null hypothesis regarding differences between extension districts, as perceived by both the leaders and members.

Between Rural and Urban Place of Residence

The data were analyzed for change by place of residence. All youth that lived in counties other than Oklahoma and Tulsa were classified as rural. There were 134 youth in the rural classification while there were only 22 in the urban group.

The null hypothesis stated: There is no significant difference in the leadership life skills change between rural and urban place of residence as perceived by leaders. The data in Table XV failed to reject the null hypothesis, as was indicated by the probability of 0.70. When analyzing the place of residence for each of the individual skills, none were significant.

TABLE XIII

COMPARISON OF CHANGE FROM PRE TEST TO POST TEST OF ALL SKILLS AND SIGNIFICANT SKILLS GROUPS BY DISTRICT AS PERCEIVED BY LEADERS

		All Skills			
		-	0	+	TOTAL
0	f	6	3	35	44
	%	3.85	1.92	22.44	28.21
Central	f	7	2	40	49
	%	4.49	1.28	25.64	31.41
Northwest	f	7	0	15	22
	%	4.49	0.00	9.62	14.10
Southwest	f	3	3	35	41
	%	1.92	1.92	22.44	26.18
TOTAL	f	23	8	125	156
	%	14.74	5.13	80.13	100.00

Chi Square = 8.336 Prob. = 0.215

		Skills 3 Understanding Yourself			
		-	0	+	TOTAL
0	f	8	11	25	44
	%	5.13	7.05	16.03	28.21
Central	f	10	9	30	49
	%	6.41	5.77	19.23	31.41
Northwest	f	2	9	11	22
	%	1.28	5.77	7.05	14.10
Southwest	f	4	25	12	41
	%	2.56	16.03	7.69	26.28
TOTAL	f	24	54	78	156
	%	15.38	34.62	50.00	100.00

Chi Square = 21.001 Prob. = 0.002

		Skills 5 Management			
		-	0	+	TOTAL
0	f	3	12	20	44
	%	1.92	7.69	18.59	28.21
Central	f	6	11	32	49
	%	3.85	7.05	20.51	31.41
Northwest	f	6	4	12	22
	%	3.85	2.56	7.69	14.10
Southwest	f	0	3	38	41
	%	0.00	1.92	24.36	26.28
TOTAL	f	15	30	111	156
	%	9.62	19.23	71.15	100.00

Chi Square = 20.498 Prob. = 0.002

TABLE XIII (Continued)

		Skills 6 Learning to Learn -	0	+	TOTAL
0	f	5	19	20	44
	%	3.21	12.18	12.82	28.21
Central	f	4	26	19	49
	%	2.56	16.67	12.18	31.41
Northwest	f	3	14	5	22
	%	1.92	8.97	3.21	14.10
Southwest	f	1	34	6	41
	%	0.64	21.79	3.85	26.28
TOTAL	f	13	93	50	156
	%	8.33	59.62	32.05	100.00

Chi Square = 16.716 Prob. = 0.010

		Skills 7 Decision Making -	0	+	TOTAL
0	f	4	8	32	44
	%	2.56	5.13	20.51	28.21
Central	f	5	7	37	49
	%	3.21	4.49	23.72	31.41
Northwest	f	8	2	12	22
	%	5.13	1.28	6.69	14.10
Southwest	f	2	8	31	41
	%	1.28	5.13	19.87	26.28
TOTAL	f	19	25	112	156
	%	12.18	16.03	71.79	100.00

Chi Square = 15.147 Prob. = 0.019

The null hypothesis stated: There is no significant difference in leadership life skills change between rural and urban place of residence, as perceived by members. The data presented in Table XVI fails to support rejecting the null hypothesis since the findings were not significant at the .05 probability level. As was true of the leaders' perceptions, none of the individual skills classifications were significant.

TABLE XIV

COMPARISON OF CHANGE FROM PRE TEST TO POST TEST
OF ALL SKILLS AND SIGNIFICANT SKILLS GROUPS
BY DISTRICT AS PERCEIVED BY MEMBERS

		All Skills			
		-	0	+	TOTAL
0	f	17	2	25	44
	%	10.90	1.28	16.03	28.21
Central	f	24	5	20	49
	%	14.38	3.21	12.82	31.41
Northwest	f	7	1	14	22
	%	4.49	0.64	8.97	14.10
Southwest	f	11	2	28	41
	%	7.05	1.28	17.95	26.28
TOTAL	f	59	10	87	156
	%	37.82	6.41	55.77	100.00

Chi Square = 8.119 Prob. = 0.230

		Skills 3 Understanding Yourself			
		-	0	+	TOTAL
0	f	8	22	14	44
	%	5.13	14.10	8.97	28.21
Central	f	13	27	9	49
	%	8.33	17.31	5.77	31.41
Northwest	f	4	11	7	22
	%	2.56	7.05	4.49	14.10
Southwest	f	11	10	20	41
	%	7.05	6.41	12.82	16.18
TOTAL	f	36	70	50	156
	%	23.08	44.87	32.05	100.00

Chi Square = 12.995 Prob. = 0.043

TABLE XV

COMPARISON OF CHANGE FROM PRE TEST TO POST TEST BETWEEN PLACE OF RESIDENCE AS PERCEIVED BY LEADERS

		All Skills			
		-	0	+	TOTAL
Rural	f	21	7	106	134
	%	13.46	4.49	67.95	85.90
Urban	f	2	1	19	22
	%	1.28	0.64	12.18	14.10
TOTAL	f	23	8	125	156
	%	14.74	5.13	80.13	100.00

Chi Square = 0.696 Prob. = 0.706

TABLE XVI

COMPARISON OF CHANGE FROM PRE TEST TO POST TEST BETWEEN PLACE OF RESIDENCE AS PERCEIVED BY MEMBERS

		All Skills			
		-	0	+	TOTAL
Rural	f	47	9	78	134
	%	30.13	5.77	50.00	85.90
Urban	f	12	1	9	22
	%	7.69	0.64	5.77	14.10
TOTAL	f	59	10	87	156
	%	37.82	6.41	55.77	100.00

Chi Square = 3.047 Prob. = 0.218

Between Group Officers and Non-Officers

The data were analyzed by change in skills level, as perceived by youth and adults, and by a classification of the young person being an officer of the club or group or a non-officer. There were 70 participants who were not officers while 86 were officers during the test period.

The null hypothesis stated: There is no significant difference in the leadership life skills change between group officers and non-officers, as perceived by leaders. Table XVII presents data for the leaders' perceptions in the all skills classification that was significant at the 0.004 probability level. In addition, the individual skills on relations and decision making were significant. These findings rejected the null hypothesis and indicated the leaders perceived a difference in the skills level between officers and non-officers.

Table XVIII shows the members' perceptions of all skills for officers and non-officers. The data was not significant and failed to reject the null hypothesis for all skills. None of the skills classifications were significant at the 0.05 level.

For the null hypothesis regarding a difference between being group officers and non-officers, the perceptions of the leaders indicated a rejection of the null hypothesis while the members' perceptions indicated failure to reject. The leaders perceived that there was a difference between the change made by the officers and the non-officers. The members did not perceive this difference.

TABLE XVII

COMPARISON OF CHANGE FROM PRE TEST TO POST TEST
OF ALL SKILLS AND SIGNIFICANT SKILLS GROUPS
FOR OFFICERS AND NON-OFFICERS
AS PERCEIVED BY LEADERS

		All Skills			
		-	0	+	TOTAL
No	f	17	5	48	70
	%	10.90	3.21	30.77	44.87
Yes	f	6	3	77	87
	%	3.85	1.92	49.36	55.13
TOTAL	f	23	8	125	156
	%	14.74	5.13	80.13	100.00

Chi Square = 10.963 Prob. = 0.004

		Skills 2 Relations			
		-	0	+	TOTAL
No	f	17	24	29	70
	%	10.90	15.38	18.59	44.87
Yes	f	7	24	55	86
	%	4.49	15.38	35.26	55.13
TOTAL	f	24	48	84	156
	%	15.38	30.77	53.85	100.00

Chi Square - 10.086 Prob. = 0.005

		Skills 7 Decision Making			
		-	0	+	TOTAL
No	f	13	13	44	70
	%	8.33	8.33	28.21	44.87
Yes	f	6	12	68	86
	%	3.85	7.69	43.59	55.13
TOTAL	f	19	25	112	156
	%	12.18	16.03	71.79	100.00

Chi Square = 6.186 Prob. = 0.045

TABLE XVIII

COMPARISON OF CHANGE FROM PRE TEST TO POST TEST
OF ALL SKILLS FOR OFFICERS AND NON-OFFICERS
AS PERCEIVED BY MEMBERS

		All Skills			
		-	0	+	TOTAL
No	f	26	6	38	70
	%	16.67	3.85	24.36	44.87
Yes	f	33	4	49	86
	%	21.15	2.56	31.41	55.13
TOTAL	f	59	10	87	156
	%	37.82	6.41	55.77	100.00

Chi Square = 0.991 Prob. = 0.609

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this chapter is to present a summary of the study which was conducted to determine the effectiveness of the 4-H life skills approach to leadership development in teaching skills necessary to perform leadership roles compared to current methods. The conclusions and recommendations presented are based upon a close examination of the data and analysis of the data, and are consistent with contemporary educational and behavioral theories related to 4-H youth development and the teaching/learning process of life skills.

Purpose of the Study

The primary purpose of the study was to determine if the 4-H life skills approach to leadership development presented through the 4-H leadership life skills material was a more effective means of teaching certain priority life skills than current methods.

Objectives of the Study

The investigation was directed toward four objectives in order to accomplish the purpose of the study. The specific research objectives include: (1) to determine if there was a change in the leadership life skills of participating youth during the test period,

(2) to determine if the youth perceive their skills differently than their adult volunteer leaders, (3) to determine if there was a difference in the skills level between the treatment and control groups; and (4) to determine if there was a difference in the skills level: (a) between age groups, (b) between extension districts, (c) between rural and urban places of residence, and (d) if the participants were group officers.

Rationale for the Study

The 4-H program, since its beginning around the turn of the century, became the acclaimed and effective youth arm of the Cooperative Extension Service. Goals of the 4-H program have expanded from the teaching of technical agriculture skills to the teaching of skills necessary for life.

Extension has an acclaimed record of success. The 4-H program enjoys a reputable image. It is becoming more and more important to substantiate and to justify accomplishments in order to maintain and increase public resources directed to 4-H programs. Funding sources, both public and private, are requiring accountability related to the effectiveness of programs funded. In addition, the changing audience and society that 4-H has available and that is being reached calls for new and more effective methods of teaching skills necessary for everyday life.

From the beginning of the program 4-H has attempted to teach leadership skills. The Southern Region 4-H Leadership Life Skills material was a product of efforts by a multi-state developmental committee to write, pilot, and distribute materials that attempted to

effectively teach leadership life skills. This research question evolved to determine whether the materials were effective in teaching leadership life skills to youth who participate in 4-H programs. The research should provide evidence of: (1) learning of leadership life skills, (2) the effectiveness of materials designed specifically for use in teaching skills, (3) strengths and weaknesses of the approach, (4) support data for further work in preparation of materials, and (5) data that can be used in making decisions regarding the allocation of resources to the continued development of the process and/or printing of materials.

Design of the Study

Literature and research related to the study was reviewed and, following that, the research procedures were established to satisfy the purpose and objectives of the study. The sampling procedures used for the study was a stratified random sampling. The population was the entire 4-H club enrollment of the state. The design included a treatment and a control group. The sample was to include counties from each of the extension districts into both the treatment and the control. In addition, there was a sampling of urban and rural places of residence. All age groups and levels of leadership in the clubs were included. Treatment counties came from counties that had participated in an extensive training program on the use of the life skills approach and the materials. Counties of similar staffing, population, and socio-economic makeup, were selected and paired with treatment counties to form the control group. Clubs were selected by

the extension agent in that county. Respondents were randomly dropped back to an equal number to their corresponding group.

The original design included 28 counties and 380 individuals from the control and the treatment groups. Usable data were obtained from 16 counties with 312 participants in the test (156 treatment and 156 control).

A Likert scale instrument was adapted from self evaluation scale on specific skills found to be priority by earlier research. The instrument included items for each of seven generic skills classifications. Participants responded on an op-scan standard answer sheet.

The instrument was given to each of the respondents to determine their perception of their skills. In addition, the volunteer leader working with the youth was asked to complete the same questionnaire on each of the youth participants. This pre test for the treatment group was followed by the introduction of the Exploring 4-H Leadership publication, which was the entry level learners' manual. The control group continued with their existing involvement in the 4-H program. At the conclusion of the test period the same participants and volunteer leaders were asked to complete the same questionnaire as the post test.

Each item on the instrument had a four level Likert scale response. The data was transferred to the computer center through an op-scan reading to discs and to the central computer. The analysis of data included the calculation of mean scores for each of the skill classifications and for all skills for the control and treatment groups. The remaining calculations and analysis were based upon the frequency and the direction of change as reflected from the pre

test to the post test. The changes were recorded for the perceptions of the youth and the perceptions of the adult volunteers working with the youth. Frequencies were clustered for each of the skills classifications and all 27 items were clustered for the all skills classification. This procedure was followed in order for the all skills classification to reflect more accurately all of the skill items rather than the unequal weighting due to the different number of items in the skills classifications.

The study was interested in the change from a directional standpoint. The intensity of that perceived change as reflected through means and means differences was also of concern. Because of the unequal club sizes, county samples, and number of volunteers involved with each of the youth participants, chi square was selected as the most appropriate method for determining statistical significance. Chi square was calculated on the various comparisons within the study and a SAS program was utilized for the analysis.

Major Findings of the Research

The major findings of this study fit into four sections: (1) changes in skills during the test, (2) frequency and direction of change as perceived by members and leaders, (3) frequency and direction of change of control and treatment, and (4) frequency and direction of change of treatment: (a) between age groups, (b) between districts, c) between rural and urban places of residence, and d) between officer and non-officer. In addition to the four sections, information was obtained on the sample background and general characteristics.

Changes in Skills During the Test Period. There was an apparent improvement in the skills level during the test period for both the treatment and the control groups, as perceived by the leaders. This was determined by calculating the mean scores for the pre test and post test for all of the skills and for each of the skills classification.

The pre test-post test mean scores for the all skills classification were greater at the end of the test for both the control and the treatment, as perceived by leaders and members. The mean scores for each of the skills areas were also greater at the end of the test period for the treatment group, as perceived by both the leaders and the members. Three of the skills areas in the control group showed a decline in the members' perceptions of skills from the beginning to the end of the test period.

The treatment-control mean scores differences perceived by the leaders for each of the skills areas were greater for the treatment than for the control with the exception of one skill, and that skill difference was the same.

There was little improvement in the skills level during the test period for both the treatment and control groups, as perceived by the members. The means for all skills were greater for the post test; however, the difference was very small.

Frequency and Direction of Change as Perceived by Members and Leaders. When the null hypothesis related to this section of the study was tested by using chi square, the null hypothesis was not rejected, leading to the conclusion that there was no significant difference in

the perception youth had of the change in their leadership life skills to that of the adult volunteer leaders perception of the change of the youths' leadership skills. This was true for both the treatment and the control groups.

Frequency and Direction of Change of Control and Treatment. Frequency and direction of change of control and treatment was the central part of this research study--was there a difference in the learning of leadership life skills that occurred during the test period when the treatment and the control groups were compared? When the data was analyzed, there was a split in the support of and the rejection of the null hypothesis.

The perception of the volunteer leaders working with the youth supported the rejecting of the null hypothesis that stated there was no difference. This same conclusion was drawn from each of the skills classifications except learning to learn (skills 6). It should be noted that only one item was included in this skills classification cluster.

Different findings were determined from the members' perception of the change that occurred. There was no significance for chi square procedures. The members' perception supported accepting the null hypothesis that there was no difference between the treatment and control groups. This was true for all of the skills classifications.

Frequency and Direction of Change for Treatment Between Age Groups. The three age groups included the pre-teens, teens, and older teens. The perceptions of the leaders and the members yielded different results. Data on the leaders' perception of change that

occurred for the different age groups supported the rejection of the null hypothesis, thus indicating that there was a significant difference in the leadership life skills change between age groups. Three of the skills classifications, working with groups (skills 4), management (skills 5), and decision making (skills 7) each supported the rejection of the null hypothesis.

The members' perception supported the null hypothesis that stated there was no significant difference in the leadership life skills change between age groups. Within the individual skills classification, however, management skills (skills 5) supported the rejection of the null hypothesis. The youths' perception on understanding yourself (skills 3) had a probability of 0.058.

Frequency and Direction of Change for Treatment Between Extension Districts. Findings for the leaders and members were in agreement regarding the statement, "There is no difference between the change of youth skills based on the district in which they live." Based on the all skills classification, this null hypothesis would be accepted. The findings did show that there was some difference between specific generic skills areas.

Frequency and Direction of Change for Treatment Between Rural and Urban Place of Residence. Data and analysis supported not rejecting this null hypothesis and indicated that there was no significant difference between the learning of leadership life skills during the test period based upon place of residence, whether rural or urban.

Frequency and Direction of Perceived Change for Treatment Between Group Officer and Non-Officer. The analysis of data from this research hypothesis produced split support of the research null hypothesis. Leaders' perceptions supported the rejection of the null hypothesis and indicated that there was a difference in the learning of leadership life skills among the officers. Individuals' skills classifications which supported this were the getting along with others skills (skill 2), and decision making skills (skills 7).

The analysis of the members' perceptions regarding this question supported the null hypothesis that indicated there was no significant difference between the officers and non-officers. All of the generic skills classifications supported the null hypothesis.

Conclusions

The analysis of the data and the subsequent findings were the basis for the following conclusions:

1. There was an improvement in the skills necessary to perform leadership tasks as a result of participation in 4-H programs.

2. There was a difference in the perception youth had of the change they made in leadership life skills compared to the perception of the adult volunteer leader working with the youth, as reflected in the mean differences. However, the frequency difference tested by chi square was not statistically significant.

3. The life skills approach to leadership development, as outlined in the Southern Region 4-H Leadership Life Skills material, was a more effective means of teaching skills necessary to perform leadership roles than the other traditional approaches used in Oklahoma.

4. The life skills approach to leadership development was more effective in teaching the more complex skill classifications such as working with group, management skills, and decision making skills, than other traditional methods used in Oklahoma.

5. There was a difference in the rate of learning based on age with more complex life skills such as working with groups, management, and decision making skills.

6. Younger 4-Hers tend to be less certain of their own individual abilities, as indicated by uncertainty of understanding yourself skills (skills 3).

7. Youth were unaware of the extent of change that occurred over a period of time. This was based on the differences of perception of the youth and adults of the skill changes that occurred. The more complex skills were frequently involved.

8. There was no difference in the learning that occurred based on the extension district in which the program was conducted.

9. There was no difference in the learning of leadership life skills that took place based on the place of residence, whether rural or urban.

10. There was a difference in the leadership life skills change from the performance of the youth as a club or group officer. This difference might have occurred because of the closer working relationship of the adult with the youth who were officers.

Recommendations

Based upon the findings of this study and the affirmation of practices within the 4-H program of the Cooperative Extension Service,

the following recommendations are made:

1. It is recommended that the Oklahoma State University Cooperative Extension Service and the Southern Region continue to refine the life skills approach to leadership development in order to maximize the learning of leadership skills by youth participating in the 4-H program.

2. It is recommended that resources be allocated to further and continue support of the development of the life skills approach to leadership development as an effective means of teaching skills necessary to perform leadership roles.

3. It is recommended that practitioners explore other methods of teaching or presenting life skills to adults who, in turn, work with youth as well as to youth in an effort to identify more effective means of teaching complex life skills.

4. It is recommended that the life skills approach be incorporated into other subject matter materials as a part of the teaching and learning process.

5. It is recommended that age graded 4-H Leadership Life Skills materials be developed to focus on awareness, learning, and development of generic life skills categories appropriate for the age and capabilities of various age youth.

6. It is recommended that 4-H Leadership Life Skills materials be developed which provide additional leadership roles appropriate for youth not serving as club officers. The roles and suggested learning experiences should relate to real role options available and applicable to their interests and needs.

Recommendations for Future Research

The following recommendations are based upon judgments resulting from this research project. Further research would clarify or verify several points raised in this research:

1. It is recommended that a longitudinal research project be conducted that would span learning over a continuing period of several years. It is further recommended that more than the Exploring 4-H Leadership publication be included in the teaching/learning process (8).

2. It is recommended that future research design include equalizing the group sizes, the number of 4-H groups or clubs that participate, and the number of adult volunteers who work with the youth. This would reduce the number of variable and simplify analysis.

3. It is recommended that future studies utilize an assessment of behavioral changes rather than the perception of youth and/or the volunteers who work with the youth.

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APPENDIXES

APPENDIX A

QUESTIONNAIRE

4-H Member Questionnaire

INSTRUCTIONS

It will take you less than fifteen minutes to complete this questionnaire. You will be using a separate answer sheet. Please do not bend or fold the answer sheet. Only part of the answer sheet will be used.

You may be unfamiliar with answer sheets or find them a bit difficult to use. Frankly, without this process other people would have to spend weeks transferring your answers onto punch cards. We appreciate your help in eliminating this procedure.

You will find arrows ↑ interspersed among the statements, indicating that the next answer sheet number will be found at the top of the next column. Following these arrows will prevent considerable erasing.

Use a soft pencil, please (the machine cannot read pen). You need not press hard, but please fill in the box well and try to avoid making stray marks on the answer sheets. If you need to erase, do so thoroughly so as not to foul the machine that reads the answer sheets.

The questionnaire is divided into two sections, general information and leadership skills. Your adult 4-H leader will tell you how to complete the general instruction section. Then go on to section II leadership and mark the box (Examole [ ][ ][ ][ ][ ]) that corresponds to the answer you want to give.

Section I - General Information

1. Your name. Print your last name, your first name, then your middle initial. Then blacken the letter box on the answer sheet which matches each letter of your name.

2. Where the answer sheet says Course Number write in your county number and blacken the number below which matches. Your leader will tell you the number.

3. Where the answer sheet says Section write in your club number and blacken the numbers below which match. Your leader will tell you this number.

4. Where the answer sheet says Student Number write in your 4-H enrollment number. Your leader will provide this information.

5. Use part I on the answer sheet items 1 and 2 to mark your age. Black in the appropriate box.

1 (a) 9yr. (b) 10 yr. (c) 11 yr. (d) 12 yr. (e) 13 yr.

2 (a)14 yr.(b) 15 yr. (c) 16 yr. (d) 17 yr. (e) 18 yr.

6. Use part I on the answer sheet items 3 to answer. Blacken the appropriate box. Are you a club officer?

(a) yes (b) no

7. Use part I on the answer sheet item 4 to answer. Blacken the appropriate box. Are you a:

(a) 4-H member (b) Adult volunteer leader

Now go to part II on the answer sheet and complete items 41 through 67. The questions are on the reverse side of this sheet.

Section II - Leadership Skills

41. I can keep records
(a) Very Well (b) Well (c) Poorly (d) Very Poorly

42. I can speak before a group
(a) Very Well (b) Well (c) Poorly (d) Very Poorly

43. I am a good listener
(a) Strongly Agree (b) Agree (c) Disagree (d) Strongly Disagree

44. I can ask questions
(a) Very Well (b) Well (c) Poorly (d) Very Poorly

45. I can teach others
(a) Very Well (b) Well (c) Poorly (d) Very Poorly

46. I can explain my ideas through writing
(a) Very Well (b) Well (c) Poorly (d) Very Poorly

47. I can express my thoughts and feelings without talking
(a) Very Well (b) Well (c) Poorly (d) Very Poorly

48. I can explain my ideas by talking
(a) Very Well (b) Well (c) Poorly (d) Very Poorly

49. I accept and care about others
(a) Very Much (b) Much (c) Little (d) Very Little

50. I encourage others
(a) Very Much (b) Much (c) Little (d) Very Little

51. I meet and get along with others
(a) Very Well (b) Well (c) Poorly (d) Very Poorly

52. I trust other people
(a) Very Much (b) Much (c) Little (d) Very Little

53. I feel good about myself and my abilities
(a) Strongly Agree (b) Agree (c) Disagree (d) Strongly Disagree

54. I feel I am enthusiastic
(a) Strongly Agree (b) Agree (c) Disagree (d) Strongly Disagree

55. I understand and know what I value
(a) Strongly Agree (b) Agree (c) Disagree (d) Strongly Disagree

56. I cooperate with others
(a) Strongly Agree (b) Agree (c) Disagree (d) Strongly Disagree

57. I work as a team member
(a) Strongly Agree (b) Agree (c) Disagree (d) Strongly Disagree

58. I feel I can plan programs
(a) Very Well (b) Well (c) Poorly (d) Very Poorly

59. I feel I can determine needs and interests
(a) Very Well (b) Well (c) Poorly (d) Very Poorly

60. I can set and carry out goals
(a) Very Well (b) Well (c) Poorly (d) Very Poorly

61. I can identify and use resources
(a) Very Well (b) Well (c) Poorly (d) Very Poorly

62. I know what is most important to me
(a) Very Well (b) Well (c) Poorly (d) Very Poorly

63. I can use brainstorming
(a) Very Well (b) Well (c) Poorly (d) Very Poorly

64. I can make choices
(a) Very Well (b) Well (c) Poorly (d) Very Poorly

65. I can evaluate people
(a) Very Well (b) Well (c) Poorly (d) Very Poorly

66. I can evaluate programs
(a) Very Well (b) Well (c) Poorly (d) Very Poorly

67. I am a responsible person
(a) Strongly Agree (b) Agree (c) Disagree (d) Strongly Disagree

Thanks for your help. Give your answer sheet and questionnaire to your leader.

APPENDIX B

BASIC CONCEPTS OF THE 4-H LEADERSHIP LIFE SKILLS

Basic Leadership Concepts

This leadership development program is designed to allow 4-H members and volunteers an opportunity to develop life skills that will make them more effective leaders. There are several basic leadership concepts underlying these leadership materials.

- *There are many leadership roles in the 4-H program.* These leadership roles include elected and appointed positions such as member, president, committee chairperson, activity leader, and many more.
- *Similar roles exist in other life situations.* Leadership roles such as president, member and committee chairperson are also found in other organizations and situations throughout life.
- *Each role has duties that must be completed.* There are certain tasks which must be completed in order to be successful in any leadership role.
- *These duties require performance of certain life skills.* Skills needed include communications, decision making, getting along with others, understanding yourself, working in groups, learning, and management skills.
- *Life skills can be learned.* The two factors most important in learning basic leadership skills are a desire to learn and knowledge of what is expected.
- *Learning experiences can be developed to teach life skills.* Both individual and group learning experiences can be used to teach life skills.
- *Skills must be practiced before they become part of your performance.* Developing a skill involves both learning information about the skill and practicing the skill. 4-H provides an opportunity to practice new skills with support and guidance. Apprenticing to an adult or older 4-H'er in the leadership role is an excellent way to practice new leadership skills.
- *When a life skill is learned in one setting, it will be of use in performing similar leadership roles.* Life skills learned to perform as a 4-H president will also be used when serving as president of other groups.
- *Different levels of a life skill may be required in different roles.* The role of member may require less proficiency in certain skills than the role of president or organizational leader.

APPENDIX C

EVALUATION OF SKILLS

Evaluation of Skills

Place an x on the line at the point which you feel reflects your performance for each life skill listed.

I feel I can:	Need to learn	Need to improve	Do well
1. Give directions.			
2. Express feelings.			
3. Define terms.			
4. Keep records.			
5. Lead discussions.			
6. Speak before a group.			
7. Listen effectively.			
8. Teach.			
9. Communicate through writing.			
10. Communicate nonverbally.			
11. Communicate verbally.			

I feel I can:	Need to learn	Need to improve	Do well
1. Exhibit an attitude of fairness.			
2. Accept and care for others.			
3. Be honest and sincere with others.			
4. Be sensitive.			
5. Encourage others.			
6. Recognize the worth of others.			
7. Respect others and their property.			
8. Be tactful.			
9. Meet and get along with others.			
10. Be an effective role model.			
11. Trust other people.			

I feel I can:	Need to learn	Need to improve	Do well
1. Develop a positive self-concept.			
2. Exhibit enthusiasm.			
3. Develop pride and confidence in my self.			
4. Develop an attitude of responsibility and dependability.			
5. Develop a friendly personality.			
6. Practice good citizenship.			
7. Admit and deal with mistakes.			
8. Be flexible.			
9. Understand and clarify my values.			

I feel I can:	Need to learn	Need to improve	Do well
1. Cooperate and work as a team.			
2. Involve people.			
3. Follow as well as lead.			
4. Consider the needs of all involved.			
5. Consider input from all group members.			
6. Create an air of ease and acceptance in groups.			

I feel I can:	Need to learn	Need to improve	Do well
1. Evaluate people and programs.			
2. Plan programs.			
3. Delegate responsibility.			
4. Guide others.			
5. Exhibit a responsible attitude.			
6. Manage time.			
7. Organize.			
8. Coordinate people and programs.			
9. Take initiative.			
0. Be open to progressive change.			
11. Conduct a group meeting utilizing parliamentary procedure.			

I feel I can:	Need to learn	Need to improve	Do well
1. Ask questions.			
2. Accumulate knowledge.			
3. Synthesize information.			
4. Be open-minded.			
5. See things objectively.			
6. Learn from others.			

I feel I can:	Need to learn	Need to improve	Do well
1. Assess needs and interests.			
2. Set and implement goals.			
3. Identify and use resources.			
4. Set priorities.			
5. Utilize brainstorming.			
6. Select alternatives.			

APPENDIX D

ORIGINAL 25 ITEM QUESTIONNAIRE

1.	I can keep records	(1) Very Well (2) Well (3) Poorly (4) Very Poorly
2.	I can speak before a group	(1) Very Well (2) Well (3) Poorly (4) Very Poorly
3.	I can listen effectively	(1) Very Well (2) Well (3) Poorly (4) Very Poorly
4.	I can teach	(1) Very Well (2) Well (3) Poorly (4) Very Poorly
5.	I can communicate through writing	(1) Very Well (2) Well (3) Poorly (4) Very Poorly
6.	I can communicate non verbally	(1) Very Well (2) Well (3) Poorly (4) Very Poorly
7.	I can communicate verbally	(1) Very Well (2) Well (3) Poorly (4) Very Poorly
8.	I accept and care about others	(1) Very Much (2) Some (3) Little (4) Very Little
9.	I encourage others	(1) Very Much (2) Some (3) Little (4) Very Little
10.	I meet and get along with others	(1) Very Well (2) Well (3) Poorly (4) Very Poorly
11.	I trust other people.	(1) Very Much (2) Some (3) Little (4) Very Little
12.	I feel good about my self and my abilities	(1) Strongly Agree (2) Agree (3) Disagree (4) Strongly Disagree
13.	I feel I exhibit enthusiasm	(1) Strongly Agree (2) Agree (3) Disagree (4) Strongly Disagree
14.	I understand and can clarify my values	(1) Strongly Agree (2) Agree (3) Disagree (4) Strongly Disagree
15.	I am cooperative and work as a team member	(1) Strongly Agree (2) Agree (3) Disagree (4) Strongly Disagree
16.	I can evaluate people and programs	(1) Very Well (2) Well (3) Poorly (4) Very Poorly
17.	I feel I can plan programs	(1) Very Well (2) Well (3) Poorly (4) Very Poorly
18.	I exhibit a responsible attitude	(1) Strongly Agree (2) Agree (3) Disagree (4) Strongly Disagree
19.	I can ask questions	(1) Very Well (2) Well (3) Poorly (4) Very Poorly
20.	I feel I can assess needs and interests	(1) Very Well (2) Well (3) Poorly (4) Very Poorly
21.	I can set and implement goals	(1) Very Well (2) Well (3) Poorly (4) Very Poorly
22.	I can identify and use resources	(1) Very Well (2) Well (3) Poorly (4) Very Poorly
23.	I can set priorities	(1) Very Well (2) Well (3) Poorly (4) Very Poorly
24.	I can utilize brainstorming	(1) Very Well (2) Well (3) Poorly (4) Very Poorly
25.	I can select alternatives	(1) Very Well (2) Well (3) Poorly (4) Very Poorly

APPENDIX E

JANUARY LETTER AND INSTRUCTION SHEET

COOPERATIVE EXTENSION SERVICE

OKLAHOMA STATE UNIVERSITY
4-H AND YOUTH DEVELOPMENT PROGRAMS

DIVISION OF AGRICULTURE
STILLWATER, OKLAHOMA 74078

January 8, 1981

Dear Co-Workers,

I would like to ask your help with a research project. This study has been cleared through the associate director's office. Your support will be greatly appreciated.

The study will attempt to determine how effective we are in 4-H at teaching skills necessary for youth and adults to be able to carry out leadership roles. Other studies in Extension have not verified our successes at teaching such behavioral skills.

Your help is needed to administer a self rating questionnaire to forty or more 4-H age youth in your county. The 4-H members can be from one or more clubs. The volunteer 4-H leader working with the club(s) also needs to complete the same questionnaire on each 4-Her. This needs to be done during the month of January.

During the remainder of January, February and March continue with the (regular 4-H program planned or introduction of the Exploring 4-H Leadership Life Skills program planned) for the club. Near the end of March we need your help again to administer the same self rating questionnaire to the same 4-H members and to have the same volunteer 4-H leader to complete the questionnaire on each 4-Her again.

An envelope is enclosed for your convenience in returning the answer sheets. Please keep the answer sheets flat and mail in the envelope provided by January 23, 1981. You need not return the questionnaire. A little later, about the first of March, a second set of questionnaires, answer sheets and return envelope will be mailed to you. They should be completed and in the mail by March 27, 1981.

Your help and cooperation is certainly appreciated. When the study is completed I will share with you findings that will be of interest to you and that may be helpful to you or to the county program.

Thanks for your willingness to help.

Enclosures

Sincerely,

Merl E. Miller
Program Specialist, 4-H

Instructions for Adult Leaders

Your help in doing this study is very much appreciated. I know it is imposing on you and will require some of your time to help the members complete the questionnaire and for you to complete a questionnaire on each member. I assure you it is worthwhile to the overall 4-H program and will be helpful to youth and leaders all across the state. Thanks!

Your help is needed to (1) have the 4-H members in your club complete the questionnaire by marking the answer sheet appropriately and (2) complete an answer sheet on each of the 4-H members in the club as you see their skills. We will then have how the members see themselves and how you see the members. Both viewpoints are important. Please return the answer sheets. It is not necessary to return the questionnaire.

Section I of the questionnaire is general information necessary for the analysis of the data. You may want to have each 4-H member fill out questions 1 through 7 as you instruct them. Question 4 which is the member number, can come from the club roll and you may find it easier to mark the appropriate member number prior to distributing the sheets. You would need to write the person's name in ink on the top of the answer sheet. The course blank could be used for this purpose.

Remember when you complete the form on the members you will need to complete all of the afore items and indicate on question #7 that you are a leader by marking (b). This will allow us to know that you are completing the questionnaire on one of your 4-H members.

Good luck. Instruction for Section I, questions #1 through #67 follows. The 4-H member should complete Section II, questions #41 through #67.

1. My name is _____

2. My County Number Is:

(1) Cleveland	(6) Beaver	(11) Oklahoma
(2) Grady	(7) Dewey	(12) Seminole
(3) Lincoln	(8) Garfield	(13) Tulsa
(4) Logan	(9) Grant	(14) Craig
(5) McClain	(10) Kay	(15) Mayes
(16) McIntosh	(21) Beckham	(26) Washita
(17) Muskogee	(22) Comanche	(27) Coal
(18) Ottawa	(23) Custer	(28) Latimer
(19) Wagoner	(24) Garvin	
(20) Alfalfa	(25) Greer	

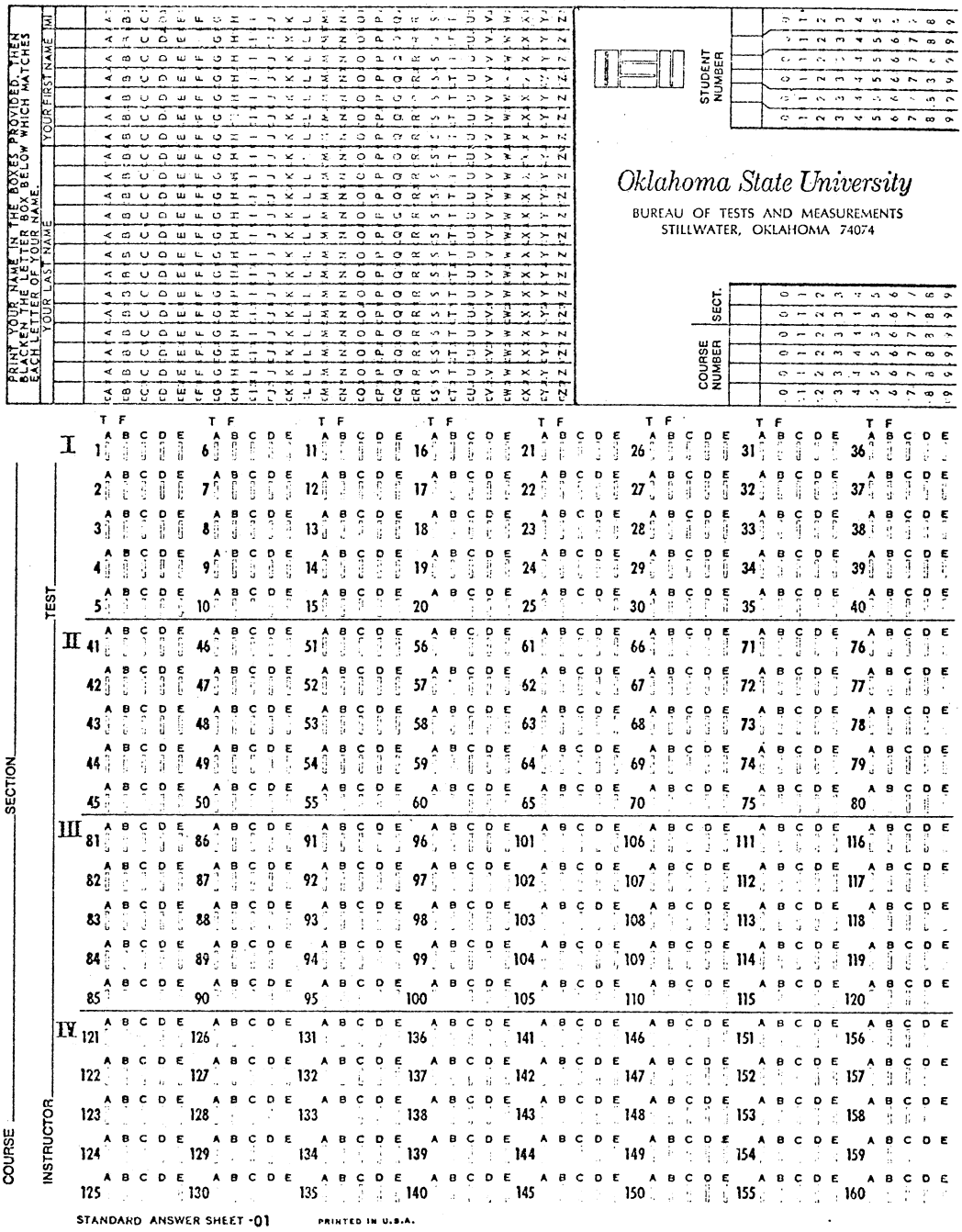
3. My Club Number Is:

1_____
2_____
3_____
4_____
5_____

4. My 4-H Membership Number Is: This number can come from the 4-H roll in the secretary's book. A numbered list of members could also be used. Attach the list to the answer sheets.

APPENDIX F

ANSWER SHEET


PRINT YOUR NAME IN THE BOXES PROVIDED, THEN BLACKEN THE OVAL IN EACH BOX BELOW WHICH MATCHES EACH LETTER OF YOUR NAME.
YOUR LAST NAME
YOUR FIRST NAME
MI
STUDENT NUMBER
Oklahoma State University
BUREAU OF TESTS AND MEASUREMENTS
STILLWATER, OKLAHOMA 74074
COURSE NUMBER
SECT.
COURSE
SECTION
INSTRUCTOR
TEST
I
II
III
IV
STANDARD ANSWER SHEET -01
PRINTED IN U.S.A.

APPENDIX G

FOLLOW-UP LETTER ON PRE TEST

February 23, 1981

Dear :

We are processing the Leadership Life Skills research pre-test and find that we have not received answer sheets from your county. It is very important to this research project that we receive data from each of the participating counties.

A copy of my January 8th letter that accompanied the materials for the pre-test is enclosed. The letter along with the instruction sheets that were distributed to you should give adequate information for your follow through. I will be looking forward to receiving your answer sheets and suggest that you marktthis packet as pre-test to assure that they are not mixed up with the post-test group that will be coming soon.

There is one item that I would call your attention to, and that is related to the volunteer marking an answer sheet on each of the youth who also completed an answer sheet. Information on each 4-H'er as the member perceives himself and as the volunteer leader perceives the 4-H member is important.

Thanks for your cooperation and help. With your assistance this research project can be carried out to a satisfactory completion and provide data that can be useful for all of us.

Sincerely,

Merl E. Miller
Program Specialist 4-H

Enclosure
MEM:dr

APPENDIX H

POST TEST DISTRIBUTION LETTER

COOPERATIVE EXTENSION SERVICE

OKLAHOMA STATE UNIVERSITY
4-H AND YOUTH DEVELOPMENT PROGRAMS

DIVISION OF AGRICULTURE
STILLWATER, OKLAHOMA 74078

February 27, 1981

Dear Co-Workers:

Thanks for your help in the first part of the research project to determine our effectiveness in teaching skills necessary to perform leadership roles. As indicated in our conference, and in my January 8th letter, a second part, or post-test is also required. It is nearly time for that post-test.

Your help is again needed to administer the same self-rating questionnaire to the same 40 or more 4-H age youth who took the pre-test. The same volunteer 4-H leader working with the club (s) also needs to complete the same questionnaire on each 4-H member as done before. This needs to be done during the month of March.

Materials you will need to complete the post-test are enclosed.

(1) Several instruction sheets

(2) 4-H member questionnaires and

(3) Answer sheets.

All three items are the same as the pre-test. If you have any left over answer sheets, please return the surplus with the completed post-test answer sheets.

An envelope is enclosed for your convenience in returning the answer sheets. Please keep the answer sheets flat and mail in the envelope provided by April 3, 1981. This is a few days later than previously indicated to allow you a little more time.

Your cooperation is certainly appreciated, and without your assistance and the help of the leaders in your county this study would not have been possible. Please extend my personal thanks to each member, leader and staff person who helped.

Sincerely,

Merl E. Miller
Program Specialist 4-H

Enclosures (4)
MM:dr

APPENDIX I

FOLLOW-UP LETTERS ON POST TEST

April 15, 1981

Dear :

We're missing the post-test results on the Leadership Life Skills research project from your county. It is very important that we receive data from each of the participating counties. The data is scheduled to be processed and analyzed very soon and without your help there will be a big void in the data.

If you are having problems in getting the information, please give me a call. Your special help is needed to complete this study. I'll be looking for your reply.

Sincerely,

Merl E. Miller
Program Specialist 4-H

MEM:dr

VITA

Merl Eldon Miller

Candidate for the Degree of

Doctor of Education

Thesis: EFFECTIVENESS OF THE 4-H LIFE SKILLS APPROACH TO LEADERSHIP DEVELOPMENT

Major Field: Agricultural Education

Biographical:

Personal Data: Born in Ada, Oklahoma, January 26, 1936, the son of Mr. and Mrs. Earl R. Miller.

Education: Graduated from Pauls Valley High School, Pauls Valley, Oklahoma, in May, 1954; received the Bachelor of Science degree from Oklahoma State University with a major in Animal Husbandry, in May, 1958; attended Cornell University, Ithaca, New York, in 1958-59; attended University of Wisconsin, Madison, Wisconsin, in 1960-61; attended Colorado State University, Ft. Collins, Colorado, in 1967; received the Master of Science degree from Oklahoma State University in May, 1971; completed requirements for the Doctor of Education degree at Oklahoma State University in December, 1981.

Professional Experience: Graduate teaching assistant, Animal Science Department, Cornell University, Ithaca, New York, 1958-59; Associate Editor and Assistant Advertising Manager, American Hampshire Herdsman, Peoria, Illinois, February, 1959-August, 1960; Instructor, Animal Science Department, University of Wisconsin, Madison, Wisconsin, September, 1960-May, 1961; Managing Editor, American Hampsire Herdsman, Peoria, Illinois, June, 1961-February, 1966; Oklahoma State University 4-H Extension Agent, Caddo County, Anadarko, Oklahoma, March, 1966-June, 1967; Oklahoma State University Extension Agent, Area 4-H Program, Anadarko, Oklahoma, July, 1967-January, 1970; Oklahoma State University Extension State 4-H Staff Assistant, Stillwater, Oklahoma, February, 1970-May, 1970; Oklahoma State University Extension State 4-H Program Specialist and Assistant Professor, Stillwater, Oklahoma, June, 1970 to present.

Organizations: Member of Alpha Zeta, Block and Bridle, Phi Kappa Phi, Epsilon Sigma Phi, Oklahoma Association of Extension 4-H Agents, National Association of Extension 4-H Agents, and former member of Oklahoma County Extension Agents Association and National County Agents Association.