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ATTITUDE ASSESSMENT OF THE 4-H MEMBERS IN THE
GALLATIN COUNTY 4-H PROGRAM

by

RANDALL FISHBURN SHANK

A professional paper submitted in partial fulfillment
of the requirements for the degree

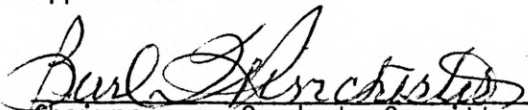
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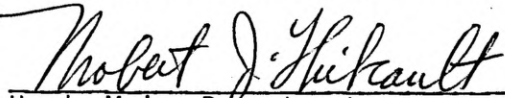
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Chairperson, Graduate Committee


Head, Major Department


Graduate Dean

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Abstract

The purpose of this study was to determine how 4-H members in the Gallatin County 4-H program feel about different aspects of their 4-H experience and to discover what relationships exist between 4-H members' attitudes toward competition and cooperation, and their attitudes toward independence, extrinsic motivation, intrinsic motivation, personal worth, judging basis, need for direction, general 4-H interest, self-expression, and 4-H events.

An attitude assessment questionnaire was administered by 4-H volunteer leaders to 300 4-H members in their April or May 4-H Club meeting. For purposes of interpretation, the population was broken down into the following age groups: (a) 74 10 year olds and under, (b) 81 11 and 12 year olds, (c) 74 13 and 14 year olds, (d) 53 15 and 16 year olds, and (e) 18 17 year olds and older.

In general, for all age groups, the 4-H members place a high level of importance on the 4-H program, the demonstration contest, 4-H record books, the 4-H Fair, 4-H Camp, and 4-H judging contests.

Receiving blue ribbons, ribbons in general, and 4-H prize money are seen as having a lot of importance by the 10 year olds and under. As the ages increase, however, the level of importance placed on these incentives decreases. There are very few feelings of confusion expressed by 4-H'ers in relation to reasons for taking a 4-H project.

No significant relationship was found between the attitudes toward competition and cooperation. Attitudes toward cooperation are positively related to attitudes toward intrinsic motivation, personal worth, judging, need for direction, general 4-H interest, self-expression, and 4-H events. Attitudes toward cooperation showed no significant relationship with attitudes toward extrinsic motivation, and only a slight negative relationship with attitudes toward independence.

Competitive attitudes are slightly positively related to attitudes concerning independence, extrinsic motivation, and judging. There is no significant relationship between competitive attitudes and attitudes toward personal worth, need for direction, general 4-H interest, self-expression, and 4-H events. A small negative correlation exists between attitudes toward competition and intrinsic motivation.

Chapter 1

Introduction

The United States Department of Agriculture, the State Land Grant Universities, and the local county governments within each state join together to form the Cooperative Extension Service. It is the expressed goal of the Extension Service to provide a link between the local citizenry in a community and the educational services of the State Land Grant Institution of Higher Learning. The Extension Service plans and conducts educational programs on a local level in the areas of Agriculture, Home Economics, Community Resource Development, and 4-H. The 4-H program is the youth program in Extension's educational service to a community.

The 4-H program in Gallatin County is administered through the Gallatin County Cooperative Extension Service. Three local County Extension Agents plan and coordinate the Extension educational programs in the county. According to the Extension Service, there are approximately 400 youth between the ages of 9 and 19 enrolled in the Gallatin County 4-H Program. These youth are organized into 22 4-H clubs with the leadership for these 4-H members provided by 80 4-H Adult Volunteer Leaders.

One of the primary sources of information for planning county-wide 4-H educational programs is through citizen input. By involving county youth and adults in the program planning process, the Extension Service can best meet the expressed needs of the populace in a

particular area. By seeking the input of 4-H members themselves, the Extension Service can best plan the educational programs that will meet the needs of the area's young people that are involved in the 4-H experience.

A large part of the 4-H educational program consists of activities that are competitive and/or cooperative in nature. Demonstration contests, judging contests, 4-H Fairs, and record keeping are just a few of the competitive activities that 4-H members participate in. Many activities such as participating in the 4-H Club itself, helping other 4-H'ers with projects, and other group activities are all cooperatively structured. Competition and cooperation play such a heavy role in the learning process of 4-H youth that the 4-H program itself would be a totally different organization without these methods of providing learning experiences for the participants.

In many instances, competitive and cooperative activities are planned and conducted for the 4-H youth with little evidence available as how the youth themselves feel about such experiences. The correlation of 4-H members' attitudes toward competitive and cooperative activities with their attitudes toward related aspects of 4-H, can convey valuable program planning information to an Extension Agent. Members' attitudes about such experiences may provide an indicator as to reasons for participation or the lack of participation in such activities.

Statement of the Problem

The problem of this study was to assess 4-H members' feelings toward several facets of their 4-H experience in the Gallatin County 4-H Program, and to determine the correlations between their attitudes toward competition and cooperation, and their attitudes toward extrinsic motivation, intrinsic motivation, personal worth, self-expression, independence, need for direction, judging, general 4-H interest, and 4-H events.

Need for the Study

One of the basic premises of program planning in Cooperative Extension is to determine the needs of the participants for which educational programs are planned. In most cases, once the need is determined, the need can begin to be met. In the planning of educational programs, determining needs has been one of the most difficult tasks confronting a County Extension Agent. One method used by Extension personnel in assessing needs is by choosing a representative group of individuals to discuss openly what they perceive their personal, and their constituents' needs are. This system has merit in that direct citizen involvement is utilized. More often than not, additional information is desired in order to properly determine the true needs of the client.

With the diversity of ages in the 4-H program, a natural variation in needs occurs. Because of this age differential, planning worthwhile educational programs and activities by Extension Agents is difficult.

4-H clubs are grouped in many different ways. In Montana, the primary way of grouping 4-H clubs is on a community basis. The grouping methods may vary from county to county. The structure of the 4-H Club itself and the diversity of interests within a club create unique educational program planning problems. In working with youth it is often difficult to gather worthwhile input concerning their needs and desires. Thus, an attitude assessment questionnaire might help some 4-H members better communicate their own feelings and desires.

As a public agency that uses a piece of the tax dollar, the Extension Service is experiencing a growing concern on the part of the public for accountability. In the Extension educational programs, educational evaluation and measurement typically deal with cognitive achievement. On the other hand, educational accountability demands that the attitudes and feelings of 4-H members be considered as well as their learning. This study is designed to assess 4-H members' feelings toward many aspects of their 4-H experience. By gathering data on 4-H members' attitudes, Extension Agents and 4-H Adult Leaders can make decisions in planning educational programs based

on 4-H members' feelings in addition to the desired level of achievement in 4-H events and activities.

Thus, the primary purpose for this study was the help it can give to county Extension Staff and 4-H Adult Leaders as they plan their yearly educational programs for the 4-H members in the county. At present, most Extension agents have no useful tool to measure the needs of youth. By gathering input from all segments of the 4-H population, needs of age levels can be identified. Other needs can also be met from this attitude assessment. The 4-H program utilizes competitive and cooperative activities as educational tools. The relationship that competitive and cooperative activities have with other aspects of the 4-H program such as motivation to learn, relationships with others, personal worth, self-expression, 4-H interest, judging, need for direction, 4-H events and 4-H interests are identified. In many cases, competitive contests are organized and run, and there is no knowledge about what relationship this competition has with the other working parts of the total 4-H system. Data from this attitudinal assessment was correlated to see if there was any relationship between the selected clusters (see Appendix A). By determining correlations on various aspects of the 4-H program, relationships were determined which will aid in the broad educational plan for the participating audience. For instance, if attitudes toward competition are negatively correlated to attitudes toward 4-H events

by a certain 4-H age group, then this relationship may be used by the Extension program planner to look at, and plan more appropriately, the competitive 4-H events for that particular age group.

General Questions to be Answered

Questions that are answered in this study are questions that any 4-H Extension Agent may want to have answered as he attempts to assess just what his educational audiences felt needs and attitudes are. Questions that are answered on selected age levels from 9 years of age to 19 years of age include:

1. What are the 4-H members' attitudes toward selected 4-H events and activities (demonstration contest, judging contests, 4-H records, 4-H Camp, 4-H Fair, 4-H prize money, 4-H ribbons, blue ribbons, project selection)?
2. What are the attitudes of the 4-H members toward the 4-H program itself?
3. How do these groups of 4-H members feel about the general areas of: competition, cooperation, independence, self-expression, extrinsic motivation, intrinsic motivation, personal worth, being judged, need for direction, 4-H events, and general 4-H interest?
4. What is the correlation between 4-H members' attitudes toward competition and their attitudes toward cooperation?

5. What is the correlation between 4-H members' attitudes toward competition and their attitudes toward independence, self-expression, extrinsic motivation, intrinsic motivation, personal worth, being judged, need for direction, 4-H events, and general 4-H interest?

6. What is the correlation between 4-H members' attitudes toward cooperation and their attitudes toward independence, self-expression, extrinsic motivation, intrinsic motivation, personal worth, being judged, need for direction, 4-H events, and general 4-H interest?

7. What are the trends in attitudes of 4-H members toward the 4-H program from 9 years of age to 19?

General Procedure

A package consisting of the attitude assessment, instructions for administering the instrument, and a cover letter signed by the local 4-H Extension Agent were mailed to each of the 22 4-H Adult Volunteer Leaders during the last week of March. Twenty of the 4-H Leaders administered the attitudinal survey to his or her respective 4-H Club in the month of April. One 4-H Club answered the survey in May and one 4-H Club (Pass Creek) chose not to participate. All those 4-H members that were present at the meeting were given the questionnaire. After the Adult Leader administered the survey, the

completed forms were mailed back to the researcher in a self-addressed envelope.

The attitude assessment instrument consists of two parts. Part I of the questionnaire asked the respondent to rank 19 selected statements on the basis of importance and unimportance. Part II of the instrument consisted of 25 statements which the respondent was asked to rank on the basis of a four point true-false scale (see Appendix A). The data gathered was broken down into the following age groups: 10 year olds and under; 11 and 12 year olds; 13 and 14 year olds; 15 and 16 year olds; and 17, 18, and 19 year olds. The data are displayed with the use of graphs and tables using both mean scores and percentages. Correlation analyses were run on clusters of test items in order to determine correlations between attitudes toward competition, cooperation, and the selected clusters.

Limitations and Delimitations

Since this study was conducted only in Gallatin County, the results are limited to the 4-H population studied. The responses to the attitude assessment instrument can only represent the attitudes of those responding. A delimitation of this study is the lack of time and money of the researcher to administer a more comprehensive instrument that would better measure each cluster area (such as attitudes toward competition). Because of time restrictions in

each 4-H meeting for administering the instrument and because of the researcher's time requirements, only so much information can be obtained from the respondents. The limited information within the survey is a delimitation imposed by the researcher.

Another delimitation of this study is the lack of training of the Adult 4-H Volunteer Leaders who administered the questionnaire to their respective 4-H Clubs. Each of the 4-H Leaders received uniform instructions for the administering of the questionnaire, but a limitation of the study involves each leader's conscious or unconscious influence on their particular 4-H Club.

Definition of Terms

Most terms in this study are self-explanatory. For purposes of clarification, definitions for the following terms are:

Attitude - An expression of one's reaction toward a feeling about a thing or situation.

Competition - The struggle or rivalry between two or more persons for a possession, reward, or end that is limited.

Cooperation - Working with others to achieve a desired goal.

Self-expression - Ability to communicate one's thoughts and feelings.

Personal Worth - Positive or negative attitudes toward self.

Intrinsic Motivation - That which is within an individual and prompts him to behave in a certain fashion.

Extrinsic Motivation - External factors that prompt an individual to behave in a certain fashion.

Independence - Working and performing tasks alone.

Summary

The degree of difficulty that county Extension personnel have in assessing the needs and desires of its educational audiences continues to be very high. How a 4-H member values the importance and unimportance of 4-H educational activities and events, and how he values the external forces that surround the 4-H programs can be an important guideline for 4-H educational program planning by Extension Agents and 4-H Adult Leaders. Whether or not a group of youth of a selected age level view their varied 4-H experiences as important or unimportant may convey valuable information to those responsible for administering a county or area 4-H program. For instance, lack of participation by 4-H members in a certain learning activity may be related to the degree of importance associated with the event. This type of implication can be related to all aspects of the 4-H program. By comparing attitudes of different age groups of 4-H youth, the Extension staff can identify trends in the needs of the broad range of ages that the 4-H program demands.

Most county Extension personnel have no set criteria for gathering input from county audiences. This study will be able to

identify attitudes held by groups of 4-H members toward certain aspects of the Gallatin County 4-H Program. The instrument used in this study should be able to be utilized in any county that conducts a 4-H program. If certain age groups feel that one portion of the 4-H educational package is more important than others, then this area can be emphasized by the adult leadership. This assessment is able to identify the felt needs and desires of the selected age groups involved in the program. By learning what the youth feel to be important and unimportant, the county Extension staff and the Adult Leaders should have a better basis for initiating programs to meet the real needs and wants of those 4-H members in the program.

Competition and cooperation play important roles in the learning process for 4-H youth. Often, competitive and cooperative activities are utilized to enhance the knowledge of individuals, but no effort has been made to determine the relationships between these activities and other aspects of the total 4-H program and purposes. If one can determine how 4-H members themselves feel about competition, cooperation, and other selected portions of their 4-H experience, then one can begin to learn what best motivates these 4-H members to learn. By identifying the correlations between competition, cooperation, and these other selected factors, one can begin to know how the 4-H youth perceive the relationship that competition and cooperation have with these other factors that effect their own

learning experience. With this information, Extension Agents should be better able to plan a more acceptable and meaningful program.

Chapter 2

Review of Literature

The 4-H program as administered nationally by the USDA through the Cooperative Extension Service relies heavily on competition and cooperation as motivators of behavior for youth. Competition and the role that it plays in the 4-H program continues to be a controversial topic among parents, 4-H leaders, and 4-H members as to the value it has in the development of a young person into a mature responsible adult. Since one goal of this researcher is to examine the areas of competition and cooperation as they relate to selected aspects of the 4-H program, studies that have been done in the area of competition and cooperation are reviewed.

Major headings that will be discussed include: types of studies done and their limitations, effects of competition and cooperation on learning, effects of competition and cooperation on behavior, attitude studies on competition and cooperation, and an overall summary.

Types of Studies

Most of the studies conducted in the area of competition and cooperation according to Johnson and Ahlgren (1976) are "almost all small, carefully controlled experimental studies in laboratory and field settings" (p. 92). These studies are experimental in nature and the subjects are few in number. The subjects tested in most

instances are asked to perform relatively simple tasks under controlled conditions. These conditions include an exercise in which the subject is to perform in competition with others, in cooperation with others, and/or as a lone individual. Data from these experimental tasks are then analyzed and the results tabulated.

Another type of study conducted, of which this researcher could find only two examples, was that of measuring attitudes about competition and cooperation. In this particular kind of study the investigators take a relatively large population and either survey the entire population or a large sample of the population.

The third kind of study reviewed was the review of other studies that have been conducted by other investigators in the area of competition and cooperation. In an effort to decide which motivator had the greatest positive or negative effect, the investigators reviewed much of the literature and then generally reached a personal conclusion.

All three of these types of studies have their limitations. The experimental investigations under controlled conditions in many instances were behavioral studies of individuals under exact circumstances. The effects of competition and cooperation were measured immediately after the fact. Valid conclusions were drawn only with regard to the particular experiment and the participating subjects. Long range effects of cooperation and competition were not measured

with these short term experiments. Clifford (1971) expounded on these limitations when she said, "Frequently, a single competitive treatment is compared with a single non-competitive treatment and the dichotomy allows for very little generalization" (p. 11).

The attitudinal surveys attempted to measure the attitudes that a population of individuals has towards itself, others, cooperation, and competition.

The "review of literature" type study was limited in that the researcher drew his own conclusions from studies conducted by others. Whether his conclusions are correct or incorrect will remain to be decided. This type review does provide a background from which future research can be oriented.

Effects of Competition and Cooperation on Learning

Debates over whether competition or cooperation is the best motivator for learning have been argued for many years. Current research still remains inconclusive as to which method is the best means to induce learning. There is very little agreement among the experts in the field, which method produces the most positive effects. Johnson and Johnson (1974) studied the effects of cooperative, competitive and individualized goal structures on learning outcomes. Based on their studies of the recent research they found that "The results of social psychology and educational research

indicate that the most frequently used goal structure for promoting positive learning processes and cognitive and affective outcomes is cooperation" (p. 19). This finding does not necessarily mean that since it is the most used, it is also the best.

Dowell (1975), in his review of the research, concluded that both cooperation and competitive learning have a value for the student. In his own study he took 652 psychology students and divided them into groups of eight. With a series of matrices that had a target placed in a certain spot on each matrix, he had each group list the rules for placing the target. Twenty minutes was allotted for the task. The groups were given different instructions with some being able to work cooperatively with one another, others working competitively. Dowell (1975) found that "no significant difference resulted between the two learning environments in the apprehension of a novel task" (p. 275). Therefore, he concluded that a cooperative learning environment is not more conducive to the learning of a mental task than is a competitive learning environment.

Margaret Clifford (1971) found in her review of literature that findings from studies are not consistent. One study showed cooperation to be more efficient than competition, while another showed that competition was more conducive to learning than cooperation. Clifford's study (1971) involved 112 fifth and sixth grade students

who had an IQ between 72 and 133. She used a relatively simple cognitive task, and instructions were for the students to associate one of six alphabet characters with a two-digit number as indicated by a key, and to reproduce the correct letter in each blank according to a number printed above it. The time allowed was one and one-half minutes, and there was a possibility of 90 possible responses. The students were ranked on a High, High Average, Low Average, and Low scale of ability. She used a variety of treatments on her subjects with the treatments set as follows: Individual Goal Setting with Reward; Individual Goal Setting without Reward; Homogenous Group Competition with Reward; Homogeneous Group Competition without Reward; Heterogeneous Group Competition with Reward; and Heterogeneous Group Competition without Reward.

She discovered that "Homogeneous Competition with Reward" is the most effective treatment in the classroom situation. She also concluded that the use of reward in a competitive setting has different effects depending on the homo-heterogeneity of the competitors. That is, she found that the subjects in homogeneous groups responded better than the students grouped heterogeneously in the condition where reward was present. The reverse was true in the non-reward condition.

Morton Deutsch's study on the effects of cooperation and competition upon the group process is a major contribution to the field

(1949). His subjects included psychology students that were grouped according to their competitive or cooperative nature. Group members either competed among themselves for grades, worked cooperatively for grades, or worked independently of the others for the grade. Each group was observed during the three hour period each week for six weeks. Deutsch concluded from his study that generally, "greater group or organizational productivity will result when the members or sub-units are cooperative rather than competitive in their inter-relationships" (p. 230).

Marvin Shaw (1958) examined some motivational factors in cooperation and competition with his study of college students. He conducted experiments in which individuals had the task of keeping a cursor aligned with a rotating target. Three experimental conditions were set up such that the subject perceived himself to be in a cooperative, a competitive, or an individualized position. His findings in this study showed that when students believed themselves to be in a cooperative situation as opposed to a competitive one, their performance on the task at hand was better. Their individualized performance was somewhere between the two.

Shaw (1958) ran a similar experiment but changed the type of task from a perceptual motor task to a memory reasoning task. Both experiments supported the conclusion, "that competitive situations arouse stronger motivation to achieve than do cooperative situations,

but this stronger motivation results in poorer performance as measured by accuracy scores" (p. 167).

Researchers Stewart, Zelman, and Mithaug (1971) chose to study the rate of task completion when contingent upon reward and non-reward situations. Their study included 11-14 year old boys in a housing project in Seattle, Washington. They found that the task rate for a group of three increases when the payoff is contingent upon that group surpassing another group's task rate. If a reward was to be given for the lowest group outcome on a task, then the cooperative rate decreased. When the reward was contingent on the highest outcome, the rate increased.

The six studies just reviewed illustrate the diversity of findings concerning the question of whether competition or cooperation is the best motivator for learning. Johnson and Johnson (1974) after their own review of that literature and their own research concluded that, "Cooperation, competition, and individualized goal structures are all effective under certain conditions, and that education should use all three depending upon the specific instructional objectives and purposes" (p. 4). The authors go on to list from their findings the conditions under which competition, cooperation, and individualization should be used in an educational setting. This researcher will not list those conditions here, but will briefly summarize the authors' views.

Conditions for competition exist when the instructional goals are review, drill, or quantity on a task with no one else's help. The activities should be relatively unimportant and low anxiety producing. No set criteria for evaluation should be used; and only when each participant has a chance to win and to enjoy the competition, should competition take place.

Individualized learning can be used when there are specific skills or facts to be learned, when programmed materials are available for such learning, and when the teacher has enough time to work with an individual student.

Cooperative conditions, say the authors, should be the most frequent way for teachers to structure learning. Conditions for cooperation include the circumstances where problem solving, divergent thinking, creativity, quality performance, positive interaction among students, wide range of cognitive outcomes, social development, interpersonal skills, positive relations, and reduction of conflict, are all highly important learning goals.

In effect, Johnson and Johnson feel that all three learning structures should be used, with the cooperative situation being used the most often.

Effects of Competition and Cooperation on Behavior

After investigating competition and cooperation as motivators for learning, it would be logical to look at the effects these motivators have on the behavior of individuals and groups in the learning process.

Dennis Mithaug (1973) in his development of procedures for identifying competitive behavior in children found that when a 15 year old male and female compete, they strive to surpass each other's task performance and in the process compare their own task achievements with others. This comparison by these youth took place at a greater rate when the outcome of their own task achievements was contingent upon a reward. This observation indicated to Mithaug that competition was taking place.

As the subjects compare and thus compete with each other in the performance of the task, it may be assumed that each will try harder to surpass the other's performance. Shaw (1958) found that if competitive students try too hard, their performance may suffer. From his experiment he concluded that competition and stress were related and that stress produces a decrement in performance as measured by accuracy scores. In essence, he concluded that competition leads to an increased effort but poorer performance by the individual. This poor performance leads to frustration which in

turn may cause an inappropriate response which leads to a less than satisfactory performance.

Shaw found that in a competitive situation and an individualized situation, blame could not be placed on others for one's performance of a task. This meant that there was a possible threat to the person's self-esteem. Even though this threat existed, he found that the college students he tested actually preferred a competitive situation to a cooperative and an individualized one. In short, the subjects enjoyed the competition.

Johnson and Ahlgren (1976) found that cooperativeness is related positively to viewing one's image. Competitiveness begins to have a positive relationship with these attitudes in junior high school and by high school, the two are related very strongly. They also discovered that when cooperation and competition are combined, they have mutually enhancing effects with respect to personal worth: the more cooperative the student is, the stronger his competitiveness is related to his personal worth and vice versa. Similarly, it can be said that students with strong feelings of personal worth are likely to have positive attitudes toward both cooperation and competition. It can be inferred then that as long as a student has "strong feelings of personal worth," participation in competitive and cooperative experiences should have no strong negative effect.

If, however, an individual has doubts about his self-esteem, then competition and possibly cooperation could have detrimental effects.

How a person views himself and in general, the type of person he is, can be of importance to the effects of competition and cooperation. Ryan and Lakie (1965) found that,

Under neutral or non-competitive conditions the persons in whom the motive to avoid failure is stronger than the motive to succeed, will perform better than the persons with a higher motive to succeed. Conversely, the persons with a higher motive to succeed performed better than the persons whose primary motive is to avoid failure when a competitive situation was at hand (p. 343).

Thus, one's personality and way of viewing a situation do make a difference concerning the effect that a cooperative or competitive situation have on an individual.

Attitudinal Studies on Competition and Cooperation

The area of competition and cooperation is most often studied in an experimental setting by an independent outside observer who attempts to support various hypotheses about the results of competitive and cooperative behavior. Another way to investigate modes of learning is to gather information from the participants themselves. A. Wayne Hothem in a graduate thesis (1968) studied the attitudes toward competition in the 4-H program in Carroll County, Ohio. He sought input from 4-H club members, the parents of 4-H members, and the 4-H leaders. Using an attitudinal scale validated by a control

group, he measured the attitudes of a random sample of 34% of the 4-H members, 31% of the parents, and 33% of the 4-H leaders.

Hothem found that girls showed a stronger orientation toward competition than boy 4-H members. His findings also suggested that the parents were more competitively oriented than the members, and that the more tenured leaders were more competitive than the less tenured. Hothem also noted that older 4-H members indicated a stronger desire for competition than did younger members. All of the groups indicated that age abilities should be considered with regard to competitive activities, with the assumption being made that older youth react better to competition than do younger children.

Johnson and Ahlgren (1976) conducted a similar attitudinal study of all students from grades 2 through 12 in a midwestern school district. Correlation analysis of relationships between scales measuring attitudes toward competition and cooperation, and in scales measuring attitudes towards variables such as motivation to learn, self worth, attitudes towards school personnel, involvement in learning, other students, and restraints on behavior were run on the data.

Interestingly enough, the investigators found that the correlation between competition and cooperation was low at all grade levels. This suggests that the two are not opposite ends of a single dimension, but are each independent dimensions. The internal consistency

reliability for competitiveness increased with grade level which would support Hothem's finding (1968) that youth become more competitive as they grow older.

Johnson and Ahlgren (1976) found that student cooperativeness is positively correlated with the liking of school personnel, believing that teachers care about one's learning. Only in high school is competitiveness related to one's learning, again supporting the notion that the older youth are more competitive than the younger youth. Cooperativeness was positively related to an intrinsic motivation to learn (such as work being fun and interesting) while competitiveness was related positively to intrinsic rewards only in high school. In general, competitiveness was related to extrinsic motivators such as pleasing parents and teachers. This study also demonstrates that attitudes toward fellow cooperators are more positive than are attitudes toward fellow competitors. Self attitudes are also remarkably better in a cooperative situation than in a competitive one.

Probably the most important finding by Johnson and Ahlgren (1976) is that the attitudinal study corroborates previous findings that cooperation may result in more consistently positive outcomes than does competition. Most important, though, this study produced no evidence that competition is correlated to negative attitudes towards any of the variables looked at. The authors go on to say that,

The fact that competition is based on a cooperative foundation of rules and procedures and the findings that cooperativeness is more consistently related to desirable student attitudes implies that cooperative learning experiences in the lower school grades can enhance the development of the mature competitiveness (p. 102).

Summary

Most studies conducted in the area of competition and cooperation are small and experimental in nature. The literature on competition and cooperation as motivators of learning is not in a state of agreement. Some studies showed competition aiding in the learning process, particularly for high school youth, while other research indicates that cooperation provides the best atmosphere for learning to take place. Other investigators contend that cooperation and competition should not even be compared because they are two totally independent entities. From the research reviewed it seems safe to conclude that some circumstances are more conducive to a competitive learning situation while other instances are more productive in a cooperative setting.

Researchers seemed to agree that competition can have an effect on the self-esteem of an individual but they were not exactly sure what type or how much of an effect. Oftentimes, individuals will try too hard as they compete and this will be detrimental to their performance and thus cause frustration. This frustration may be

more difficult for a younger child to cope with than an older youth.

Since studies have shown that youth do become more competitive as they get older, many feel that competition may have a more negative effect on younger children. By participating in cooperative learning situations as a child, a youngster has the potential to develop more positive attitudes that will help him to compete in a mature way as he gets older.

Chapter 3

Procedures

The problem of this study was to assess the feelings of 4-H members toward several facets of their 4-H experience in the Gallatin County 4-H Program and to determine the correlations between their attitudes toward competition and cooperation and their attitudes toward extrinsic motivation, intrinsic motivation, personal worth, self-expression, independence, need for direction, judging, general 4-H interest, and 4-H events. Essentially, the purpose of this study was two-fold: (a) to assess how different age levels of 4-H members feel about several aspects of the 4-H program in Gallatin County, (b) with the data collected, run correlation analyses between clusters of questions and examine how these clusters correlate with 4-H members' attitudes toward competition and cooperation as the terms are used in relation to the 4-H program in Gallatin County.

This chapter will provide a detailed description as to how this study will be conducted. Included in this chapter will be the population description and sampling procedure, the treatment used, a description of the methods used for establishing validity and reliability for the survey instrument, the method of organizing and evaluating the data, statistical hypotheses tested, the methods and statistics used for analyzing the data, and the precautions taken for accuracy.

Population Description and Sampling Procedures

The population for this study was all of the 4-H members present in either their April or May 4-H Club meeting. These members are sub-grouped in a total of 22 different 4-H clubs, which are organized in a variety of ways. Geographical location, age level, sex, and project selection all contribute to the way a particular 4-H Club is structured. Because of this diverse interest and heterogeneity within the 4-H program, the attitude assessment instrument was administered to 4-H'ers in all but one 4-H Club.

Treatment

All 4-H members present in their April or May 4-H meeting were asked to complete a 44 item attitude assessment instrument. The instrument was developed by the researcher and its design is based on the Minnesota School Affect Assessment Instrument which was developed at the University of Minnesota for use with school age youth in grades 4 through 12. The researcher has substituted words where appropriate in the test statements in order to make them applicable to the Gallatin County 4-H Program. Many test statements were totally deleted from the Minnesota School Assessment Instrument in order to eliminate data not applicable to this study.

The instrument used in this study is of two parts. Part I consists of 16 items each of which is ranked on a five point scale

of importance and unimportance. After the data was collected, these items were grouped into three broad categories of: (a) General Interest, (b) Self-expression, (c) 4-H Events. Part II of the instrument consists of 25 statements that the respondents marked on a four point true-false scale for each item. These items, after the data were collected, were grouped in the following clusters:

(a) Competition, (b) Cooperation, (c) Independence, (d) Extrinsic Motivation, (e) Intrinsic Motivation, (f) Personal Worth, (g) Judging Basis, (h) Need for Direction.

Method of Collecting Data

The 4-H clubs in Gallatin County meet on a monthly basis. A cover letter, the attitude assessment instrument, detailed instructions for administering the instrument, and a self-addressed manila envelope for returning the completed tests back to the researcher were mailed in late March to each Adult 4-H Volunteer Leader for the 22 clubs. The cover letter was designed by the researcher and it was signed by the 4-H Extension Agent. Three days after mailing, the researcher contacted each 4-H Leader by telephone and clarified any questions or problems that the 4-H Leaders had with the understanding and administering of the instrument. The 4-H Adult Leader then administered the survey to the members in the club during the monthly 4-H meeting.

The set of standardized instructions included in the survey materials helped to assure that all 4-H members were able to receive the same instructions. The leader also read each question to the members as they took the survey in order to help make sure that each 4-H member understood each test statement. After the 4-H Club members completed the survey, the 4-H Leader returned the completed instruments in the stamped, self-addressed envelope back to the researcher.

Reliability. A representative sample of 4-H members in the Gallatin County 4-H Program as determined by the Gallatin County 4-H Extension Agent and the researcher was used to determine reliability coefficients for the test items and test clusters. The test was administered twice to each sample group member over a one month period (April and May). The sample group was selected on the basis of the ages of the participants and the general 4-H interests of the members as they relate to the entire population.

The Pearson correlation coefficients are used to measure the reliability for the clusters of questionnaire items per age group. (See Appendix B.) The researcher recognizes that there is a low number of respondents for each age level who participated in the test, re-test. Those scores that are combined to form a reliability score for the total group for each cluster is a more accurate score. The total n of 25 for the reliability sample is low, however.

For all cluster scales except for the cooperation scale there is a high reliability score. With a coefficient of .29, the cooperation reliability score is not very high. Over a one month period there seems to be a strong correlation in answers for the clusters of items.

Validity. The validity of the instrument was obtained on the basis of face and content validity evaluation as determined by a 4-H Adult Volunteer Leader, the three Gallatin County Extension Agents, a Montana State 4-H Youth Specialist, and a Montana State Human Development Specialist. These persons were asked to subjectively evaluate each test item and the test clusters on the basis of clarity, readability, understanding, relevance, content, and structure as they relate to the 4-H population age levels of 9 years of age through 19 years of age.

Method of Organizing the Data

In order to reduce the volume of the data interpreted and to evaluate the data in relationship to age levels within the 4-H program, the data for each item on the instrument and for each cluster of items were grouped according to the age of the respondents. The groupings were made up of: 10 year olds and under; 11 and 12 year olds; 13 and 14 year olds; 15 and 16 year olds; and 17, 18, and 19 year olds.

For selected items and for each cluster of items, tables were organized to convey how many 4-H members in each age group responded to each question, the percentage of responses per age level for each position on the five and four point scales, and mean point response for each age level per item.

For each cluster of test items and for selected statements from each cluster, a graph is presented that conveys the mean ranking of the responses from each age level (Figures 1-10). This enables the researcher to evaluate trends in age levels regarding the point ranking for the individual statements and the clusters.

Correlation analyses were run on the clusters of statements. The correlation coefficients computed for these clusters are displayed in Tables 11 through 20 in order to convey the data in a convenient form.

Statistical Hypotheses

Although a large part of this study is descriptive in nature, the following statistical hypotheses are formulated:

H_0 : There is no correlation between the attitudes of 4-H members toward competition and the attitudes of 4-H members toward cooperation.

- H_1 : There is a correlation between the attitudes of 4-H members toward competition and the attitudes of 4-H members toward cooperation.
- H_0 : There is no correlation between the attitudes of 4-H members toward competition and the attitudes of 4-H members toward:
(a) Intrinsic Motivation, (b) Extrinsic Motivation, (c) Independence, (d) Self-expression, (e) Need for Direction, (f) Judging Basis, (g) 4-H Events, (h) Personal Worth, (i) General 4-H Interest.
- H_1 : There is a positive correlation between the attitudes of 4-H members toward competition and the attitudes of 4-H members toward: (a) Intrinsic Motivation, (b) Extrinsic Motivation, (c) Independence, (d) Self-expression, (e) Need for Direction, (f) Judging Basis, (g) 4-H Events; and a negative correlation toward: (h) Personal Worth, (i) General 4-H Interest.
- H_0 : There is no correlation between the attitudes of 4-H members toward cooperation and the attitudes of 4-H members toward:
(a) Intrinsic Motivation, (b) Extrinsic Motivation, (c) Self-expression, (d) Personal Worth, (e) Need for Direction, (f) Judging Basis, (g) General 4-H Interest, (h) 4-H Events, (i) Independence.
- H_1 : There is a positive correlation between the attitudes of 4-H members toward cooperation and 4-H members' attitudes toward:

(a) Intrinsic Motivation, (b) Extrinsic Motivation, (c) Self-expression, (d) Personal Worth, (e) Need for Direction, (f) Judging Basis, (g) General 4-H Interest, (h) 4-H Events; and a negative correlation toward (i) Independence.

Analysis of Data

The Pearson product-moment correlation coefficient was used to determine if there are positive, negative, or no correlations between the clusters of test statements that are discussed in the hypotheses as stated. The test of significance for the correlation analyses was a two-tailed test at the .01 level of significance for the correlation analysis of the competition-cooperation clusters, and a one-tailed test at the .01 level of significance for the positive and negative correlation analyses between the competition cluster and the previous mentioned clusters, and between the cooperative cluster and the previous mentioned clusters. The researcher wishes to guard against Type II errors.

A Type II error occurs when the researcher accepts the null hypothesis (H_0) as true, when in reality it is false. Thinking there is no correlation between attitudes toward certain subject areas when there is will be an error of greater consequence than thinking there is a correlation in the attitudes when there is not. The researcher feels that the chances for zero correlations are

very remote and thus chooses a level of significance of .01 to further guard against a Type II error.

Also, percentages are used to tabulate the data for each possible response for each test item. This enabled the researcher to compare the responses for each statement between age levels. The percentages are displayed in tables.

Precautions Taken for Accuracy

Computer programming was utilized to derive the correlation coefficients for the cluster of items in the study and to compute the analysis of all of the data that is appropriate to this study.

Summary

The population of 4-H members enrolled in the Gallatin County 4-H Program was administered an attitude assessment instrument in their monthly 4-H meeting by their 4-H Adult Volunteer Leader. The instrument is based on the Minnesota School Affect Assessment and is designed to measure the attitudes of 4-H members toward selected aspects of their 4-H experience.

Mean scores were tabulated for selected items and for clusters of items on the test. The scores were then grouped by age levels and graphed in order to make comparisons and examine trends in responses for each age level. A percent score was tabulated for each possible score for each test item and placed in a table and

examined for differences in response per age level. The competition and cooperation clusters were correlated with the other test item clusters using the Pearson product-moment correlation coefficient. The hypotheses as stated for the correlations were tested on the .01 significance level.

A reliability coefficient was obtained on the clusters of items from a similar sample group drawn from the Gallatin County 4-H population. The questionnaire was administered twice over a one month period to this sample group. Face and content validity for the instrument were determined by a panel of six persons who have been and are presently involved in the 4-H program in some capacity. A computer was used to tabulate the statistical information relevant to the study.

Chapter 4

Interpretation of Data

The purpose of this study was to determine how 4-H members in the Gallatin County 4-H Program feel about different aspects of their 4-H experience and to discover what relationships exist between 4-H members' attitudes toward competition and cooperation, and their attitudes toward independence, extrinsic motivation, intrinsic motivation, personal worth, judging basis, need for direction, general 4-H interest, self-expression, and 4-H events.

The general questions that are to be answered and the hypotheses that have been developed are discussed. The results of the data collected are placed in tables and graphs, and each appropriate survey item is elaborated upon.

The correlation analyses are presented in tables and the results are interpreted and discussed.

Analysis of Results--Part I

The 4-H Attitude Assessment Instrument was administered to 20 4-H clubs in their April 4-H meeting and to one 4-H club in its May 4-H club meeting. One 4-H club (The Pass Creek 4-H Club) chose not to participate in the survey. A total of 309 questionnaires were administered by 4-H Adult Leaders in their respective 4-H clubs. Nine questionnaires were not used because of insufficient information or error in recording by a 4-H member. A total of 300 respondents

to the attitude assessment were used in the final analysis. By age group there were 74 respondents who were 10 years old or younger, 81 11 and 12 year olds, 74 13 and 14 year olds, 53 15 and 16 year olds, and 18 respondents who were seventeen years old and older.

Because of the nature of the instrument, several but not all of the individual items are appropriate to the program planning needs of the Gallatin County Extension Agents and the 4-H Adult Volunteer leaders. Many items were included in the instrument in order to form composite cluster subject areas, and therefore do not lend themselves to analysis as individual items.

For Figures 1 through 9 the responses are on a scale of 1 to 5 with response number one meaning very unimportant and response number five meaning very important.

Since a purpose of this assessment is for it to be used in program planning for 4-H age groups, it is important to look at trends over age levels in the analysis of the information. Also, the totals can be of help in giving the 4-H educational program planner some knowledge as to how the 4-H members feel about different aspects of the 4-H program. Comparison among items can also be of some help. For example, the judging contest and the demonstration items may want to be compared.

The researcher recognizes that many different factors can influence the 4-H members' responses to this instrument. The results

in the next 10 figures should be seen only as symptoms of how the Gallatin County 4-H members are feeling about the various parts of their 4-H experience. The researcher recognizes that a mean or average value is not truly indicative of how 4-H members feel. An average of 3.0 for example could mean that most of the 4-H members marked a 3 for that item or it could mean that equal numbers of 4-H members marked it very low (1) and very high (5). Therefore, the percentage of responses for each level of response in each item as seen in the tables should be taken into consideration.

What follows is the graphic display of the responses to the 10 selected questionnaire items that are most appropriate to the informational needs of 4-H educational program planners.

For the item "The 4-H Program" as seen in Table 1 and Figure 1, of the 74 10 year olds and under who responded to the item, 86% felt that the 4-H program was very important, 12% felt that the 4-H program was sort of important, and 1% felt that the 4-H program in Gallatin County was very unimportant. The mean point response for this age group was 4.85. Similarly, in the last column of the table, there were a total of 298 responses with two responses missing for the first item. Zero percent of the total population felt that the 4-H program was very unimportant, 1% felt that the 4-H program was sort of important, 5% saw the 4-H program as being neither important or unimportant, 18% felt the 4-H program was sort of important, and

Table 1

The 4-H Program

		Age					
		10&under	11&12	13&14	15&16	17&over	Total
Included		74	81	73	52	18	298
Missing		0	0	1	1	0	2
	1	1	0	0	2	0	0
Percent	2	0	2	1	0	0	1
Response	3	0	5	4	12	11	5
	4	12	25	21	17	6	18
	5	86	68	74	69	83	75
Means		4.85	4.58	4.67	4.52	4.72	4.67

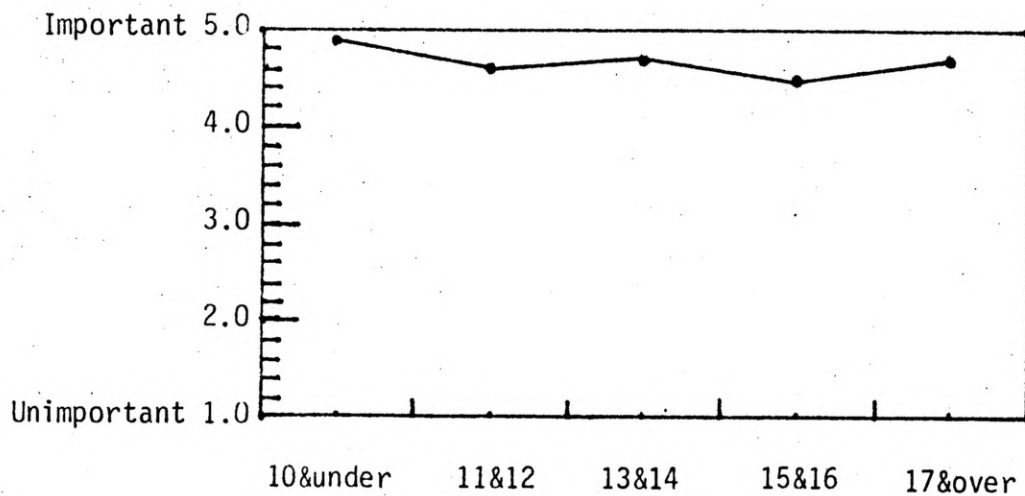


Figure 1. The 4-H Program.

75% felt that the 4-H program was very important. The total mean response for the population on the item concerning the 4-H program was 4.67.

In Figure 1 concerning the 4-H program in general, it can be generalized that all age levels of 4-H members attach a great deal of importance to the 4-H program, with there being very little difference between each age group. The data from the accompanying table supports this interpretation as most of the scores do fall in the four and five point response areas.

Figure 2 displays graphically that the 4-H Demonstration Contest in general is not valued as being as important as the overall 4-H program itself (see Figure 1). There appears to be a total population mean point response of 3.54 level of importance (see Table 2). The 15 and 16 year olds' attitudes about the demonstration contest dip below average scores for the other age groups. A possible explanation for this pattern of response could be that the 8-14 year olds are actively participating in the demonstration contest while the 15 and 16 year olds have competed through the years and at this point in their 4-H experience, do not place as much value on the contest as the younger members. At 17 years of age, enrollment in the 4-H program drops off considerably. For those who remain enrolled, they in all probability, look back and see the value that the demonstration program area has had for them, and thus their

Table 2

The Demonstration Contest

		Age					
		10&under	11&12	13&14	15&16	17&over	Total
Included		74	81	72	52	18	297
Missing		0	0	2	1	0	3
	1	14	11	13	8	11	11
Percent	2	3	10	11	12	6	8
Response	3	35	20	18	40	17	27
	4	15	27	21	23	33	22
	5	34	32	38	17	33	31
Means		3.53	3.59	3.60	3.31	3.72	3.54

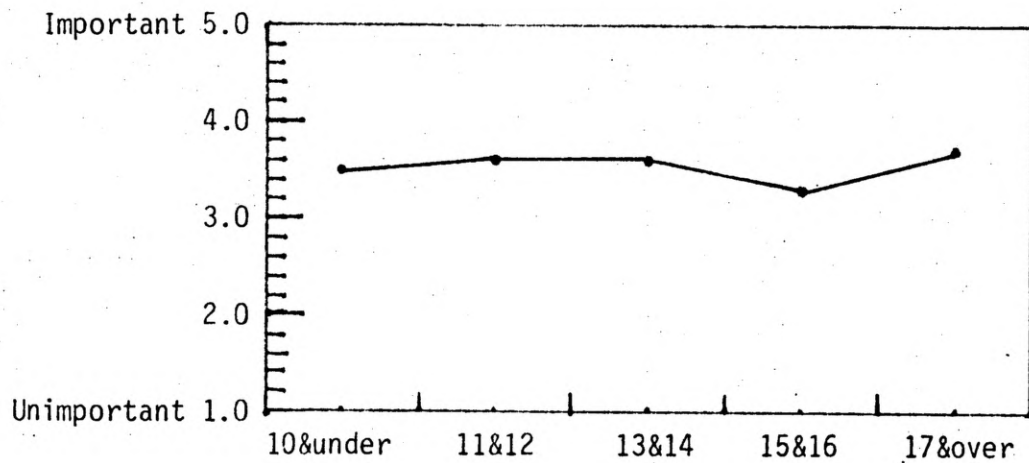


Figure 2. The Demonstration Contest.

point level of responses rises above the 15 and 16 year olds.

Again, the data can only suggest attitudes within the 4-H program in Gallatin County. The greater the discrepancy in scores for each age group, however, the more significant the information becomes.

In Figure 3, a downward trend appears by age group in the level of importance placed on 4-H Record Books. The 4-H members in the 10 years old and younger age group place the greatest value on 4-H Record Books with a mean point response of 4.5 (see Table 3). The graph reaches its low point in the 15 and 16 year old group with a mean response of 3.77 and then it rises to 4.17 with the 17 year olds and older. As a 4-H education planner, one may want to consider what the role of 4-H Record Books is in 4-H as the 4-H members get older. Again, the curve rises with the 17 year olds and older who may attach a higher value to records as they near the end of their 4-H career and see the value that 4-H records have had for them in the past.

All of the 4-H members place a high level of importance in the 4-H Fair. This item received the highest point response of all the items in the survey instrument. The slight dip in the mean point for the 10 year olds and under can probably be attributed to their limited experience with the Gallatin County 4-H Fair. In general

Table 3

4-H Record Books

	Age					Total
	10&under	11&12	13&14	15&16	17&over	
Included	74	81	73	53	18	299
Missing	0	0	1	0	0	1
1	4	10	8	4	0	6
2	1	1	4	13	6	4
Percent 3	7	7	18	21	22	13
Response 4	16	16	18	26	17	18
5	72	65	52	36	56	58
Means	4.50	4.26	4.01	3.77	4.22	4.17

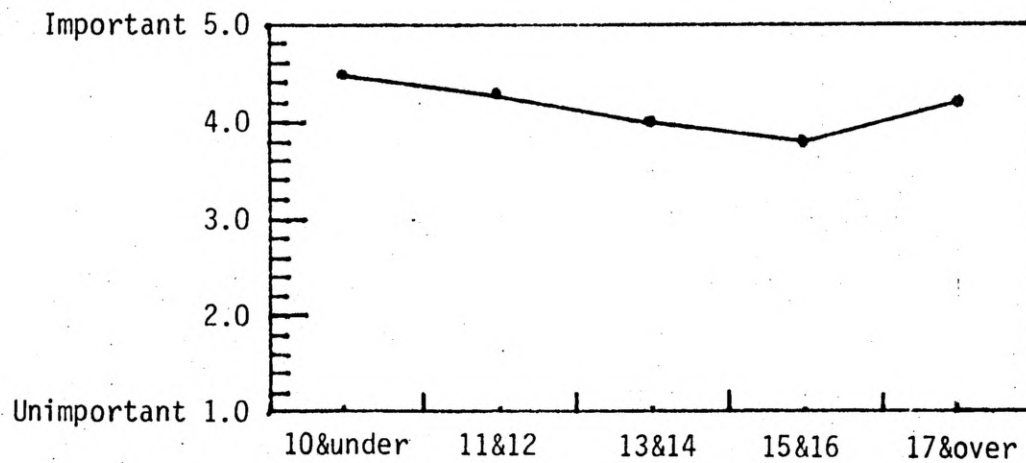


Figure 3. 4-H Record Books.

though, the 4-H Fair can be seen as an experience that is valued very highly by the 4-H members in all age groups (Figure 4 and Table 4).

Generally, the response concerning the level of importance placed on 4-H Camp is the expected response. Those who are looking forward to 4-H Camp for the first time and who have already been for the first time place the highest level of importance on this 4-H activity. The trend then decreases and reaches the low point in the curve with the 15 and 16 year olds, and then the curve rises with the 17 year olds and older. Those who have the opportunity to participate in 4-H Camp at this point in their 4-H career value the experience the most (Figure 5 and Table 5).

The trends in attitudes of being in 4-H judging contests is a fairly stable one. Again, there is a fair amount of importance attached to judging contests but not a strong level of importance. Generally speaking, the 4-H members see this aspect of the 4-H program as being "sort of important." The greatest variety in responses occurred with the 10 year olds and under, while the other age groups basically answered this item with a response of 3 or higher. The total mean point response for the population is 3.68 (see Figure 6 and Table 6).

A 4-H Judging Contest is an activity that is participated in by only a small percentage of the total 4-H population. Judging

Table 4
4-H Fair

	Age					Total
	10&under	11&12	13&14	15&16	17&over	
Included	73	81	74	53	18	299
Missing	1	0	0	0	0	1
1	3	0	1	0	0	1
Percent 2	3	0	0	0	0	1
Response 3	8	1	4	2	0	4
4	8	10	8	21	22	12
5	78	89	86	75	78	83
Means	4.56	4.88	4.78	4.72	4.78	4.74

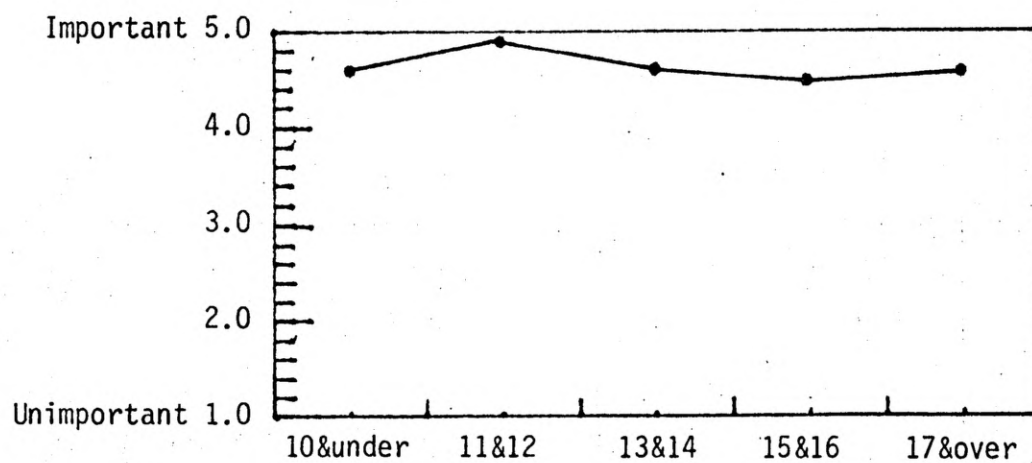


Figure 4. 4-H Fair.

Table 5
4-H Camp

		Age					
		10&under	11&12	13&14	15&16	17&over	Total
Included		74	79	73	52	18	296
Missing		0	2	1	1	0	4
	1	8	6	7	17	0	8
Percent	2	1	4	11	5	11	7
Response	3	12	23	25	17	11	19
	4	15	20	18	27	33	20
	5	64	47	40	23	44	45
Means		4.24	3.97	3.73	3.23	4.11	3.86

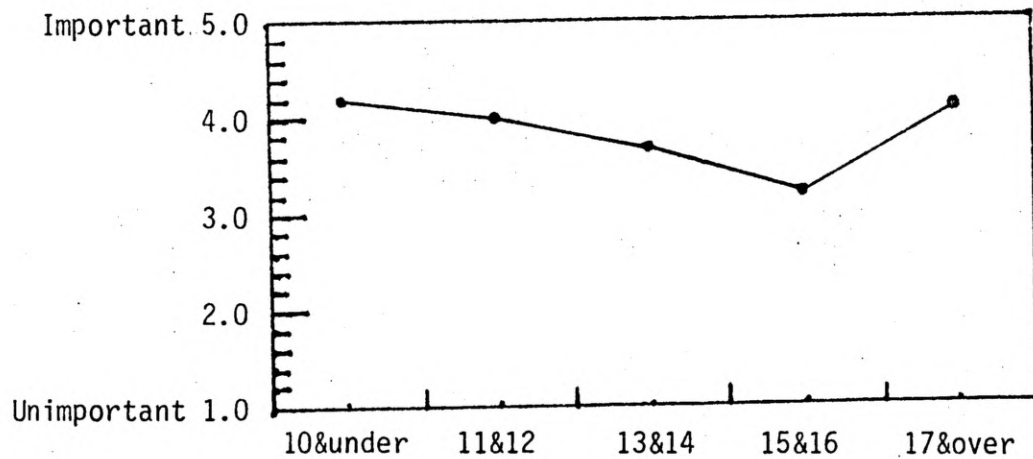


Figure 5. 4-H Camp.

Table 6

Being in Judging Contests

	Age					Total
	10&under	11&12	13&14	15&16	17&over	
Included	72	78	73	53	18	294
Missing	2	3	1	0	0	6
1	14	12	8	11	6	11
Percent 2	8	4	8	9	6	7
Response 3	24	19	21	26	22	22
4	14	22	26	26	33	22
5	40	44	37	26	33	37
Means	3.58	3.82	3.75	3.47	3.83	3.68

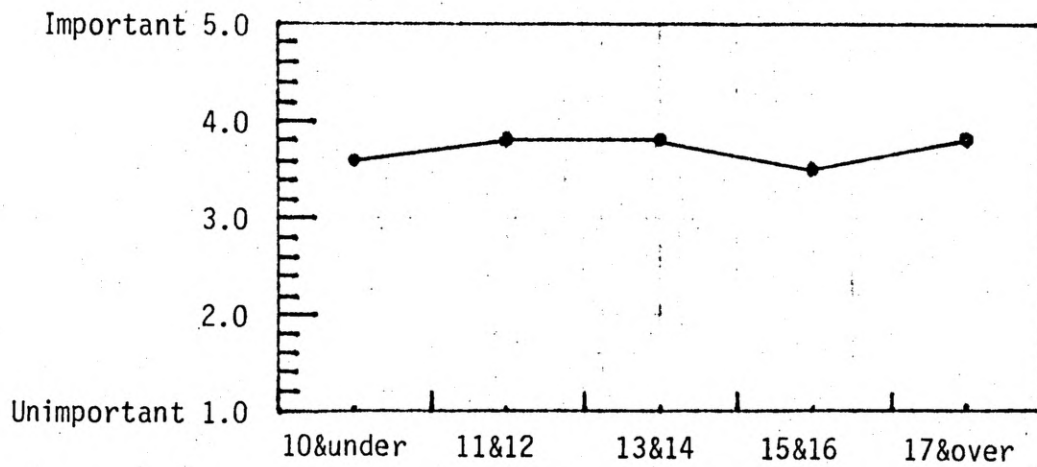


Figure 6. Being in Judging Contests.

contests are, however, used as a tool in the education of the participants, and it appears that the 4-H'ers see the contests as such.

Ribbons for accomplishments in the 4-H program are used as incentives and rewards for participating 4-H members. There is a relatively high level of importance placed on 4-H blue ribbons with the overall mean point response being 4.23 (Table 7). However, there is a definite downward trend in the level of importance placed on blue ribbons as the 4-H members get older. This trend may indicate that 4-H members, as they get older, are not as concerned about achieving a tangible reward in the form of a blue ribbon for their 4-H work. The younger 4-H'ers definitely place a higher value on blue ribbons than the older 4-H youth (Figure 7).

The distribution of answers per age group for the item dealing with the receiving of ribbons in 4-H Fairs and competitive events (Figure 8 and Table 8) reveals a similar pattern to the responses recorded concerning the getting of blue ribbons. There is a definite downward trend in response level as the 4-H members get older. The responses for both of these items should raise questions about the use of ribbons as incentives for all age groups.

4-H prize money is an important aspect of the awards program in several 4-H activities. The 4-H Fair and 4-H stock shows utilize monetary rewards as a means of rewarding 4-H members for achievement. As with the level of importance placed on ribbons, there is a

Table 7

Getting Blue Ribbons on my 4-H Work

		Age					
		10&under	11&12	13&14	15&16	17&over	Total
Included		74	79	73	53	18	297
Missing		0	2	1	0	0	3
	1	3	9	8	11	11	8
Percent	2	0	3	3	2	11	2
Response	3	8	6	15	17	6	11
	4	12	11	16	25	44	17
	5	77	71	58	45	28	62
Means		4.60	4.33	4.12	3.91	3.67	4.23

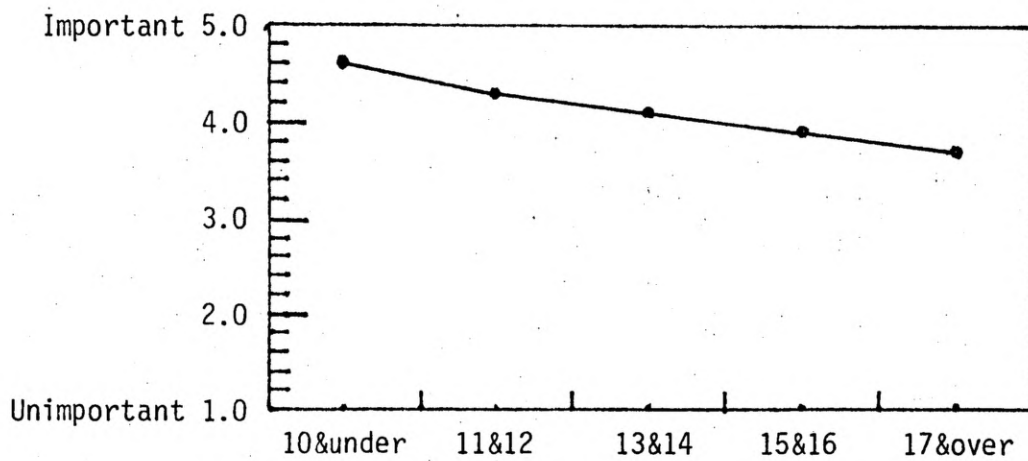


Figure 7. Getting Blue Ribbons on my 4-H Work.

Table 8

Getting Ribbons in 4-H Fairs and Competitive Events

		Age					
		10&under	11&12	13&14	15&16	17&over	Total
Included		74	79	73	53	18	297
Missing		0	2	1	0	0	3
	1	1	9	4	9	17	6
Percent	2	1	1	3	6	11	3
Response	3	15	10	14	11	6	12
	4	9	14	18	21	50	17
	5	73	66	62	53	17	61
Means		4.51	4.27	4.30	4.02	3.39	4.24

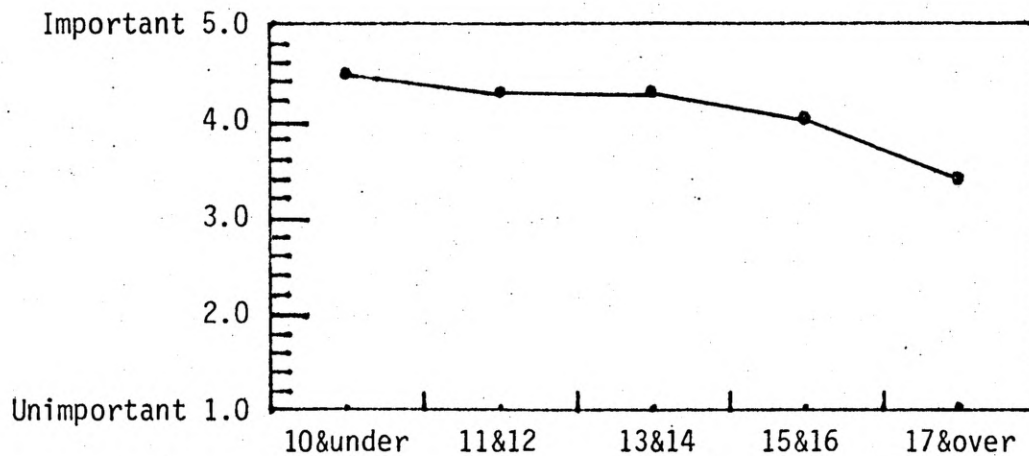


Figure 8. Getting Ribbons in 4-H Fairs and Competitive Events.

decreasing trend in the level of importance as the 4-H members get older. As seen in Table 9, the total mean point response for prize money was 3.90 which is slightly below the importance level placed on ribbons in general for recognition purposes. The whole use of incentives may want to be reconsidered by 4-H educators as it appears that ribbons and prize money are valued less as 4-H members do get older. However, there remains a relatively high level of importance placed on these incentives by all 4-H'ers (Figure 9).

The pattern of response for Figure 10 and Table 10 indicates that most of the 4-H members are not very confused when it comes to taking 4-H projects. As can be expected, the 17 year olds and older 4-H members seem to be the least confused and the 10 year olds and under are the most confused. No age group is very much confused. The 10 year olds and under did have the highest percentage of responses in point response number four, with 16%. In general this too is not surprising, for as one gains more experience in 4-H one can be expected to know more about what is going on and why he is taking a project.

Analysis of Results--Part II

Competition and cooperation are important factors within the educational structure of the 4-H program. Each plays a role in the educational activities in which 4-H members participate. Using

Table 9

4-H Prize Money

		Age					
		10&under	11&12	13&14	15&16	17&over	Total
Included		74	79	73	53	18	297
Missing		0	2	1	0	0	3
	1	3	14	14	11	17	11
Percent	2	4	5	4	9	6	5
Response	3	11	15	21	26	11	17
	4	16	14	11	19	39	16
	5	66	52	51	34	28	51
Means		4.39	3.85	3.81	3.55	3.56	3.90

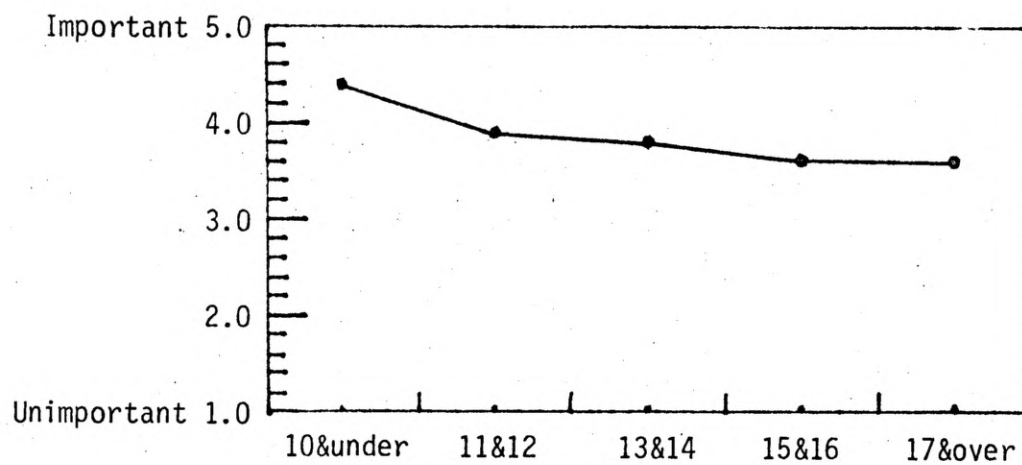


Figure 9. 4-H Prize Money.

Table 10

"I Get Confused Because I Don't Know
Why I'm Taking a Project"

		Age				
		10&under	11&12	13&14	15&16	17&over
Included		74	79	72	53	18
Missing		0	2	2	0	0
	1	65	67	76	60	78
Percent	2	12	10	8	21	17
Response	3	7	11	8	6	6
	4	16	11	7	13	0
Means		1.74	1.67	1.46	1.72	1.28

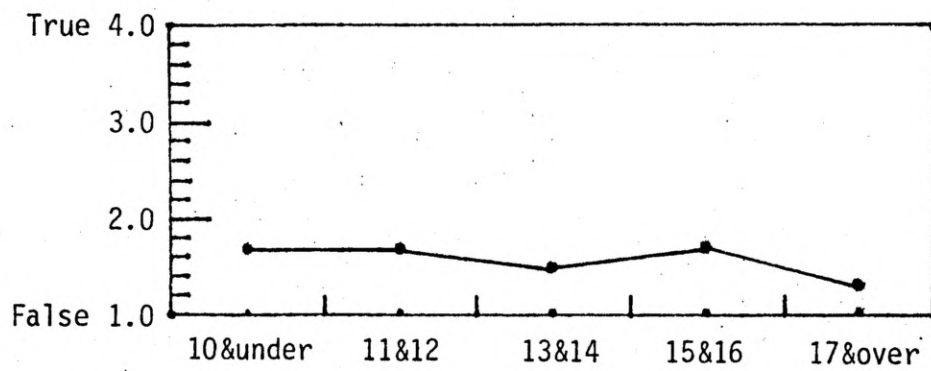


Figure 10. "I Get Confused Because I Don't Know Why I'm Taking a Project."

Pearson correlations, the researcher ran correlation analysis on the data collected from the Gallatin County 4-H population using the clustered subject areas that have already been mentioned. The following is a discussion of the results of the correlation analysis. All hypotheses will be accepted or rejected based on a significance level of .01 for the population as a whole. The .01 level of significance means that one would expect no more than one chance in a hundred that you would get a correlation of the size shown in the data analysis, due to chance alone.

Also, the correlations only show relationships. Cause and effect cannot be considered as a part of this study.

In Table 11, the Pearson correlations between attitudes toward cooperation and the attitudes toward competition are given for each age group and for the 4-H population as a whole. The significance level for the correlation appears at the end of the table. The correlations of attitudes for all age levels between cooperation and competition are low. Except for the 10 year olds and under, there is a slight negative correlation, with 11 and 12 year olds having the strongest negative correlation. Nowhere is there a significant relationship in attitudes between competition and cooperation attitudes. It would appear that there is slight negative correlation in attitudes between the two variables, but not enough of a relationship to accept the alternative hypothesis which postulates that there is a correlation

between the two. Therefore, the researcher must accept the H_0 (null) and conclude that there is no significant relationship between the attitudes of 4-H members toward cooperation and competition.

Table 11
Cooperation and Competition

	Age					Total	S
	10&under	11&12	13&14	15&16	17&over		
Correlation	.06	-.25	-.07	-.03	-.14	-.12	.05
n	74	81	74	53	18	300	

S = significance level

We often think of competition and cooperation as being at the opposite ends of a scale. If this were true, then a strong negative relationship might have resulted in the correlations of attitudes. However, this is not the case. Since there is only a slight negative relationship in attitudes, it would appear that attitudes toward competition and cooperation are not very much related at all, and if so, only in a small negative way.

It was hypothesized that there would be a positive correlation in attitudes between competition and independence, and that there would be a negative correlation in attitudes toward cooperation and independence. Except for the 10 year olds and under, there is a negative relationship between the attitudes toward cooperation and

independence for all the other age groups. There is a positive relationship in attitudes for all age groups between competitive and independent attitudes. Based on a significance level of .01, the researcher rejects the H_0 (null) hypothesis and concludes that there is a negative relationship between the attitudes of 4-H members toward cooperation and independence, and that there is a positive relationship between their attitudes toward competition and independence.

From Table 12 one can see that in either case there is not a very strong relationship. The correlations are low for both cooperation and competition as they relate to the attitudes toward independence. However, in both cases, they are generally either negative (cooperation) or positive (competition) for all age groups (10 year olds and under excepted). Logically, one would expect that cooperation does not lend itself to exerting one's independence. On the other hand, as one competes, one tends to utilize his independent nature, and thus, the positive relationship.

Table 12

Independence

	Age					Total	S
	10&under	11&12	13&14	15&16	17&over		
$r_{\text{Cooperation}}$	.09	-.18	-.25	-.08	-.69	-.15	.011
$r_{\text{Competition}}$	.07	.21	.23	.07	.31	.14	.013

 r Correlation coefficient

S = significance level

Extrinsic motivation deals with those external factors that motivate a 4-H member to do 4-H work (Table 13). Doing 4-H work to make 4-H Leaders happy, to make parents happy, and to be liked by other 4-H members are all involved with the concept of extrinsic motivation. It was hypothesized that there was a positive relationship between 4-H members' attitudes toward cooperation, competition, and extrinsic motivation. The correlations between cooperation and extrinsic motivation are all very low with three age groups showing a very small negative relationship. For the competition scale, the attitudes are consistently positive in their relationship to extrinsic motivation, except for the 17 year olds and older, who show a very slight negative correlation. From the data available, the researcher concludes that there is no significant relationship between the attitudes of 4-H members toward cooperation and their attitudes

toward extrinsic motivation. Also, the researcher concludes that there is a significant positive relationship between the attitudes of 4-H members toward competition and their attitudes toward extrinsic motivation.

Even though the relationship between attitudes toward competition and extrinsic motivation is not a very strong one, it would seem that there are certain implications that can be drawn from this information. The correlations clearly indicate that there is a positive relationship between being competitive and having attitudes such as "doing 4-H work to make parents and leaders happy," and "doing 4-H work to be liked by other 4-H members." This relationship brings up the question as to what the true reasons are for participating in competitive activities. Apparently, the "pleasing of others" is one of the motivating forces.

Table 13

Extrinsic Motivation

	Age						
	10&under	11&12	13&14	15&16	17&over	Total	S
r _{Cooperation}	-.02	.02	-.20	.19	-.02	.06	.293
r _{Competition}	.18	.23	.38	.39	-.04	.20	.001
r _{Correlation coefficient}					S = significance level		

The area of intrinsic motivation as it relates to this study deals with 4-H members being motivated to learn because of their own personal reasons. Participating and learning in 4-H activities because 4-H members like to learn in 4-H, because 4-H is fun, and because "learning interesting things is an enjoyable experience" are all tied to intrinsic motivation (Table 14).

It was hypothesized that for all 4-H members there is a positive relationship in attitudes between cooperation, competition and intrinsic motivation. The data clearly show that for all age levels of 4-H members there is a positive relationship between attitudes toward cooperation and attitudes toward intrinsic motivation. It would appear that there is a definite positive relationship between working with others and participating and learning in 4-H because of one's own personal motivations, as opposed to being influenced by others. 4-H members' reasons for working with others and reasons for participating in 4-H activities are positively related. Thus, the alternative (H_1) hypothesis which states that there is a positive relationship between attitudes toward cooperation and intrinsic motivation is accepted as true, and the null (H_0) hypothesis is rejected.

On the other hand, it was also postulated that attitudes toward competition and intrinsic motivation were also positively related. The data indicate, however, that there is a small negative

relationship. At the .01 level of significance, this would suggest a significant negative relationship, although the correlation for the entire group at $-.16$ is a small correlation. The negative relationship implies that as one becomes more competitive, then his level of intrinsic motivation decreases. This relationship is logically the opposite of the relationship between extrinsic motivation attitudes and competitive attitudes. Again, the question arises as to how much influence do external factors have on one's reasons for competing? Based on the information available, the researcher would have to conclude that there is a slight negative relationship between the attitudes of 4-H members toward competition and intrinsic motivation.

Table 14
Intrinsic Motivation

	Age					Total	S
	10&under	11&12	13&14	15&16	17&over		
$r_{\text{Cooperation}}$	.33	.59	.61	.42	.48	.52	.001
$r_{\text{Competition}}$	-.12	-.24	-.14	-.08	.02	-.16	.006

r Correlation coefficient

S = significance level

Personal worth as related to the 4-H members and to the survey instrument deals with how a 4-H member views his own importance in

relationship to his peers and 4-H leaders, and whether or not he feels good about himself and his 4-H experience. It was hypothesized that there is a positive relationship between attitudes toward cooperation and attitudes of personal worth. The results indicate that for all age levels there is a relatively strong correlation between these two variables. It would seem that cooperating and working together with others has a strong positive relationship to the good perceptions that 4-H members have about themselves (Table 15).

A hypothesis was also developed that postulated that there is a negative correlation in attitudes of 4-H members between competition and personal worth. The data indicate that there is a definite negative trend in the relationship between the two variables in all of the age groups except the 15 and 16 year olds. This trend suggests that positive attitudes toward competition are not associated with positive feelings of personal worth. In fact, the data point to a negative relationship. However, since the data do not reveal a relationship that is significant at the .01 level, the researcher must reject the alternative hypothesis (H_1) and accept the null (H_0) hypothesis. Thus, the conclusion is that there is no significant relationship between 4-H members' attitudes regarding competition and personal worth.

Table 15

Personal Worth

	Age					Total	S
	10&under	11&12	13&14	15&16	17&over		
$r_{\text{Cooperation}}$	.23	.65	.49	.28	.67	.44	.001
$r_{\text{Competition}}$	-.10	-.21	-.09	.02	-.29	-.12	.034

 r Correlation coefficient

S = significance level

The "Judging Basis" cluster of items deals with how much a 4-H member likes to be judged on his 4-H work. A composite score for this item was reached on the basis of responses in the areas of being judged on "how hard I work," "comparison to other 4-H members," and "on level of improvement." It was hypothesized that there is a positive correlation between attitudes toward cooperation, competition, and judging (Table 16).

Since many competitive 4-H activities are centered around the concept of judging and being judged, one would expect a high positive relationship between competitive attitudes and judging attitudes. The data indicate, though, that there is a higher, positive relationship between cooperation and judging than there is for competition and judging. There is an equally marked difference between the two variables for the 13 and 14 year olds.

One involved with the 4-H program may relate this information to "4-H Judging Contests" such as Livestock Judging, Soil Judging, or Poultry Judging. These are all team oriented (thus cooperative in nature) and it would appear that working with others and being judged is a more positive experience than merely competing and being judged.

Even though the correlation is not very high for both cooperation (.27) and competition (.15) as they relate to judging, they are both significant correlations at the .01 level of significance. The researcher thus accepts the hypothesis that there is a positive correlation in attitudes for 4-H members with regard to cooperation, competition, and judging. Thus, there is a small but significant positive relationship.

Table 16
Judging Basis

	Age					Total	S
	10&under	11&12	13&14	15&16	17&over		
$r_{\text{Cooperation}}$	.34	.08	.36	.39	.18	.27	.001
$r_{\text{Competition}}$	.23	.20	.03	.10	.36	.15	.011

r Correlation coefficient

S = significance level

One problem that confronts many 4-H members is their confusion about the purposes behind their own participation in many 4-H events

and activities. The "Need for Direction" grouping of items addresses itself to goals being set by 4-H Leaders for 4-H members, confusion by 4-H members concerning project selection, and confusion about what one is supposed to be learning in 4-H. It was postulated that as the need for guidance or direction increased, so would one's attitudes toward cooperating and working with others. The correlations are low for all age groups, with a very slight negative correlation occurring for the 13 and 14 year olds, and the 17 year olds and older. The .16 correlation score for the population is statistically significant at the .01 level, but clearly there is a very low positive relationship (Table 17).

It was also postulated that there is a positive correlation in attitudes by the 4-H members toward competition and need for direction. There appears to be a very slight positive relationship between the two, but the researcher concludes that there is not a significant relationship.

Table 17
Need for Direction

[illegible]

The area of "General 4-H Interest" includes a variety of topic areas such as the 4-H program in general, doing 4-H work on time, being liked by other 4-H members, being a good 4-H member, and several other such factors. Since cooperation involves working and getting along together with others, it was hypothesized that there is a positive relationship between the attitudes of 4-H members toward cooperation and their attitudes or interest in 4-H.

Being with or in a group and getting along within that peer group continues to be valued by most youth, and for many it is an important reason for getting involved in any youth organization. For all age groups there is a positive relationship in attitudes toward cooperation and 4-H interest. The 11 through 16 year olds show the highest correlation, and one may assume that this age group is probably the more "socially conscious" age group. The 10 year olds and younger are just getting started in 4-H and perhaps are socially a little immature. The 17 year olds and older have perhaps already established their own stable social relationships and do not rely on 4-H as heavily for the cooperativeness with others as their younger counterparts do. So, there definitely appears to be a positive correlation between attitudes toward cooperation and attitudes dealing with general 4-H interest (Table 18).

On the other hand, it was hypothesized that there is a negative correlation between the attitudes of 4-H members toward competition

and their attitudes dealing with general 4-H interest. The 13 through 16 year olds show a slight negative correlation. In general there appears to be no statistically significant relationship between the two variables.

Table 18
General 4-H Interest

	Age					Total	S
	10&under	11&12	13&14	15&16	17&over		
$r_{\text{Cooperation}}$	.12	.40	.40	.40	.16	.37	.001
$r_{\text{Competition}}$	-.08	-.22	.20	.07	-.25	-.07	.259
$r_{\text{Correlation coefficient}}$	S = significance level						

Being able to express oneself in front of large groups, small groups, and on a one-to-one level is an important skill for all people to have. The demonstration contest as a part of the 4-H educational program is a useful tool in the teaching of communication skills. Attitudes toward cooperating with others and attitudes toward communicating with others are consistently positively related for all age groups (see Table 19). For the 17 year olds and older particularly, the correlation is higher than the other age groups. There is a statistically significant relationship between 4-H members' attitudes of expressing themselves and cooperating with

others. Thus, the hypothesis as stated in Chapter 3 is accepted as true and null (H_0) is rejected.

It was also hypothesized that there is a positive correlation in attitudes toward competition and attitudes toward self-expression. For all age groups except the 17 year olds and older, there appears to be very little, if any, relationship between the two variables. However, for the 17 year olds and older 4-H youth, there is a relatively high negative relationship. Apparently, this age group may feel that competition is not a situation that is conducive to expressing oneself. In general, though, for the whole population there is no significant relationship between the two variables. Therefore, the alternative (H_1) hypothesis is rejected, and the null (H_0) hypothesis which states that there is no relationship is accepted as being true.

Table 19
Self-Expression

	Age					Total	S
	10&under	11&12	13&14	15&16	17&over		
$r_{\text{Cooperation}}$	.30	.30	.36	.22	.59	.30	.001
$r_{\text{Competition}}$	-.08	.09	-.04	.03	-.61	-.02	.698

r Correlation coefficient

S = significance level

The 4-H program in Gallatin County has several 4-H events that are placed on a relatively high level of importance by 4-H Leaders and Extension Agents. The events that make up this cluster score include the demonstration contest, 4-H record books, the 4-H Fair, 4-H Camp, judging contests, and 4-H prize money which is awarded at several 4-H events. 4-H Camp and the 4-H Fair are basically cooperative in nature, with competition built into both programs. The other events listed are essentially competitively structured (Table 20).

It was hypothesized that there is a positive relationship between attitudes toward competition, cooperation, and 4-H events. Interestingly, attitudes toward 4-H events are consistently positively correlated to attitudes toward cooperation for all age groups with the lowest correlation in the 11 and 12 year old age group. The hypothesis that states that there is a relationship between cooperative attitudes and 4-H events is accepted as true, and the null (H_0) hypothesis is rejected. If one looks at these 4-H events as being opportunities for 4-H members to be around and work cooperatively with other 4-H'ers (4-H Fair, Judging Contests, 4-H Camp), and as a chance to be recognized by their peers (demonstration contest, prize money), then this positive relationship can be understood.

On the other side of the issue, since several of these events are competitive in nature, it was hypothesized that there would also be a positive correlation between attitudes toward competition and

attitudes toward 4-H events. Generally, for each age level and for the population as a whole, there is little or no relationship. Thus, the alternative hypothesis is rejected and the null hypothesis, which postulates no relationship, is retained.

Again, it would seem that the 4-H members do not see competition as it relates to 4-H events as being either positive or negative in nature. Participation in 4-H activities and events is positively related to being around other 4-H'ers and the competitive aspect appears to be of little importance.

Table 20
4-H Events

	Age					Total	S
	10&under	11&12	13&14	15&16	17&over		
$r_{\text{Cooperation}}$	.37	.11	.49	.52	.54	.36	.001
$r_{\text{Competition}}$	-.09	.05	.17	-.22	-.10	-.01	.875

r Correlation coefficient

S = significance level

Summary

An attitude assessment was administered to 309 Gallatin County 4-H members in their April or May 4-H club meeting. Nine questionnaires were rejected because of 4-H member error in filling out the survey. The population of 300 4-H members was broken down into

age groups consisting of: (a) 74 10 year olds and under, (b) 81 11 and 12 year olds, (c) 74 13 and 14 year olds, (d) 53 15 and 16 year olds, and (e) 18 17 year olds and older.

In general, for all age groups, the 4-H members in Gallatin County place a high level of importance on the 4-H program, the demonstration contest, 4-H record books, the 4-H Fair, 4-H Camp, and 4-H judging contests. The 4-H Fair received the highest level of response with 83% of the 4-H'ers rating this event as very important. Receiving blue ribbons, ribbons in general, and 4-H prize money are seen as having a lot of importance by the 10 year olds and under. As the ages increase, however, the level of importance placed on these incentives decreases. Finally, there are very few feelings of confusion expressed by 4-H'ers in relation to reasons for taking a 4-H project. The response was low for all age levels in this category.

No significant relationship was found between the attitudes toward competition and cooperation. Attitudes toward cooperation are positively related to attitudes toward intrinsic motivation, personal worth, judging, need for direction, general 4-H interest, self-expression, and 4-H events. Attitudes toward cooperation showed no significant relationship with attitudes toward extrinsic motivation, and only a slight negative relationship with attitudes toward independence.

Competitive attitudes are slightly positively related to attitudes concerning independence, extrinsic motivation, and judging. There is no significant relationship between competitive attitudes and attitudes toward personal worth, need for direction, general 4-H interest, self-expression, and 4-H events. A small negative correlation exists between attitudes toward competition and intrinsic motivation.

Chapter 5

Summary, Conclusions, and Recommendations

Summary

The problem of this study was to assess 4-H members' feelings toward several facets of their experience in the Gallatin County 4-H Program, and to determine correlations between their attitudes toward competition and cooperation, and their attitudes toward independence, extrinsic motivation, intrinsic motivation, personal worth, judging, need for direction, general 4-H interest, self-expression, and 4-H events.

The population for this study was all of the 4-H members present in either their April or May 4-H club meeting. A questionnaire developed by the researcher and based on the Minnesota School Affect Assessment instrument was administered to 309 4-H members by their respective 4-H Leader in their 4-H meeting. Of the 309 questionnaires which were administered to the 4-H population, 9 questionnaires were rejected because of insufficient information or 4-H member error in filling out the questionnaire. The population was broken into 5 age groups with the response per age group as follows: 10 year olds and under, 74 respondents; 11 and 12 year olds, 81 respondents; 13 and 14 year olds, 74 respondents; 15 and 16 year olds, 53 respondents; and 17 years old and over, 18 respondents.

Reliability information was obtained for the survey instrument by the use of a test, re-test over a one month period (April-May) on

a sample of 25 4-H members in the Fowler Beef and Swine 4-H Club. The Gallatin County Extension Agents believed that this 4-H club was representative of the 4-H population as a whole.

Validity on the instrument was obtained on the basis of face and content validity evaluation as determined subjectively by a 4-H Adult Leader, the three Gallatin County Extension Agents, a Montana State University 4-H Youth Specialist, and a Montana State University Human Development Specialist.

The data obtained from the survey was subjected to computer analysis for accuracy. The information coded for the computer analysis was verified by the researcher. Results from the computer analysis were displayed in tables and graphs for interpretation. All of the statistical hypothesis were either accepted or rejected based on a significance level of .01. (Note: The .01 significance level means that there is one chance in a hundred or less that correlations could occur when, in fact, there are no correlations in attitudes.)

Conclusions

The first part of this study deals with the assessment of attitudes toward 10 selected 4-H items. The first 9 items are statements that were ranked on a 5 point scale of importance. The last item was ranked on a true or false scale of 1 to 4.

The results show that in general all age levels place a high level of importance on the 4-H program. A total mean point response of 4.67 out of a possible 5.0 was tabulated for this item. Since 4-H in Gallatin County is a volunteer organization, one would naturally assume that those participating in the program would see it as relatively important.

The demonstration contest is seen as being less important for the 4-H members than any of the other items measured. The 15 and 16 year olds had the lowest response with a mean response of 3.31 as compared to the total mean response of 3.54. Still, the 4-H members see demonstrations as being of some importance but not as high a level of importance as the 4-H program in general.

4-H Record Books are to 4-H as textbooks are to the schools. General information, guidelines, instructions, and many other mechanisms for transmitting knowledge are found in 4-H record books. In general, a relatively high level of importance is placed on record books by 4-H members, with a slight downward trend in importance level from 10 year olds and under to the 15 and 16 year olds. The trend from the latter age group to 17 year olds and over then rose.

The 4-H Fair is considered to be very important by each age group and by all the 4-H'ers as a whole. The 4-H Fair received the highest level of response in terms of importance.

4-H Camp, which is an activity primarily participated in by younger 4-H members, showed a level of importance of 4.2 for 10 year olds and under, to a low mean response of 3.2 for 15 and 16 year olds. The level of importance then shot up for 17 year olds and older. In general, one can conclude that 4-H camp is relatively important but this importance decreases with age to age 16; then the level of importance increases from 17 years of age and up.

An important way of learning in 4-H is through Judging Contests. These are events which 4-H teams compete with other teams in evaluation of livestock, soils, poultry, and other agricultural related areas. Not all 4-H'ers participate in 4-H judging events, but most are familiar with the concept. In general, all age groups see judging contests as being somewhat less than "sort of important." Only a small percentage of those who participate in this 4-H activity are represented in the total 4-H population, however.

For the two items "Getting Blue Ribbons on my 4-H Work" and "Getting Ribbons in 4-H Fairs and Competitive Events," the results were just about the same. Ten year olds and younger place a high level of importance, 4.0 and 4.5 respectively, on getting blue ribbons and ribbons. A definite downward trend in importance level occurs from this age group all of the way to the 17 year olds and older who rank getting ribbons a little below "sort of important." The implications for incentives and program planning are significant.

With the younger members, ribbon awards can and should play an important part in the incentives program. As 4-H members get older, other incentives may be used more effectively.

The same trend in attitudes towards 4-H ribbons was seen in the attitudinal trends toward 4-H prize money. In general, for each age group there is a lower level of importance placed on prize money than on ribbons. The 10 year olds and younger value prize money the most with a mean score of 4.39 or a little over "sort of important." The attitude scores then decrease until they level off at the 15-17 year olds and older with a mean score of 3.5. Prize money is seen then as somewhat important by all age groups, but this level of importance decreases with age.

For the last item in the first part of the analysis, very few 4-H'ers seem to be confused about project selection. With a total mean score of 1.62 for the population, there seems to be a very low level of confusion about the taking of 4-H projects. One would conclude that communication between 4-H members and leaders is good.

Overall, the 4-H members in Gallatin County place a relatively high level of importance on all of the 4-H educational activities that were measured. There was no specific activity that was considered unimportant. As long as the educational planners and the participants continue to value an activity, then the implications are strong that the activity is a worthwhile endeavor.

In the demonstration contest, 4-H Record books, 4-H Camp, judging contests, and 4-H prize money areas, the 15 and 16 year olds recorded the lowest mean point response and, in general, placed less importance on these areas than the other age groups. In addition, this age group scored a little higher response than other age groups when it came to the area of "confusion about taking a project." Programming in the 4-H program may want to take a little more consideration of this age group since it appears that their needs are different from the norm.

Another trend that can be seen in the data is the downward trends by age groups in level of importance for the survey items. Since all age groups place relatively high values on the various aspects of the 4-H program, this trend is no cause for alarm. Planners need to recognize that incentive mechanisms differ as youth get older and incentives used should be built in to accommodate this trend.

In the second part of this study which includes the hypothesis testing and the correlation analysis between clusters of scores, the results suggest several interesting clues to the relationships between competition and cooperation and 4-H members' attitudes toward other selected areas. It should be emphasized that correlations only show relationships. This study does not imply causality. The results

from this study deal only with the relationships in attitudes of 4-H members. Cause and effect are not dealt with by the researcher.

Some theorists see competition and cooperation as being on the opposite ends of the same scale. If this were true, then correlation analysis should indicate a strong negative relationship. The data in this study, however, suggest that attitudes toward competition and cooperation have no significant relationship. This lack of a significant relationship would indicate that rather than being opposite points on the same scale, cooperation and competition are two independent concepts that are really not significantly related to each other at all.

Attitudes toward cooperation and independence showed a slight negative correlation, with attitudes between competition and independence showing a slight positive correlation for the entire 4-H population. Only the 17 year olds and older indicate a strong relationship, with the correlations being high negative ($-.69$) and low positive ($.39$) for the competition as they both relate to independence.

For all age groups there was no significant relationship between attitudes toward cooperation and extrinsic motivation. Except for the 17 year olds and older, attitudes toward competition were positively related with attitudes toward extrinsic motivation. These results indicate that participation in competitive 4-H

activities relates in a positive way to being motivated by external sources.

On the other hand, competitive attitudes are slightly negatively correlated to internal or intrinsic motivation. Thus, it would appear that competing in 4-H activities relies more heavily on external motivating forces than on internal ones. Conversely, for all age groups, attitudes toward cooperation are consistently and positively related to intrinsic motivation. This suggests that motivation to work with others comes from inside the individual and not from outside sources. Motivations to compete, on the other hand, have strong external motivations.

Many studies have been conducted to try to determine whether or not competition has any detrimental effects on the individual. Data from this study indicates no significant relationship between attitudes toward competition and personal worth. There does appear to be a very slight negative correlation but not of any significance. Attitudes between cooperation and personal worth are consistently positive for all age groups. Thus, attitudes toward oneself become more positive as attitudes toward working with others increase.

It is almost impossible to participate in 4-H without being evaluated or judged in some manner. Attitudes toward competition and cooperation are slightly related in a positive way to being

judged. Many judging events in 4-H are team oriented which may explain the positive relationship with cooperation.

There is no significant relationship between competition and need for direction, and the correlation between attitudes toward cooperation and this variable is a small one. In general, as one develops a need for direction or help in 4-H, he also develops a need to work with others.

Since competitive and cooperative activities are integral parts of the 4-H program, the relationship in attitudes between these two variables with general 4-H interest is an important one. Attitudes toward cooperation and attitudes dealing with interest in 4-H are positively related for all age groups. There seems to be no significant relationship between competitive attitudes and 4-H interest. In sum, it would appear that cooperative activities are having a positive effect on the 4-H members in relation to 4-H interest, while competition reveals no relationship.

Does competing relate in any way to expressing oneself? The data suggest that there is no relationship for the 4-H population as a whole, but for the 17 year olds and older 4-H members, there is a definite negative relationship.

Cooperative attitudes, though, are related positively to self-expression for all age groups. That is, getting along and working

with others is conducive to an atmosphere of expressing one's feelings.

4-H events also incorporate both cooperative and competitive concepts. For all age levels there is a positive relationship between attitudes toward cooperation and 4-H events. Participation with others continues to be of importance in 4-H. There is no significant relationship between attitudes toward competition and toward 4-H events. Again, it seems that cooperation plays an important positive role in the 4-H experience, while in this case, competition has little or no effect.

For the entire population of 4-H members and for all of the correlation analysis run, attitudes toward cooperation are positively related to attitudes toward intrinsic motivation, personal worth, judging, need for direction, general 4-H interest, self-expression, and 4-H events. Attitudes toward cooperation showed no significant relationship with extrinsic motivation, and only a slight negative relationship with independence attitudes.

Competitive attitudes were slightly positively related to attitudes concerning independence, extrinsic motivation and judging. There was no significant relationship between the competitive attitudes and personal worth, need for direction, general 4-H interest, self-expression, and 4-H events. A slight negative correlation exists between attitudes toward competition and intrinsic motivation.

There was no significant relationship between attitudes toward competition and attitudes toward cooperation.

The data from this study consistently relates attitudes toward cooperation positively with attitudes toward several other concepts that are tied to the 4-H experience. For all age groups, cooperative experiences are highly valued and the value increases with age, peaking at about age 16. The social aspect of 4-H as seen in 4-H club meetings, 4-H Fairs, 4-H Camp, and other 4-H events and activities are an important aspect of the total 4-H experience for 4-H members. Because of the positive correlations between cooperative attitudes and the other variables, 4-H educational program planners may wish to continue to incorporate cooperative activities into the 4-H program.

The area of competition has always been a controversial one. Some people are more competitive than others. Many claim that competition has a detrimental effect on those participating. The data from this study indicate that attitudes toward competition are not highly related to any of the other areas that were under consideration. There were slight positive relationships to independence, extrinsic motivation, and judging, but these were not strong correlations. In general, there seems to be very little relationship between attitudes toward competition and attitudes toward the other variables. One may infer, then, that the 4-H members themselves, do not see

competition in a positive or negative light. Competition is seen only as an independent variable that continues to be a part of the 4-H experience.

Recommendations

1. A follow-up study should be conducted in the future, the results to be compared to the results of this study. Changes in attitudes over a longer period of time would provide information to substantiate results of this survey.
2. A similar attitudinal survey should be administered to 4-H Leaders and to the parents of 4-H members. In this way, comparisons between the three groups could be made. Parents and 4-H Leaders have a great deal of influence on 4-H members. Comparison in attitudes between these three groups would help to get some idea as to how much influence is exerted on the 4-H members.
3. 4-H learning events and activities that include the demonstration contest, record books, the 4-H Fairs, 4-H Camp, and judging contests should all continue to be used in the Gallatin County 4-H program because of the high level of importance placed on these activities by 4-H members.
4. The process of using ribbons and prize money as incentives should be evaluated by Gallatin County Extension Agents and 4-H Leaders. For the samples, as age increases, the level of importance

placed on these incentives decreases. Awards and incentives programs should be designed with this trend taken into consideration.

5. 4-H educational programs that are cooperative in nature should continue and be strengthened. Because of the consistent positive correlations between cooperative attitudes and attitudes toward other variables that are involved with 4-H, cooperation should be encouraged.

6. Because of the little or no relationship between competitive attitudes and attitudes toward other relevant variables, it is recommended that competitive based activities be used for educational purposes when deemed appropriate by Extension Agents, 4-H Leaders, or 4-H members.

7. A similar study should be conducted that incorporates variables that include boy/girl relationships with competition and cooperation. Variables such as age and sex would provide additional needed information for 4-H program planners.

APPENDICES

Appendix A

Cover Letter, Instructions, Attitude Assessment
Questionnaire, and Cluster Scales

Dear _____, (4-H Leader)

The Gallatin County Extension Service in conjunction with Randy Shank, an Extension Agent from Virginia and currently a graduate student at Montana State University, is conducting a study of the Gallatin County 4-H Program. We would like to get some idea as to how the 4-H members in Gallatin County feel about certain aspects of their 4-H experience.

We need your help for this study. Enclosed with this letter is a set of questionnaires that we would like you to have the 4-H members in your 4-H Club fill out in your April 4-H Club meeting. It should take about 20 minutes to complete the questionnaire. Instructions for administering the questionnaire are enclosed.

The day after your April 4-H Club meeting, please mail the completed questionnaires in the enclosed self-addressed envelope to:

Randy Shank
1405 Deer Street
Bozeman, Montana 59715

We feel that the results from this study will help the Extension Service and you as a 4-H Leader plan better 4-H programs for our youth. The results from this study will be made available to you through the Gallatin County Extension Office in June.

Thank you very much for your help.

Sincerely,

Terry Wolfe
Extension Agent

Instructions for Administering the
4-H Attitude Assessment

We would like to find out how 4-H members feel about what they do in 4-H. We'd like you to show how you feel about some things by marking this printed questionnaire. Does everybody have a pencil? Does everybody have a questionnaire?

We don't want you to put your name on the paper. No one will know which paper you marked. When we are done, the papers will be sent to a graduate student at Montana State University who will analyze the information collected and then return the results for the entire Gallatin County 4-H Program as a whole to the County Extension Office. Results will be available in June for those interested.

Everyone should have a pencil and a survey form. On the top of the form where it says age, write in your age.....And if you are a boy, check the space right next to the word Boy.....And if you are a girl, check the space right next to the word Girl.

Now we'll go to the questions.

PART I

Look at the sample question where it says, "WATCHING TV AT HOME." If you feel that watching TV at home is very important to you, then you should check the blank at the important end of the scale. Or, if you feel that watching TV at home is very unimportant to you, then check the blank at the unimportant end. If you feel

that watching TV at home is sort of important, then check the blank that is beside the blank at the important end. If you feel that watching TV at home is sort of unimportant, then check the blank that is beside the blank at the unimportant end. If you really can't decide whether it is important or unimportant, then check the blank in the middle.

For all questions, mark your answers fairly quickly. Obviously, there are no right or wrong answers, since we want to know what your feelings are and not your friends' or anybody else's. Don't think too hard about your response--we don't want you to analyze it, just to mark the first feeling you get when you read the item.

We know that you can all probably read these items. But some of you read faster than others, and it could be awkward if everyone were finishing at different times. To keep you all moving together, I will read all the items aloud to you.

The reading pace will be fairly fast, so mark your answer immediately after each item is read. We will now start with item one..... (Read each statement)

PART II

All right, I will now tell you how to answer the questions in Part II.

Look at the sample question on the top of Part II. The statement says, "I LIKE TO TAKE TESTS." The four blanks between the TRUE and

FALSE mean very true, sort of true, sort of false, and very false.

Check the blank that shows how true or false the statement is for YOU.

Are there any questions?

We will now start with item one.... (Read each item)

4-H Attitude Assessment

AGE _____

SEX: boy _____

girl _____

Sample Question: Watching TV at home.

Important _____ Unimportant _____

PART I

1. The 4-H program

Important _____ Unimportant _____

2. Talking to the whole 4-H club about my own ideas

Important _____ Unimportant _____

3. Demonstration contest

Important _____ Unimportant _____

4. Listening to the 4-H Leader

Important _____ Unimportant _____

5. Talking in a small group about my own ideas

Important _____ Unimportant _____

6. 4-H Record Books

Important _____ Unimportant _____

7. Finishing my 4-H work on time

Important _____ Unimportant _____

8. Talking to the whole 4-H club about my feelings

Important _____ Unimportant _____

9. 4-H Fair

Important _____ Unimportant

10. Doing 4-H work by myself

Important _____ Unimportant

11. Talking in a small group about my feelings

Important _____ Unimportant

12. 4-H Camp

Important _____ Unimportant

13. Being a good 4-H member

Important _____ Unimportant

14. Being in Judging Contests

Important _____ Unimportant

15. Being liked by other 4-H members

Important _____ Unimportant

16. Being liked by 4-H Leaders

Important _____ Unimportant

17. Getting blue ribbons on my 4-H work

Important _____ Unimportant

18. Getting ribbons in 4-H Fairs and 4-H competitive events

Important _____ Unimportant

19. 4-H prize money

Important _____ Unimportant

PART II

Sample Question: I like to take tests.

True _____ False

1. Other 4-H members like to help me learn.

True _____ False

2. My friends want to do better 4-H work than me.

True _____ False

3. I like to do 4-H work by myself.

True _____ False

4. I do 4-H work to make my 4-H Leaders happy.

True _____ False

5. I do 4-H work to learn interesting things.

True _____ False

6. I am just as important in 4-H as any other member.

True _____ False

7. I like to be judged on how hard I work.

True _____ False

8. I like to know what I am supposed to be learning in 4-H.

True _____ False

9. I like my 4-H Leaders to set clear goals for me.

True _____ False

10. I like to be judged on how well I do compared to other 4-H'ers.

True _____ False

11. I feel that I'm doing a good job of learning in 4-H.

True _____ False

12. I do 4-H work because it is fun.

True _____ False

13. I do 4-H work to make my parents happy.

True _____ False

14. I want other 4-H members to leave me alone.

True _____ False

15. I like to do better 4-H work than my friends.

True _____ False

16. I like to learn by working together with other 4-H members.

True _____ False

17. I like to help other 4-H members learn.

True _____ False

18. I like to get better 4-H awards and ribbons than other 4-H'ers.

True _____ False

19. I don't like to work in groups.

True _____ False

20. I do my 4-H work to keep my 4-H Leaders from getting made at me.

True _____ False

21. I do 4-H work to be liked by other 4-H members.

True _____ False

22. I like to learn in 4-H.

True _____ False

23. I like to have my 4-H Leader see my work.

True _____ False

24. I like to be judged on how much I improved.

True _____ False

25. I get confused because I don't know why I'm taking a project.

True _____ False

Cluster Scales for Part I

General 4-H Interest

1. The 4-H Program
4. Listening to the 4-H Leader
7. Finishing my 4-H work on time
10. Doing 4-H work by myself
13. Being a good 4-H member
15. Being liked by other 4-H members
16. Being liked by 4-H Leaders
17. Getting blue ribbons on my 4-H work
18. Getting ribbons in 4-H Fairs and 4-H competitive events

Self-expression

2. Talking to the whole 4-H club about my own ideas
5. Talking in a small group about my own ideas
8. Talking to the whole 4-H club about my own ideas
11. Talking in a small group about my feelings

4-H Events

3. Demonstration Contest
6. 4-H Record Books
9. 4-H Fair
12. 4-H Camp
14. Judging Contests
19. 4-H prize money

Cluster Scales for Part IICooperation

1. Other 4-H'ers like to help me learn.
16. I like to learn by working together with other 4-H'ers.
17. I like to help other 4-H members learn.

Competition

2. My friends want to do better 4-H work than me.
15. I like to do better 4-H work than my friends.
18. I like to get better 4-H awards and ribbons than other 4-H members.

Independence

- 3. I like to do 4-H work by myself.
- 14. I want other 4-H'ers to leave me alone.
- 19. I don't like to work in groups.

Extrinsic Motivation

- 4. I do 4-H work to make my leaders happy.
- 13. I do 4-H work to make my parents happy.
- 20. I do my 4-H work to keep my 4-H Leaders from getting mad at me.
- 21. I do 4-H work to be liked by other 4-H members.

Intrinsic Motivation

- 5. I do 4-H work to learn interesting things.
- 12. I do 4-H work because it is fun.
- 22. I like to learn in 4-H.

Personal Worth

- 6. I am just as important in 4-H as any other 4-H member.
- 11. I feel that I'm doing a good job of learning in 4-H.
- 23. I like to have my 4-H leader see my work.

Judging Basis

- 7. I like to be judged on how hard I work.
- 10. I like to be judged on how well I do compared to other 4-H members.
- 24. I like to be judged on how much I improved.

Need for Direction

- 8. I like to know exactly what I'm supposed to be learning in 4-H.
- 9. I like my 4-H Leaders to set clear goals for me.
- 25. I get confused because I don't know why I'm taking a project.

Appendix B

Reliability Scores (r Pearson Correlations)

	n=4 10&under	n=5 11&12	n=9 13&14	n=4 15&16	n=3 17&over	n=25 Total
r Cooperation	---	---	-.63	.96	.99	.29
Significance	---	---	.067	.044	.091	.159
r Competition	.81	.96	.76	.35	.87	.81
Significance	.187	.011	.017	.654	.333	.001
r Independence	.97	-.48	.82	.92	.80	.71
Significance	.034	.408	.007	.085	.407	.001
r Extrinsic Motivation	.97	.96	.63	.90	-.33	.87
Significance	.028	.009	.069	.095	.788	.001
r Intrinsic Motivation	1.00	.61	.80	.33	1.00	.74
Significance	.001	.272	.010	.667	.001	.001
r Personal Worth	-.17	.41	.53	.47	.87	.34
Significance	.826	.496	.144	.526	.333	.093
r Judging Basis	.47	.87	.82	.73	.50	.75
Significance	.529	.058	.007	.267	.667	.001
r Need for Direction	1.00	.72	.50	.58	-.87	.84
Significance	.001	.168	.170	.423	.333	.001
r Gen. 4-H Interest	.91	.99	.97	.98	.99	.94
Significance	.092	.001	.001	.017	.080	.001
r Self-Expression	.21	.75	.75	.91	.99	.73
Significance	.795	.142	.019	.090	.033	.001
r 4-H Events	.87	.93	.86	.92	.94	.86
Significance	.133	.024	.003	.078	.212	.001

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