FACTORS ASSOCIATED WITH THE SUCCESS
OF PARTICIPANTS IN THE 1981 NATIONAL FFA
LIVESTOCK JUDGING CONTEST,

by
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DEDICATION

This study is dedicated with love to my wife, , and my son, . The sacrifices that they made, along with their love and support, made this study possible.
The author extends his appreciation to several individuals who were instrumental in the development of this study.

A special thanks goes to Dr. John Hillison for the dedication and true professionalism exhibited through his help, advice, and encouragement. A note of gratitude is offered to the members of the author's committee, Dr. James P. Clouse, Dr. William G. Camp, Dr. Gary L. Minish, and Dr. Gale Hagee, for their suggestions and help.

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Chapter 1

Introduction

Background and Description of the Problem

Since its establishment in 1928, the Future Farmers of America (FFA) has grown to include chapters in all fifty states and Puerto Rico. Its membership consists of nearly a half million young people enrolled or who were enrolled in high school vocational agriculture programs. Since its inception, the FFA has been considered an integral part of the vocational agriculture program. Each year thousands of vocational agriculture students, who are also FFA members, engage in competition in the form of shows and fairs, proficiency awards, talent contests, chapter contests, public speaking contests, and judging contests.

The benefits incurred by these competitive events have generally long been accepted by agricultural educators as meriting the time, effort, and monetary outlay necessary to plan and conduct these competitive events each year.

Benefits that are frequently mentioned as being achieved by FFA contests are:
1. Contests can make the learning experience more exciting. (Key: 1977).

2. Competition is the basis of the free enterprise system. Contests help teach and foster the system. (Shumann: 1977).

3. FFA competition allows students to participate regardless of size, physical ability, intelligence, or sex. (Stockton: 1977).

4. Contests help students learn to set goals and to work toward those goals even if they take years to achieve. (Carter: 1978).

5. Contests provide motivation to remember terms and concepts learned in the classroom. (Mayfield: 1978).


7. Contests help fulfill the basic want of all to be recognized. (McVay: 1978).


9. Contests give the teacher a chance to accompany students in social situations outside the classroom. (Emanuel: 1977).

10. Contests can be a means of involving past students and FFA alumni members in the program. (Karcher: 1979).

11. Contests are a means of making the public aware of
what students are learning in the classroom. (Bailey: 1979).

12. Competition can teach students to be good losers as well as good winners. (Farrar: 1977).

The livestock judging contest was among the first contests to be organized. It has evolved into one of the most widely acknowledged and participated in of all eleven FFA contests held on the national level. At the 1980 convention 47 states and 141 FFA members participated in the National FFA Livestock Judging Contest held in Kansas City, Missouri (FFA: 1980). These 141 members represented only a small portion of the students who participated in the livestock judging contest on the chapter, county, district, and state levels. The national contest was the culmination of success for the 141 members who advanced through the lower levels to participate in the national contest.

While most contestants in the livestock judging contest compete as a team from a single chapter, some states select their teams from the individuals who scored highest at the state competition. It is possible that a team in the national contest could be composed of members from three different chapters within that state. The team, regardless of how its three members are selected, is required to complete the following parts of the contest:

1. Six classes of four animals each are ranked according to the animals' desirability as
market or breeding animals. The classes are composed of one ring each of breeding cattle, market cattle, breeding sheep, market sheep or lambs, breeding swine and market swine.

2. Oral reasons are given on three classes of livestock designated by the Division Superintendent at the beginning of the contest.

3. One class of swine and two classes of cattle are graded individually according to the latest U.S. market grades. (FFA: 1981).

The team scoring the highest total of individual scores is declared the winner. The teams are ranked in four groups. Those teams whose scores rank in the top 20 percent are designated as Gold Emblem. The second 20 percent is designated as Silver Emblem; the third 20 percent is designated as Bronze Emblem; and the fourth 20 percent is designated as Honorable Mention. Contestants are ranked, designated in the same manner as the teams, and awarded medals and/or Certificates of Honorable Mention.

Although contests have long been accepted as having benefits meriting the time, effort, and money expended each year to promote and conduct them, they have been the focus of some controversy.

As far back as 1948, Johnson criticized the national contests because they "failed to satisfy all sections of the country." More recently contests have come under a very
broad spectrum of criticisms. Among the frequent criticisms voiced are:

1. There is too much emphasis placed on winning. Some advisors will go to any length to win. (Key: 1978, Mayfield: 1978).


3. The FFA contests sometimes dictate the development of the instructional program. (Shumann: 1979).

4. Contests frequently appeal only to the more able students. (Gadda: 1978).

5. Advisors often use contests to build their reputations as teachers. (Key: 1978, Crownover: 1978).

6. Many teachers arbitrarily select team members without giving all of the students an equal opportunity to participate. (Shumann: 1977).

Records show that the National FFA Livestock Judging contest has been dominated over the past years by teams from the Western and Central Regions. An examination of the 1979 livestock census showed that while all states reported substantial populations of both hogs and cattle, nine states have such low sheep populations that estimates for that specie are no longer recorded (Appendix A).

While several studies concerning the FFA have been conducted over the past four years, very few have dealt directly with the issues confronting the national contests.
In 1980, Damann conducted a study to identify perceptions of rural, urban, urban fringe, and central city vocational agricultural teachers concerning the role of the National FFA Organization. A secondary purpose was to determine the current and future effectiveness of services, resources, programs, and activities sponsored by the National FFA organization. After surveying the attitudes of 469 teachers from across the nation (61% return), he found, among other things, that the respondents supported the need to evaluate all existing FFA activities.

Annually, a short evaluation form is completed by participants at the national contest; however, greater depth is needed to help determine not only the attitudes of the contestants and their advisors, but also to collect data concerning the member selection, training, and achievements of the participating teams. By collecting and analyzing these data a more precise understanding of the nature of the variables leading to success can be achieved.

The National FFA Livestock Judging Contest was used as the focus of the study for four reasons: (1) the interest of the researcher; (2) the livestock judging contest is one of the oldest of the FFA contests; (3) members from almost every state participate in the contest; and (4) the dominance of the contest by two regions.
STATEMENT OF THE PROBLEM

The primary purpose of the study was to determine the factors associated with the success of those teams that participated in the 1981 National FFA Livestock Judging Contest. A secondary purpose of the study was to determine the attitudes of both the contestants and their advisors regarding the contest.

Research Objectives

The specific objectives of the study were to determine:

1. the relationship between the percent of the vocational agriculture program composed of animal science units and contest team score.
2. the relationship between the number of FFA contests other than livestock judging that the chapter has participated in above the chapter level and contest team score.
3. the relationship between the amount of time spent in preparing for the livestock judging contest and contest team score.
4. the relationship between years of the advisor's vocational agriculture teaching experience and contest team score.
5. the relationship between the state population of
cattle and contest team score.

6. the relationship between the state population of sheep and contest team score.

7. the relationship between the state population of hogs and contest team score.

8. the relationship between the number of livestock judging practice sessions and contest team score.

9. the relationship between the number of livestock judging contests that the team participated in and contest team score.

10. the relationship between the size of school and contest team score.

11. the relationship between the size of student population in the local vocational agriculture program and contest team score.

12. the relationship between the advisor's attitude toward the National FFA Livestock Judging Contest and contest team score.

13. the relationship between the contestant's attitude toward the National FFA Livestock Judging Contest and the advisor's attitude toward the National FFA Livestock Judging Contest.

14. the relationship between the contestant's attitude toward the national livestock judging contest and individual contest score.

15. the relationship between the contestant age and individual contest score.
16. the relationship between the years of vocational agriculture enrollment and individual contest score.

17. the relationship between the number of years a contestant has been a member of the FFA livestock judging team and individual contest score.

18. the relationship between the number of FFA contests other than livestock judging that the contestant has participated in and individual contest score.

19. the influence of geographical area on contest team score.

20. the influence of source of advisor's livestock judging expertise on contest team score.

21. the influence of the number of teachers in the local vocational agriculture department on contest team score.

22. the influence of the method of team member selection on contest team score.

23. the influence of the sex of the advisor on contest team score.

24. the influence of the educational level held by the advisor on contest team score.

25. the influence of the type of agriculture in the school district on contest team score.

26. the influence of the type of school on contest team score.
27. the influence of the sex of the contestant on individual contest score.

SCOPE AND LIMITATIONS OF THE STUDY

The scope of this study was limited to the identification of characteristics and attitudes of contestants and advisors in the 1981 National FFA Livestock Judging contest. The study was limited because data were collected from these contestants and advisors; thus generalizations should not be made to other populations.

DEFINITION OF TERMS

FFA Activities - refers to those activities such as contests, conferences, conventions, camps, shows, and fairs conducted by the Future Farmers of America.

Instructional Programs - refers to the organized overall plan for conducting learning activities associated with teaching vocational agriculture.

Judging Contests - refers to those competitive events that require the participants to evaluate animals or materials based on what has been learned in the local vocational agriculture instructional programs.
National Contests - refers to those contests held in Kansas City, Missouri at the National FFA Convention. They include Dairy Cattle Judging, Livestock Judging, Agricultural Mechanics, Farm Business Management, Floriculture, Meats, Milk Quality and Dairy Foods, Poultry, Nursery Landscape, Public Speaking, and Extemporaneous Speaking.

Proficiency Awards - refers to awards given to individual FFA members on the basis of their accomplishments in their area of interests. The awards may be won on the chapter, district, state, or national level.

Vocational Agriculture Program - refers to the planned series of learning experiences designed to provide students with knowledge, skills and attitudes related to agriculture.

Contestant - a FFA member who participated in the 1981 National FFA Livestock Judging Contest.

Comprehensive High School - a school with grades 9 through 12 that offers both academic and vocational courses.

Advisor - a teacher of vocational agriculture who advises a local chapter of the Future Farmers of America.

Success - the number of points scored either by the contestant or the team in the 1981 National FFA Livestock Judging Contest.
Chapter one provides a background and description of the problem, the rationale for the study, the limitations of the study, and definition of terms.

Chapter two reviews the literature covering the historical development of FFA contests, the objectives of FFA contests, contest controversy, and research studies conducted.

Chapter three describes the research methodologies used in the studies. The population, the design, instrumentation, data collection, statistical treatments, and analysis of data are discussed.

Chapter four presents the data and subsequent analysis and interpretation.

Chapter five provides the study summary, findings, conclusions, recommendations, and general discussion.

CHAPTER SUMMARY

Chapter one presented documentation of the importance of FFA contests in the vocational agricultural program. It was shown that educators realize the many benefits that can be derived by using FFA contests in conjunction with the vocational agriculture program. It was pointed out that the livestock judging contest was one of the very first of the contests to be organized on the national level and still is
one of the most widely publicized and participated in of the eleven contests held on the national level. A brief description of the livestock contest was included.

The chapter drew attention to the fact that although the contest values are recognized, there remains several points of controversy concerning the achievement of success in contests. These controversies provided the context for the problem. Within this context the chapter provided a statement of the problem and twenty-seven research objectives. The rationale for the study centers around answering the criticisms of the contests.

Four reasons for using the livestock judging contest were offered: (1) the interest of the researcher, (2) the large degree of participation, (3) the length of time the contest has endured, and (4) the dominance of the contest by two geographical regions. In addition, the scope and limitations of the study, definitions of terms, and organization of the study were presented.
Chapter 2

REVIEW OF LITERATURE

Introduction

It has been widely accepted among teachers of vocational agriculture that FFA contests are advantageous to the local instructional program. The controversy that exists seems to be concerned not with the desirability, but with the preparation for and conduct of contests. The purpose of this chapter is to summarize the opinions, attitudes, and concerns expressed by those who have examined this controversy. In addition, a synopsis of the research studies dealing with the topic is presented. This chapter is divided into the following four sections:

1. Historical Development of the National FFA Livestock Judging Contest
2. Objectives of FFA Contests
3. Controversy Surrounding FFA Contests
4. Related Research Studies Conducted
Livestock judging contests existed as early as 1919 in Alabama and Virginia. The following year, North Carolina, Nebraska, and New Mexico conducted statewide contests, although there was no formal state or national FFA organization (Carnes: 1977).

While these states were organizing their own state contests, a movement was underway to develop a national contest. A committee composed of C. H. Lane, Chief of the Agricultural Education Service of the Federal Board of Vocational Education, J. A. Linke, member of the Federal Board staff, and C. V. Williams, who later became a teacher trainer in Kansas, was formed for the purpose of organizing a national contest to be held at the 1918 International Livestock Show in Chicago. The show officials, however, rejected the plan. Dr. Lane was finally successful in 1925 in organizing a National Dairy Judging Contest at the National Dairy Show in Indianapolis, Indiana. The contest was so successful that Dr. Lane and his committee again made an attempt to establish a separate livestock judging contest for vocational agriculture students at the Chicago show. The proposal was again rejected by show officials.

Dr. Lane next met with the officials of the American Royal Livestock and Horse Show. This meeting took place in May of 1926 in Kansas City, Missouri. Dr. Lane was very
encouraged by the results of the meeting when he reported:

The officials of the American Royal, the Chamber of Commerce of Kansas City, the Kansas City Livestock Exchange, the Kansas City Stockyards Company, and the Kansas City Star are enthusiastic over the possibility of our developing a national vocational program at the American Royal and have promised every means at their disposal to make our efforts a great success. (Tenny: 1977)

In November of that same year the newly organized National Congress of Vocational Agriculture Students, met in Kansas City for a three day program including judging contests and tours of packing plants and business establishments. Such activities continued on an annual basis and eventually led to the National FFA Convention being held in Kansas City.

The Future Farmers of America was established in 1928 in Kansas City, Missouri. However, the National Congress of Vocational Agriculture Students did not disband as a result of the organization of the FFA. Dr. A. W. Tenny noted:

The National Congress of Vocational Agricultural Students continued to sponsor the national judging contests until 1936. The FFA convention and the national judging contests were billed that year as the Ninth National Convention of Future Farmers and the National Contests for Students of Vocational Agriculture.

As the FFA grew in numbers and prestige, members and advisors requested that the national judging contests (Dairy and Livestock Judging) be made a part of the FFA programs (Tenny, 1977).

The judging contest became a permanent part of the FFA program. In the following years when FFA members met in Kansas City, the livestock judging contest was an important
part of the convention program.

The contests were discontinued in 1941 because of restrictions resulting from World War II. When the contests were resumed after the war, there was a move to improve their educational value. Writing of a hypothetical farmer, Olney said,

Farmer Ashburn is concerned with buying and raising animals and varieties that will produce high yields; and, in addition, he desires to grade the products grown so that they will bring the greater return, thereby making a high labor income. He is primarily interested in his own farm. It is true that he makes comparisons with his neighbors and other farmers in order to improve his own situation, but it is not his primary concern to compete openly with them...

With the resumption of the vocational contests for Future Farmers of America in 1947 it is important at this time that everyone in vocational agriculture education give serious and constructive thought to the problem. What every teacher of agriculture should do is to provide the training and experience that each pupil needs which will enable him to become a better and more efficient farmer on a particular farm. We should not place undue emphasis upon show and artificial awards that are of less value to most farmers. But "sticking to" our real job of teaching boys the actual problems, which may often be of more value than those received at some bizarre event that passes quickly and is soon forgotten. (Olney, 1947)

In that same year (1947), P. M. Hall of the University of Illinois stated that "Contests are accused of developing undesirable interests and as being guessing rather than judging games." W. H. Martin (1947) criticized judging contests as having "consisted largely of placing prize college animals in order, scoring milk or other activities
requiring few of any of the skills, and judging abilities essential to success in farming." In 1947, for the purpose of improving the educational value of the contests, the dairy contest was changed to include evaluation on the basis of body type and production rather than body type alone. The livestock contest added classes of steers to be graded according to commercial standards. Horse and mule judging contests were discontinued.

With minor changes that generally reflect market trends, the livestock contest remains very much the same as it was after the changes of 1947.
OBJECTIVES OF FFA CONTESTS

According to the FFA 1981 Official Manual,

All FFA contests are to be a natural outgrowth of the instructional program. The contest also should help make classes more interesting and encourage the development of special skills. Contests are to help develop: (1) technical knowledge, (2) ability to make sound judgements, (3) ability to defend the decisions, and (4) the ability to be a gracious winner or a good loser.

The FFA Advisor's Handbook describes contests as invaluable teaching aids for the instructor. If used properly at the local, state, and national levels, awards and participation are a tremendous motivating force for students. In addition, FFA contests provide opportunities for members to develop leadership and other abilities.

General purposes listed for all FFA contests are:

(1) To help the individual member develop new and improved leadership abilities and skills.

(2) To serve as a practical extension of the classroom.

(3) To increase involvement of members in the chapter program.

(4) To help publicize the worth of the chapter.

Specific objectives for the livestock judging contest are listed in the National FFA Contests, Bulletin Number 4 for 1979, 1980, 1981:
(1) To measure (demonstrate) the contestants' knowledge attained through the learning process by ranking annimals on their merit.

(2) To measure the students' ability in the following categories:
   (a) to make accurate observations of livestock
   (b) to determine the desirable traits in animals
   (c) to make logical decisions based on these observations
   (d) to orally defend and discuss their decisions
   (e) to evaluate the contestants' judgements based on observations (critical analysis).

(4) To develop the ability to select livestock that will maximize returns for the producers and meet the needs of the industry and the consumer.

(5) To become proficient in communicating in the terminology of the industry and the consumer.

(6) To identify the criteria necessary in marketing livestock. (FFA, 1979).

CONTROVERSY SURROUNDING FFA CONTESTS

Since their inception, contests have been a point of controversy among agricultural educators. This controversy appears to be centered around three topics:

(1) Too much emphasis is placed on winning.

(2) Contests are the end instead of the means toward an end.

(3) Only a select few benefit from contests.

Each of these points will be reviewed in light of the literature concerned.

Too Much Emphasis is Placed on Winning

As early as 1948 much concern was expressed over the fear that the motivation that contests provided had become a
point of rivalry rather than an educational objective.

"One shortcoming in these and some other contests is the tendency to highlight the winning team in each contest to the degree that some teachers, some administrators, and portions of the public assume that winning contests is the chief criterion of success for a teacher or department." (Deyoe, 1948)

"The reason contests are a topic of debate is because they are misused by many instructors. Some become so insistent on winning that they will go to no end in order to beat their rivals. Trophies become the entire motive to teaching...winning does not justify pulling strings or spending four weeks in class on one contest." (Johnson, 1948)

In recent years much the same concern has been expressed. Key (1978) wrote that sometimes a "monster" is created of competition. He wrote of one teacher who said that he felt he had to win to build his reputation as a teacher.

Mayfield (1978) contended that contests were designed as an educational experience with winning as a secondary objective. In his opinion these priorities may now be reversing.

Carter (1978) expressed the opinion that some vocational agriculture teachers use extreme measures in preparing for contests:

One extreme is the person teaching his young people that winning is the only thing that matters. This person seems to be teaching that students must be embarrassed and ashamed if they place anything but first. Often he even goes so far as to make them feel anything, ethical or unethical is justified if it will result in a win.
Contests are an End Instead of the Means Toward an End

Perhaps the aspect of contests that has generated the greatest amount of controversy is the amount of time devoted to contests. It is often claimed that instead of contests being a natural outgrowth of the instructional program, classroom instruction is the outgrowth of contests.

Shumann (1977) said that such an attitude (that all the year is spent training for contests) is the reflection of the frustration felt by those instructors who are not successful in training winning teams. He gave some advice in successfully integrating FFA contests into the instructional program:

First, the basic principles of the contest should be taught to all students in the vocational agriculture class and additional practice should be done after school hours. In other words, the contest material should be an integral component of the organized instructional program. Teachers cannot justify the practice of training a few members of the class and assigning the remainder of the students meaningless "busy work". Content should be the means to an end and not an end in itself. It should be part of a well organized program of vocational agriculture and should contribute toward the accomplishment of the overall program objectives.

Emanuel (1977), in reflecting on his career as a vocational agriculture instructor, expressed somewhat the same concern: "It was my belief that at no time should FFA contests, for example, initiate the development of the instructional program."

Byers (1975) believed that the most emphasis on
contests should be at the local level because excellent
performance and recognition are the most meaningful where
the peers, parents, etc. can observe.

Contests are most valuable in motivating
chapter members at the local level and decrease in
value to the local members at the state and
national levels. Teachers of agriculture
(advisors to the FFA) should make local contests,
rather than state or national contests, the first
priority in their planning and efforts.

Gadda (1978) said that competition, when not used to
excess, when not used exploitatively of learners, and when
the overall plan is well designed by the instructor will
yield beneficial results. He did, however, offer some
cautions in the use of contests:

If inappropriately used, they (contests) can
be more of a curse than a blessing. Contests
should be used to motivate and to teach.
Competitive activities can provide a dazzling
dimension which turns learners on. The teacher
must be mindful of the major purpose of the vo ag
program: to prepare persons for employment in
occupations in the agricultural industry....
Merely to conduct a competitive activity without a
clear notion of how it contributes to the
development of occupational competencies is sheer
folly. The contest activity must contain the
specific skills needed in the occupation, and the
learner must be made well aware of these as well
as how they contribute to employability. This is
a crucial dimension which is often overlooked.

Only a Select Few Benefit From Contests

Still another accusation aimed at those who are
successful in contests is that only a select few benefit
from the instructional value of contests. The charge is
often made that all members of a class do not have an equal
opportunity to secure a position on the judging team.

Shumann (1977) expressed this concern:

Students should be selected for the team based on competition with other students in the FFA chapter. Many teachers make the mistake of arbitrarily selecting team members without giving all students the opportunity to participate in the competition. This practice simply cannot be defended from the standpoint of fairness and equality for all students. Furthermore, the teacher may overlook some students, previously unmotivated, who may be inspired to excel in a given contest area.

Byers (1975) wrote of the need for team selection to be based on open competition.

Students should earn the right to represent their chapter. The advisor should not be responsible for selecting the chapter representatives for district or state level contests. The representatives should be selected on their performance - an earned right. Students who earn the right to represent their chapter will be the strongest representative the chapter can have. Experience indicates that teachers do not always select the best representative, regardless of how well their intentions may be.

RELATED RESEARCH STUDIES CONDUCTED

As far as the author was able to ascertain, there has been a noticeable lack of research over the past few years dealing directly with FFA contests. The purpose of this section of the chapter is to describe the research that has been done that is pertinent to this study.

White (1977) conducted a study for the purpose of assessing the FFA contest program in Texas as perceived by
secondary school principals, parents, current third year FFA members, and teachers of vocational agriculture. To achieve this purpose the following objectives were formulated:

1. To determine a research agreement and disagreement among secondary school principals, parents, current FFA members, and vocational agriculture teachers concerning the value of FFA contests.

2. To determine if Texas secondary school principals, parents, current FFA members, and vocational agriculture teachers are of the opinion that there is need for additional contests, deletion of some contests, or changes in present contest procedures.

3. To determine if the contest activities selected by Texas FFA chapters are influenced by the number of years of vocational agricultural teaching experience of the advisor, total number of students enrolled in the vocational agricultural classes, number of teachers in the vocational agriculture department and size of high school.

Among the findings, White determined that the secondary principals' group was more extreme in their level of agreement or disagreement in seventy-two percent of the sixty cases. Differences appeared in response to such statements as: "FFA contests are currently designed primarily for students going into farming"; "Costs of preparing for and participating in FFA contests are not justified in terms of their worth or value to the individual"; and "Too much time is spent in traveling to and from FFA contests."

No significant correlation was found between the number of years of teaching experience and the types of contests
entered. In addition, no significant correlation was found between the number of students enrolled in the program and the type of contest entered. It was concluded by White that the size of the high school is not a factor in types of contests entered by students.

Siebert (1975) conducted a study to determine the relationship of selected characteristics to the success of vocational youth organizations. A total of three organizations were surveyed; the Distributive Education Clubs of America, Future Business Leaders of America, and the Future Farmers of America. Twenty-four states were selected as being representative of the geographical and cultural areas in the continental United States. Within each of these states, twelve advisors were randomly selected to participate.

Data obtained from a mail questionnaire were analyzed using a one-way frequency distribution, measures of central tendency, and dispersion for each response. A linear combination of independent variables which would correlate as highly as possible with the dependent variables was utilized. Based on the statistical findings of the study the following were among the conclusions drawn:

1. The longer the organization had been in existence, the more effective it was in reaching its objectives.

2. Organizations with a higher number of male members were more effective in reaching their objectives.
3. Organizations that participated in state and national conventions were more effective in attaining their objectives.

4. School administrations that gave organizations encouragement and financial support were significantly correlated with achievement of organization objectives.

5. The longer the advisor had sponsored a youth organization, the more effective it was in achieving its objectives.

In a similar study by Swanson (1979), it was found among other results, that years of advisor's teaching experience is relatively independent from FFA activities and that years of teaching was not a good predictor of chapter effectiveness. The study was designed to determine if relationships existed between the leadership style of FFA chapter advisors and FFA chapter effectiveness. A sample of thirty-five advisors was randomly selected from a population of ninety-four chapter advisors in Missouri in single teacher vocational agriculture departments. The teachers were asked to complete the Leaders Behavior Description Questionnaire and the Chapter Activity Record. Correlation coefficients were calculated for comparisons. Because no significant correlations or differences were found between the years of advisor teaching experience and chapter effectiveness, Swanson concluded that there was little, if any, relationship between the two variables.
In 1976, Vaughn, in a study designed to identify some of the characteristics that are related to the success of vocational agriculture teachers as FFA advisors, found that when other factors were held constant, there was no significant relationship between the success of a vocational agriculture teacher's FFA chapter and the size of the community where the vocational agriculture department was located. This and other findings were drawn from data collected from mail questionnaires sent to vocational agriculture teachers in New Mexico. The teachers were divided into three groups based upon a chapter rating scale predetermined by the National FFA organization and the New Mexico State FFA Association. The three groups represented the varying degrees of success in advising and supervising FFA activities. The questionnaire consisted of two parts. Part I was concerned with collecting information about the instructor such as age, department location, degree of participation in school, and high school activities as a high school student, etc. Part II consisted of questions designed to determine a teacher's perceived level of proficiency in twenty-nine student organization competencies.

Kim (1979) found there was a significant correlation between an advisor's cognitive knowledge of FFA and seventeen variables. Among these variables were number of members attending state and national contests, number of proficiency award applications to district level and number
of members' participating in judging contests. An FFA information test which contained 216 multiple choice items in eight areas of FFA knowledge was used as the criterion. An FFA chapter activities inventory, developed primarily from the national chapter award items, was also tested with the FFA Information Test for correlations.

Welton (1971) conducted a study to investigate FFA chapter programs and the characteristics of vocational agriculture students as they relate to student participation in FFA activities. Among other things he found that FFA members indicated that more appropriate activities to interest all members, an opportunity for members to participate in activities, and more awards and recognition were the major improvements needed in the organization.

Welton used a stratified random sample of 112 vocational agriculture departments from throughout the United States. Two survey instruments were developed to gather data. The first instrument was designed to elicit information from vocational agriculture teachers concerning attributes of vocational agriculture departments and FFA chapters. The second instrument was developed to secure information from junior and senior vocational agriculture students in the participating departments. Student information obtained included personal, family, and social characteristics in addition to the extent to which they participated in various FFA activities during the 1969-1970 school year.
In a study designed to examine the impact of admitting girls into the vocational agriculture and FFA programs in Idaho, Klein (1979) found that "the majority of instructors indicated girls had not lowered contest proficiency levels." Fifty percent of the instructors indicated competition in contests between sexes is not bad and does not adversely affect students psychologically.

To arrive at these conclusions, Klein collected data from 44 vocational agriculture instructors and 7 state officers from Idaho. The data collection was made by survey and personal interview which obtained the attitudes and perceptions of the teachers regarding changes made since the admittance of females into the program.

In 1977, Sutfin conducted a study of vocational agriculture teachers in California, Oregon, and Washington to identify what animal science technical competencies were needed by vocational agriculture instructors and the degree of proficiency they needed to perform these selected animal science technical competencies. The study found that the degree of proficiency an agriculture instructor had in performing the 130 competencies mentioned in the study was varied. It also found the colleges or universities where the instructors earned their B.S. degrees had little effect on their ability to perform most of the competencies. A total of 17 competencies showed the effect of years of teaching and the degree of competency an instructor possessed. Sutfin believed the major factor his study

showed was that a large number of agriculture instructors completed teacher education programs without the needed technical competency in animal science to perform their job. They must take time to learn these skills after they are on the job and this may prevent them from doing the kind of teaching job that they are expected to do by their administration and the community.

In a similar study, Thomas (1979) found the greatest source of achieved competencies in animal science was "own experience". This conclusion stemmed from a 158 item survey instrument completed by 165 teachers of vocational agriculture in eleven western states. The instrument gathered data using three sections: (1) demographic, (2) a vocational agricultural teacher opinion scale, and (3) a teacher attitude scale. Among other findings, Thomas found that those who felt most competent in animal science were also self taught.

CHAPTER SUMMARY

Chapter two dealt with a review of literature concerned with the topic of this study. The chapter begins with a historical perspective of the National Livestock Judging Contest. This contest, which began before the establishment of the Future Farmers of America, was instrumental in the organization of the National FFA.

The National FFA Livestock Judging Contest, which was
disrupted during World War II, underwent major revisions after the war. The contest has remained basically the same since that time.

The major purposes of the National FFA Judging contests and specifically the livestock judging contest were presented as outlined by the National FFA Organization.

An in-depth discussion of the points of controversy over contests was presented as discussed by agricultural educators. The controversy can be categorized as concerns regarding the proper use of contests as an instructional tool. There seems to be little controversy as to the benefits of contests if they are used properly.

The final part of the chapter dealt with studies that have been conducted that relate to FFA contests or other vocational contests. Although there have been several studies dealing indirectly with the topic, few if any have been conducted dealing with the characteristics of those chapters and individuals that are successful in contests. Available studies regarding the attainment of success by contest participants are insufficient to address the controversies that are frequently voiced by agricultural educators.
Chapter 3

RESEARCH METHODOLOGY

Chapter three describes the procedures used to design and implement the study. A description of the population, research design, instrumentation, data collection, and statistical analysis are presented.

THE POPULATION

The population consisted of 135 contestants, who competed in the 1981 National FFA Livestock Judging Contest in Kansas City, Missouri and their 45 advisors. These contestants represented their home states in this contest as a result of winning their respective state FFA Livestock Judging Contests. Forty-two of the teams won their respective state contests. Three states chose the top scoring contestants from their contests, therefore each of these team's contestants were from different local chapters.

The study was conducted using the entire population. This population was used for data collection because the contestants in the National FFA Livestock Judging Contest and their advisors were readily available as a group. Using this population allowed not only an examination of the
perceptions of both advisors and contestants involved, but also a comparison of the two groups.

RESEARCH DESIGN

Best (1981:57) describes experimental research as being "...the most sophisticated, exacting, and powerful method for discovering and developing an organized body of knowledge." However, for a study to be truly experimental in nature the researcher must be able to control and manipulate the variables (Cross, 1981). Mosser and Kalton (1971:225) suggest ex post facto research as a method for use when the variables are not manipulatable. This type of study concerns "information about the past, which can be obtained either from the subjects' memory or from records."

Because the variables that affected the success of the participation in the contest had already occurred at the time of the study, the research was conducted as ex post facto research.

Kerlinger (1973:379) defines ex post facto research as:

"...systematic empirical inquiry in which the scientist does not have direct control of independent variables because their manifestations have already occurred or because they are inherently not manipulatable. Inferences about relations among variables are made without direct intervention, from concomitant variation of independent and dependent variables.

Gay (1976) describes ex post facto research as "research in which the researcher attempts to determine the
cause, or reason, for existing differences in the behavior or status of groups of individuals." Gay further explains that in this type of research, the researcher has observed differences in groups on some variables and attempts to "identify the major factor that led to this difference."

Ary, Jacobs, and Razavieh (1972) said that the basic purpose of ex post facto research is to discover or establish casual or functional relationships among variables.

The relationships involved in this ex post facto study were best determined by the use of a questionnaire designed to obtain information regarding the demographics, background, and attitudes of the participants.
INSTRUMENTATION

The instrument used in the study was developed by the author. It consisted of two questionnaires, one completed by contestants and one completed by their advisors. Each questionnaire consisted of two parts. One part was composed of questions designed to obtain information regarding demographic data such as sex, age, size of school, experience, etc. This part was also designed to elicit data concerning the background of the contestants and their advisors regarding their preparation and training for the contests. Such items as methods of team member selection, amount of time outside of class time spent on contests, and the number of FFA activities the chapter was involved in were included. The other part of the questionnaire measured attitudes of the contestants and their advisors regarding the National FFA Livestock Judging Contest. (Note Appendix A)

The attitudes were measured using a Likert-type summated rating scale. Wiersma (1975:189) describes attitude as dealing with existing feelings of a subject toward such things as ideas, procedure, and social institutions. Regarding measuring attitudes he elaborates:

Usually we think of attitudes in such terms as acceptance, rejection or favorable-unfavorable. The intensity of feeling is not dichotomous but is usually considered to be measured by some kind of continuum between the extremes. It is placing the subjects on this continuum that is the job of the attitude inventory. The items of all attitude
inventories are commonly measured on a scale consisting of a number of points on the theoretical continuum to which the subject can respond to indicate the intensity of his feeling.

A five point Likert-type scale, ranging from strongly disagree to strongly agree, was used. According to Nunnally (1978:604) the Likert scales have five advantages over the other models:

1. they follow from an appealing model
2. they are easy to construct
3. they are usually highly reliable
4. they can be adopted to the measurement of many different kinds of attitudes
5. they have produced meaningful results in many studies to date

Construct validity was established through the use of a panel of experts who reviewed the questionnaire. The panel of experts consisted of four graduate students and one undergraduate student in vocational education at Virginia Tech. They were asked to review the questions for appropriateness and clarity. They were also asked to determine whether the attitude statements expressed a positive or negative attitude by ranking the statements on an eleven point scale with one being the most positive, six neutral, and eleven the most negative. Using the data supplied by the panel, the attitude statements were then classified as positive, negative, or neutral.

The instrument was field tested using students and
advisors who had been involved in livestock judging activities and contests. The purpose of the field test was to determine if the statements and questions are stated clearly, concisely, and understandably.

DATA COLLECTION PROCEDURE

The data for the study were collected at the National Convention of the Future Farmers of America in Kansas City, Missouri on November 12 and 13, 1981.

Permission was obtained from the superintendent of the National FFA Livestock Judging Contest to distribute the questionnaire to the contestants and their advisors. This was accomplished during the advisors' meeting the day before the contest. Those contestants and advisors who were absent from the advisors' meeting were given the questionnaire the following day at the contest. The questionnaire was collected immediately upon completion.

RESEARCH QUESTIONS

The following research questions were answered:

1. What is the relationship between the percent of the vocational agriculture program composed of animal science units and contest team score?

2. What is the relationship between the number of FFA contests, other than livestock judging, that the chapter
has participated in above the chapter level and contest team score?

3. What is the relationship between the amount of time spent in preparing for the livestock judging contest and contest team score?

4. What is the relationship between years of the advisor's vocational agriculture teaching experience and contest team score?

5. What is the relationship between state population of cattle and contest team score?

6. What is the relationship between state population of sheep and contest team score?

7. What is the relationship between state population of hogs and contest team score?

8. What is the relationship between the number of livestock judging practice sessions and contest team score?

9. What is the relationship between the number of livestock judging contests that the team participated in and contest team score?

10. What is the relationship between the size of the school and contest team score?

11. What is the relationship between the size of the student population in the local vocational agriculture program and contest team score?

12. What is the relationship between the advisor's attitude toward the National FFA Livestock Judging Contest and contest team score?
13. What is the relationship between the contestant's attitude toward the National FFA Livestock Judging Contest and the advisor's attitude toward the National FFA Livestock Judging Contest?

14. What is the relationship between the contestant's attitude toward the National FFA Livestock Judging Contest and individual contest score?

15. What is the relationship between contestant's age and individual contest score?

16. What is the relationship between years of vocational agriculture enrollment and individual contest score?

17. What is the relationship between the number of years a contestant has been a member of the FFA livestock judging team and individual contest score?

18. What is the relationship between the number of FFA contests other than livestock judging that the individual contestant has participated in above the chapter level and individual contest score?

19. Are contest team scores influenced by geographic area?

20. Are contest team scores influenced by the source of the advisor's livestock judging expertise?

21. Are contest team scores influenced by the number of teachers in the local vocational agriculture department?

22. Are contest team scores influenced by the method of team member selection?

23. Are contest team scores influenced by the sex of the
advisor?

24. Are contest team scores influenced by the educational level of the advisor?

25. Are contest team scores influenced by the type of agriculture in the school district?

26. Are contest team scores influenced by the type of school where the team is enrolled?

27. Are individual contest scores influenced by the sex of the contestant?

STATISTICAL ANALYSIS AND TREATMENT OF DATA

Statistical analysis of the data was conducted through the use of several techniques. Those research questions concerned with determining relationships were tested using Pearson Product Moment Correlation. Those research questions concerned with differences were answered using group means.

The data were analyzed using the Statistical Package for the Social Sciences. Processing was done using the VPI&SU computer system.

CHAPTER SUMMARY

Chapter three presented the methods that were used to conduct the study. The population was defined as the participants in the 1981 National FFA Livestock Judging
Contest. The research was conducted as ex post facto research designed to determine the variables that were associated with the success of participants in the contest.

The instrument consisted of two questionnaires, one for the advisors and one for the contestants. The questionnaires were designed to collect data concerning the demography and attitudes of the advisors and the contestants.

It was determined that group mean comparison and Pearson Product Moment Correlation were the proper statistical procedures for the study.
Chapter 4

DATA PRESENTATION AND ANALYSIS OF DATA

The primary purpose of this study was to determine the factors associated with the success of those teams that participated in the 1981 National FFA Livestock Judging Contest. A secondary purpose was to determine the attitudes of both the contestants and their advisors toward the contest.

This chapter describes the population and presents the analyzed data for the study. The data were analyzed using the Pearson Product Moment Correlation and group mean comparisons. Using these statistical procedures, twenty-seven research questions are addressed. Tables recording the data are presented.

Description of the Population

The population consisted of 135 contestants who participated in the 1981 National FFA Livestock Judging Contest in Kansas City, Missouri and their 45 advisors. Questionnaires were given out at the advisors' meeting held the day preceding the contest. Those contestants and advisors who were absent from the meeting of the first day received the questionnaire at the advisors' meeting the
following day. A total of 109 contestants and 44 advisors completed the questionnaire.

DATA ANALYSIS

Data collected from the instrument were analyzed using the Statistical Package for the Social Sciences. Computer programs were run utilizing the computer at Virginia Polytechnic Institute and State University. Reliability for the questionnaire computed to be .20 for the questionnaire given to the advisors and .19 for the questionnaire given to the contestants. This low reliability was caused by the small number of items on the instrument, the small n size, and the homogeneity of the population.

1. Percent of the Vocational Agriculture Program Composed of Animal Science Units

To answer the question, "What is the relationship between the percent of the vocational agriculture program composed of animal science units and contest team score?", each advisor was asked to indicate the percent of his or her teaching curriculum that was composed of animal science units. The percent was correlated with contest team score using the Pearson Product Moment Correlation. As indicated in Table 1 a correlation coefficient of .08 was found.

2. Number of FFA Contests Entered Above the Chapter Level

Advisors were asked to indicate the number of contests
above chapter level entered last year by their FFA chapters. When paired with respective team scores, these data produced a Pearson Product Moment Correlation of -.06. The data are reported in Table 1.

3. **Amount of Time Spent in Preparing for the National Livestock Judging Contest**

By responding to the question, "During the past year, what percent of the time you spent working with students after school hours was devoted to training the three members of this judging team?", advisors provided data to determine the relationship between the amount of time spent in preparing for the National Livestock Judging Contest and team score. As reported in Table 1 a Pearson correlation was calculated to determine the relationship of the two variables. The correlation was found to be .23.

4. **Years of Advisor's Vocational Agricultural Teaching Experience**

The advisors were asked to indicate the number of years of agriculture teaching experience in order to answer the question, "What is the relationship between the years of advisor's vocational agriculture teaching experience and contest team score?" Analysis using the Pearson Product Moment Correlation produced a coefficient of -.23. The data are presented in Table 1.

5. **State Populations of Cattle**

To determine the relationship between the state population of cattle and contest team score, cattle
population for each state was obtained from the United States Department of Agriculture Statistical Bulletin No. 655. These populations were correlated with corresponding team scores. Using the Pearson Product Moment Correlation, a coefficient of .40 was calculated. The data are reported in Table 1.

6. State Populations of Sheep

In order to determine if a relationship existed between state populations of sheep and contest team score, sheep populations for each state that participated in the contest were obtained from the United States Department of Agriculture Statistical Bulletin No. 653. When tested for a correlation with the team scores using the Pearson Product Moment Correlation, a coefficient of .22 was obtained. The data are presented in Table 1.

7. State Populations of Hogs

To answer the question, "What is the relationship between state populations of hogs and contest team scores?", state hog populations were taken from the United States Department of Agriculture Statistical Bulletin Number 648. When these populations were correlated with corresponding team score using the Pearson Product Moment Correlation, a coefficient of .20 was obtained. The data are presented in Table 1.

8. Number of Practice Sessions

To determine the relationship between the number of livestock judging practice sessions and contest team score,
the advisors were asked to indicate the number of times that their teams practiced last year. As Table 1 indicates, the Pearson Product Moment Correlation was found to be .40.

9. **Number of Livestock Judging Contests Participated In by the Teams**

Advisors indicated the number of livestock judging contests in which their teams had participated before reaching national competition. In comparing those numbers and contest team scores a Pearson Product Moment Correlation coefficient of .40 was found. The data are recorded in Table 1.

10. **Size of School**

To provide data for the question, "What is the relationship between the size of the school and contest team scores?", the advisors were asked to specify the highest and lowest grades in their schools and also the total number of students in their schools. The total number of students was divided by the number of grades in the school. This gave the average number of students per grade. The average was then multiplied by four giving a standard high school of four grades. The school size was then correlated with corresponding team score to produce a Pearson Product Moment Correlation coefficient of -.17. Table 1 presents the data.

11. **Size of Student Populations in the Vocational Agriculture Program**

To answer the question, "What is the relationship between populations in the vocational agriculture program
and contest team scores?", the advisors were asked to indicate the number of students in their vocational agriculture programs. As Table 1 reports these numbers were then correlated with the corresponding team scores using the Pearson Product Moment Correlation. A coefficient of -.04 was found.

12. Advisor Attitude

To determine the relationship between the advisor's attitude toward the National FFA Livestock Judging Contest and contest team score, advisors were asked to respond (using a five point Likert type scale) to twenty four statements expressing attitudes toward the contest. Ten of the statements represented a negative attitude, ten represented a positive attitude and four were neutral. Negative statements were recorded with reverse values and a total attitude scale was computed. Total attitude was then correlated with team score. As Table 1 reports the Pearson Product Moment Correlation coefficient was .07.
Table 1

DEMOGRAPHIC DATA, MEANS, STANDARD DEVIATIONS
AND CORRELATION WITH CONTEST TEAM SCORES

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>MEAN</th>
<th>STANDARD DEVIATION</th>
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<tbody>
<tr>
<td>Percent of curriculum composed of animal science</td>
<td>43</td>
<td>37.14</td>
<td>25.60</td>
<td>.08</td>
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<tr>
<td>Number of FFA contests entered above chapter level</td>
<td>43</td>
<td>8.56</td>
<td>5.11</td>
<td>-.06</td>
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<tr>
<td>Percent of after school time spent preparing for the contest</td>
<td>40</td>
<td>23.65</td>
<td>26.18</td>
<td>.23</td>
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<tr>
<td>Years of advisor teaching experience</td>
<td>38</td>
<td>8.21</td>
<td>6.71</td>
<td>-.23</td>
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<tr>
<td>State cattle population</td>
<td>44</td>
<td>2462.45*</td>
<td>2527.52</td>
<td>.40</td>
</tr>
<tr>
<td>State sheep population</td>
<td>44</td>
<td>299.16*</td>
<td>458.25</td>
<td>.22</td>
</tr>
<tr>
<td>State hog population</td>
<td>44</td>
<td>1762.18*</td>
<td>3837.70</td>
<td>.20</td>
</tr>
<tr>
<td>Number of practice sessions</td>
<td>42</td>
<td>48.50</td>
<td>99.39</td>
<td>.40</td>
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<tr>
<td>Number of livestock judging contests participated in</td>
<td>44</td>
<td>9.34</td>
<td>10.86</td>
<td>.40</td>
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<tr>
<td>Size of school</td>
<td>43</td>
<td>654.23</td>
<td>528.93</td>
<td>-.17</td>
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<tr>
<td>Student population in departments</td>
<td>44</td>
<td>111.43</td>
<td>137.01</td>
<td>-.04</td>
</tr>
<tr>
<td>Advisor attitude</td>
<td>43</td>
<td>77.02</td>
<td>5.12</td>
<td>.07</td>
</tr>
</tbody>
</table>

* 1,000 head
13. Contestant and Advisor Attitude

To determine the relationship between contestant's attitude and advisor's attitude toward the National FFA Livestock Judging Contest, both total attitude scores were correlated using the Pearson Product Moment Correlation. As Table 2 indicates, the correlation coefficient was .09.

14. Contestant's Attitude Toward the Contest

To determine if there is a relationship between the contestant's total attitude toward the National FFA Livestock Judging Contest and individual contest score, the variables were correlated using the Pearson Product Moment Correlation. A coefficient of .07 was found. Table 3 presents the data.
Table 2

CONTESTANT AND ADVISOR MEAN ATTITUDES TOWARD THE CONTEST, CORRESPONDING STANDARD DEVIATIONS AND CORRELATION COEFFICIENT

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Students</td>
<td>109</td>
<td>76.62</td>
<td>4.04</td>
<td>.09</td>
</tr>
<tr>
<td>Advisors</td>
<td>44</td>
<td>77.02</td>
<td>5.13</td>
<td></td>
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**Table 3**

**CONTESTANT ATTITUDE AND INDIVIDUAL SCORE MEANS, STANDARD DEVIATIONS, AND CORRELATION COEFFICIENT**

<table>
<thead>
<tr>
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<th>N</th>
<th>MEAN</th>
<th>STANDARD DEVIATION</th>
<th>r</th>
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</thead>
<tbody>
<tr>
<td><strong>Attitude</strong></td>
<td>109</td>
<td>76.35</td>
<td>4.54</td>
<td>.07</td>
</tr>
<tr>
<td><strong>Score</strong></td>
<td>109</td>
<td>666.35</td>
<td>51.18</td>
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Table 4

CONTESTANT DATA MEANS, STANDARD DEVIATIONS, AND CORRELATIONS WITH INDIVIDUAL CONTEST SCORE

<table>
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<tr>
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<th>MEAN</th>
<th>STANDARD DEVIATION</th>
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<tbody>
<tr>
<td>Age</td>
<td>108</td>
<td>17.38</td>
<td>5.33</td>
<td>.03</td>
</tr>
<tr>
<td>Years of enrollment</td>
<td>108</td>
<td>3.52</td>
<td>.93</td>
<td>.16</td>
</tr>
<tr>
<td>Years on team</td>
<td>108</td>
<td>2.47</td>
<td>1.29</td>
<td>.15</td>
</tr>
<tr>
<td>Number of contestants</td>
<td>105</td>
<td>1.9</td>
<td>3.08</td>
<td>.11</td>
</tr>
</tbody>
</table>
15. **Contestant Age**

To determine the relationship between the age of the contestant and individual score, the variables were tested using the Pearson Product Moment Correlation. As indicated in table 4 the correlation coefficient was found to be .03.

16. **Years of Enrollment in Vocational Agriculture**

The students were asked to indicate the number of years they had been enrolled in vocational agriculture to determine if there was a relationship between individual score and the number of years of enrollment. A Pearson Product Moment Correlation was computed. The data presented in table 4 indicates the correlation coefficient to be .16.

17. **Number of Years on the Livestock Judging Team**

Individual scores were correlated with the number of years the student had been a member of the livestock judging team. This was done to answer the question, "What is the relationship between the number of years a contestant has been a member of the FFA livestock judging team and individual score?". The Pearson Product Moment Correlation coefficient was found to be .15. Table 4 presents the data.
18. **Number of FFA Contests Entered**

To find what relationship existed between the number of FFA contests other than livestock judging that individual team member had participated in above the chapter level and individual contest team score, a Pearson Product Moment Correlation was computed. Table 4 reports the correlation to be .11.

19. **Geographical Area**

To determine if geographical area influences team scores, the states that participated were divided into the four regions designated by the FFA. The regions are Eastern, Central, Western, and Southern (refer to Appendix B). The mean contest team scores of the region indicate differences among the areas. As Table 5 indicates, the region with the highest score was Central followed by Western, Southern and Eastern. The mean scores ranged from a low of 1865.40 for the Eastern region to a high of 2065.50 for the Central region.
Table 5

MEAN TEAM SCORES AND STANDARD DEVIATIONS BY REGION

<table>
<thead>
<tr>
<th>Region</th>
<th>N</th>
<th>Mean Team Scores</th>
<th>Standard Deviation</th>
</tr>
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<tbody>
<tr>
<td>Western</td>
<td>14</td>
<td>2019.93</td>
<td>135.00</td>
</tr>
<tr>
<td>Central</td>
<td>12</td>
<td>2065.50</td>
<td>99.53</td>
</tr>
<tr>
<td>Southern</td>
<td>8</td>
<td>1969.50</td>
<td>111.20</td>
</tr>
<tr>
<td>Eastern</td>
<td>10</td>
<td>1865.40</td>
<td>165.81</td>
</tr>
<tr>
<td>All Teams</td>
<td>44</td>
<td>1988.07</td>
<td>146.22</td>
</tr>
</tbody>
</table>
20. **Source of Advisor Expertise**

To determine if team score is influenced by the source of advisor expertise, advisors were asked to rate the importance of eight sources of expertise. Mean team scores were calculated for those who rated a source "of extreme importance". As Table 6 indicates, the highest mean score was achieved by the three advisors who indicated "undergraduate courses" as being extremely important. It should be noted that two of these three also indicated collegiate judging team (second highest mean) as being extremely important. The lowest mean score was by those who indicated "self taught" as extremely important. Table 7 shows the results of the rating scales tested with team scores using the Pearson Product Moment Correlation. The correlation coefficient for "FFA or 4-H livestock judging team" was .25 and "member of collegiate livestock judging team" was .30.
Table 6

MEAN SCORES OF TEAMS WHOSE ADVISORS INDICATED SOURCES OF EXPERTISE AS "EXTRAERELY IMPORTANT"

<table>
<thead>
<tr>
<th>SOURCE OF EXPERTISE</th>
<th>N</th>
<th>MEAN SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-taught</td>
<td>12</td>
<td>1943.92</td>
</tr>
<tr>
<td>Undergraduate Courses</td>
<td>3</td>
<td>2112.00</td>
</tr>
<tr>
<td>Graduate Courses</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Workshops</td>
<td>5</td>
<td>2054.00</td>
</tr>
<tr>
<td>Farm or ranch work</td>
<td>17</td>
<td>1969.82</td>
</tr>
<tr>
<td>FFA Livestock Judging Team</td>
<td>14</td>
<td>2037.00</td>
</tr>
<tr>
<td>Collegiate Livestock Judging Team</td>
<td>9</td>
<td>2078.00</td>
</tr>
<tr>
<td>Other source</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>
Table 7

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>N</th>
<th>MEAN</th>
<th>STANDARD DEVIATION</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-taught</td>
<td>41</td>
<td>3.76*</td>
<td>1.22</td>
<td>-.10</td>
</tr>
<tr>
<td>Undergraduate courses</td>
<td>42</td>
<td>2.70</td>
<td>1.33</td>
<td>.02</td>
</tr>
<tr>
<td>Graduate courses</td>
<td>41</td>
<td>1.15</td>
<td>1.44</td>
<td>.14</td>
</tr>
<tr>
<td>Workshops</td>
<td>42</td>
<td>2.54</td>
<td>1.66</td>
<td>-.02</td>
</tr>
<tr>
<td>Farm or ranch work</td>
<td>42</td>
<td>3.88</td>
<td>1.38</td>
<td>.14</td>
</tr>
<tr>
<td>FFA team member</td>
<td>42</td>
<td>3.64</td>
<td>1.69</td>
<td>.25</td>
</tr>
<tr>
<td>Collegiate team member</td>
<td>40</td>
<td>1.95</td>
<td>2.26</td>
<td>.30</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>.57</td>
<td>1.45</td>
<td>-.04</td>
</tr>
<tr>
<td>Team score</td>
<td>44</td>
<td>1988.07</td>
<td>146.22</td>
<td></td>
</tr>
</tbody>
</table>

*1 = of no importance      5 = of extreme importance
To answer the question, "Does the number of teachers in the vocational agriculture department influence team score?", advisors were asked to indicate the number of teachers in their departments. Twenty-four advisors indicated they taught in single teacher departments. The other twenty advisors indicated the number of vocational agriculture teachers in their department ranged from two to eight. These were grouped together as multiple teacher departments. As Table 8 indicates, the mean score of the teams from single teacher departments was 2007.84. The mean score of the teams from multiple teacher departments was 1964.35. The difference between mean score from single teacher departments and mean score from multiple teacher departments was 43.39.
### Table 8

**MEAN SCORES AND STANDARD DEVIATIONS OF TEAMS FROM SINGLE AND MULTIPLE TEACHER DEPARTMENTS**

<table>
<thead>
<tr>
<th>NUMBER OF ADVISORS IN DEPARTMENT</th>
<th>N</th>
<th>MEAN SCORE</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>24</td>
<td>2007.83</td>
<td>135.22</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>1965.69</td>
<td>164.48</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>2008.00</td>
<td>150.56</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>1967.50</td>
<td>137.89</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>1698.00</td>
<td>0.0</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>2076.00</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**All multiple-teacher departments**

<table>
<thead>
<tr>
<th>N</th>
<th>MEAN SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>1964.35</td>
</tr>
</tbody>
</table>

**All teams**

<table>
<thead>
<tr>
<th>N</th>
<th>MEAN SCORE</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>1988.07</td>
<td>146.22</td>
</tr>
</tbody>
</table>
22. Method of Team Member Selection

Advisors indicated the method used to select the members for their livestock teams in order to answer the question, "Does the method of team member selection influence team scores?" The mean scores for those indicating each separate method were calculated. Table 9 shows that members "selected by the advisors" produced the highest mean score (2097.35) followed by "other" methods. The most commonly specified "other" method was participation in county and state fairs. The method that produced the third highest scores was "selection of the three highest scoring individuals at the state contest." The method producing the lowest mean score (1950.30) was "members chosen on the basis of a chapter contest". No advisor reported using a written exam as the basis of selection. These findings revealed a range of 147.05 points.

23. Male and Female Advisors

To determine if the sex of the advisor influenced team score, mean scores were calculated for both male and female advisors. As Table 10 indicates, the mean score of the teams advised by the two females scored higher (28.74 points) than the teams advised by males.
Table 9

METHOD OF TEAM SELECTION AND MEAN TEAM SCORE

<table>
<thead>
<tr>
<th>METHOD</th>
<th>N</th>
<th>MEAN TEAM SCORE</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter contest</td>
<td>27</td>
<td>1950.30</td>
<td>151.23</td>
</tr>
<tr>
<td>Written exam</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Picked by advisor</td>
<td>8</td>
<td>2097.35</td>
<td>115.22</td>
</tr>
<tr>
<td>High scoring individuals at state contest</td>
<td>3</td>
<td>1960.00</td>
<td>85.44</td>
</tr>
<tr>
<td>Other methods</td>
<td>6</td>
<td>2026.33</td>
<td>119.90</td>
</tr>
<tr>
<td>All teams</td>
<td>44</td>
<td>1988.07</td>
<td>146.22</td>
</tr>
</tbody>
</table>
Table 10

MEAN SCORES AND STANDARD DEVIATIONS OF TEAMS
WITH MALE AND FEMALE ADVISORS

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>MEAN SCORE</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teams with male advisors</td>
<td>42</td>
<td>1986.76</td>
<td>146.12</td>
</tr>
<tr>
<td>Teams with female advisors</td>
<td>2</td>
<td>2015.50</td>
<td>205.77</td>
</tr>
<tr>
<td>All teams</td>
<td>44</td>
<td>1988.07</td>
<td>146.22</td>
</tr>
</tbody>
</table>
24. **Educational Degree Held by the Advisor**

To answer the question of whether team scores are influenced by the educational level held by the advisor, each advisor was asked to indicate the educational level he or she had attained.

Table 11 shows there were differences among the mean team scores of advisors having different educational levels. Only one advisor held less than a bachelors degree. The corresponding team score for this advisor was the highest of the four categories. Advisors with masters degrees (n=8) had the next highest mean score, followed by those with bachelors degrees (n=30). The lowest mean score corresponded with those holding post masters (n=5) degrees.

25. **Type of Agriculture in the School District**

Advisors were asked to indicate the type of agriculture that was predominant in their school districts in order to determine if team scores were influenced by the type of agriculture in the school districts. Three advisors specified "predominantly crop" which yielded the highest mean team score. The next highest was "predominantly livestock" specified by nine advisors. Third highest was "livestock and crop" specified by 30 advisors.
Table 11

MEAN CONTEST TEAM SCORES AND STANDARD DEVIATIONS BY ADVISORS EDUCATIONAL LEVEL

<table>
<thead>
<tr>
<th>EDUCATIONAL LEVEL</th>
<th>N</th>
<th>TEAM MEAN SCORE</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than bachelors</td>
<td>1</td>
<td>2041.00</td>
<td>0.0</td>
</tr>
<tr>
<td>Bachelors</td>
<td>30</td>
<td>1983.33</td>
<td>146.42</td>
</tr>
<tr>
<td>Masters</td>
<td>8</td>
<td>2007.37</td>
<td>148.26</td>
</tr>
<tr>
<td>Postmasters</td>
<td>5</td>
<td>1975.00</td>
<td>184.63</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>1988.07</td>
<td>146.22</td>
</tr>
</tbody>
</table>
Fourth highest mean score was from the two teams whose advisors specified "other". The "other" was described as "dairy". The data are presented in Table 12.

26. **Type of School**

In order to determine whether the type of school influences team scores, mean team scores for teams from each of the type schools were calculated. Forty-three of the 44 advisors responded that they taught at comprehensive high schools. The other advisor taught at a vocational school. The team from the vocational school had a lower score than the mean score of the teams from the comprehensive schools. The data are reported in Table 13.

27. **Male and Female Contestants**

To determine the influence of the sex of the contestants, the mean scores of both male and female contestants were calculated. Of the 109 contestants who returned questionnaires, 79 were males and 30 were females. The mean score for the males was 665.53 and the mean score for the females was 668.50. Table 14 reports the data.
Table 12

MEAN SCORES AND STANDARD DEVIATIONS OF TEAMS FROM SCHOOL DISTRICTS WITH DIFFERENT TYPES OF AGRICULTURE

<table>
<thead>
<tr>
<th>TYPE OF AGRICULTURE</th>
<th>N</th>
<th>MEAN TEAM SCORE</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predominantly livestock</td>
<td>9</td>
<td>2006.00</td>
<td>82.05</td>
</tr>
<tr>
<td>Predominantly crop</td>
<td>3</td>
<td>2086.33</td>
<td>64.36</td>
</tr>
<tr>
<td>Predominantly livestock and crop</td>
<td>30</td>
<td>1977.77</td>
<td>166.62</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>1914.50</td>
<td>78.48</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>1988.07</td>
<td>146.22</td>
</tr>
</tbody>
</table>
Table 13

CONTEST TEAM MEAN SCORES AND STANDARD DEVIATIONS BY TYPE OF SCHOOL

<table>
<thead>
<tr>
<th>TYPE OF SCHOOL</th>
<th>N</th>
<th>MEAN SCORE</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teams from comprehensive schools</td>
<td>43</td>
<td>1989.14</td>
<td>147.77</td>
</tr>
<tr>
<td>Teams from vocational schools</td>
<td>1</td>
<td>1942.00</td>
<td>0.0</td>
</tr>
<tr>
<td>All teams</td>
<td>44</td>
<td>1988.07</td>
<td>146.22</td>
</tr>
</tbody>
</table>
Table 14

MEAN SCORES AND CORRESPONDING STANDARD DEVIATIONS FOR MALE AND FEMALE CONTESTANTS

<table>
<thead>
<tr>
<th>SEX OF CONTESTANTS</th>
<th>N</th>
<th>MEAN</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>79</td>
<td>665.53</td>
<td>54.77</td>
</tr>
<tr>
<td>Females</td>
<td>30</td>
<td>668.50</td>
<td>40.95</td>
</tr>
<tr>
<td>Total</td>
<td>109</td>
<td>666.35</td>
<td>51.17</td>
</tr>
</tbody>
</table>
Chapter four dealt with the analysis and presentation of the data. The purpose of the study was reiterated and a description of the population was given. Data analysis of each of the research questions were presented. Additional data not dealing directly with the research questions are presented in Appendix H.
Chapter 5

SUMMARY, FINDINGS, DISCUSSION, AND RECOMMENDATIONS

Chapter 5 contains a summary of the study procedures, conclusions drawn from the findings, recommendations based on the conclusions, and a discussion of the study results.

SUMMARY OF STUDY

Purpose of Study

The primary purpose of the study was to determine the factors associated with the success of teams participating in the 1981 National FFA Livestock Judging Contest. Rationale for the study centered around concerns about FFA contests expressed by educators. A secondary purpose was to determine the attitudes of both students and advisors toward the contest.

Investigative Procedures

A two part instrument was developed to obtain data from the contestants in the contest and their advisors. One part of the instrument was designed to obtain information about contestants and advisors regarding themselves, their schools...
and communities, their team organizations, amount of time spent in contest preparation, etc. The other part was designed to measure the attitudes of contestants and advisors toward the contest. The questionnaires were distributed to the respondents just prior to the 1981 contest in Kansas City. The instruments were collected from the subjects as soon as they were completed.

The data were then analyzed using group mean comparisons and the Pearson Product Moment Correlation. Computer analysis was used utilizing the Statistical Package for the Social Sciences. Variables, such as the amount of time spent preparing for the contest, advisor experience and expertise, animal populations, contestant and advisor attitudes, etc., were investigated for the purpose of answering 27 research questions.

FINDINGS

The following conclusions are based on the results of the data analysis using group means and the Pearson Product Moment Correlations. To interpret the coefficients, Best (1981:255) presents the following standards:

.00 to .20 negligible
.20 to .40 low
.40 to .60 moderate
.60 to .80 substantial
.80 to 1.00 high to very high

The judgement of the researcher was used to evaluate differences in group means.

1. There was negligible relationship between the percent of the vocational agriculture program composed of animal science and contest team score.

2. There was a negligible relationship between the number of FFA contests other than livestock judging that the chapter participated in above the chapter level and contest team score.

3. There was a low positive relationship between the amount of time spent in preparing for the National FFA Livestock Judging Contest and contest team score.

4. There was a low negative relationship between the years of the advisor's vocational agriculture teaching experience and contest team score.

5. There was a moderate positive relationship between the state population of cattle and contest team score.

6. There was a low positive relationship between state population of sheep and contest team score.

7. There was a low positive relationship between the state population of hogs and contest team score.

8. There was a moderate positive relationship between the number of livestock judging practice sessions
and contest team score.

9. There was a moderate positive relationship between the number of livestock judging contests that the chapter participated in before reaching the national contest and contest team score.

10. There was a negligible relationship between the size of the school and contest team score.

11. There was a negligible relationship between the size of the student population in the vocational agriculture program and contest team score.

12. There was a negligible relationship between the advisor's attitude toward the National FFA Livestock Judging Contest and contest team score.

13. There was a negligible relationship between contestant's and advisor's attitude toward the National FFA Livestock Judging Contest.

14. There was a negligible relationship between the contestant's attitude toward the National FFA Livestock Judging Contest and individual contest score.

15. There was a negligible relationship between the age of the contestant and individual contest score.

16. There was a negligible relationship between the number of years of enrollment in the vocational agriculture program and individual contest score.

17. There was a negligible relationship between the
number of years a contestant had been a member of the livestock judging team and individual contest score.

18. There was a negligible relationship between the number of FFA contests other than livestock judging that a contestant has competed in above the chapter level and individual contest score.

19. Contest team score was influenced by geographical area.

20. Contest team score was influenced by the source of advisor expertise.

21. Contest team score was influenced by the number of teachers in the vocational agriculture department.

22. Contest team score was influenced by the method of team member selection.

23. Although there was a difference in the mean team scores of teams with male advisors and teams with female advisors, the small n size of females is so low that one could not confidently conclude that the sex of the advisor influenced contest team score.

24. Due to the low n size of advisors holding other than a bachelor's degree, one cannot confidently conclude that contest team score was influenced by the educational degree held by the advisor.

25. The low n size for the type of agriculture in the community other than "predominantly livestock and
crop" would preclude the conclusion that contest team score was influenced by the type of agriculture in the school district.

26. Due to the small n size for the vocational school, one cannot confidently conclude that the type of school influenced contest team score.

27. Although the mean score of the female contestants was slightly higher than the male contestants, the difference is not substantial enough to warrant the assumption that individual contest score was influenced by the sex of the contestant.

DISCUSSION

The primary purpose of the study was to determine the factors associated with the success of those teams that participated in the 1981 National FFA Livestock Judging Contest. The following are factors that, as a result of the findings of the study, have been interpreted as being associated with success in the contest.

1. **Amount of Time Spent on the Contest**

Those teams who spent more time preparing for the contest tended to score higher. This was indicated by the positive correlation between the percent of after school time spent on livestock judging and team score examined in
conjunction with the positive correlation between the number of livestock judging practice sessions and team score.

2. **Years of Advisor Experience**

Teams with advisors who had fewer years of vocational agriculture teaching experience tended to score higher. This is probably due to the more recent training received by the less experienced advisors. Those advisors whose teams scored higher, listed "undergraduate courses" and "collegiate livestock judging team" as being extremely important sources of their expertise.

3. **State Livestock Populations**

State populations of cattle, hogs, and sheep were all positively correlated with team score, which indicates that those teams from states with high livestock populations tended to score higher. This could reflect the easier access of the students to animals.

4. **Number of Livestock Judging Contests Entered**

Those teams which entered more livestock judging contests tended to score higher. Those teams with more contest experience should have gained more expertise, self confidence, and finesse than those with less experience. The differences in the number of contests entered could reflect the different forms of contest eliminations among the various states. Some states use the process of lower
level contest winners proceeding to a higher level contest which ultimately culminates in the state contest. Other states allow all chapters to participate in the state contest.

5. Geographic Area

Teams from the Central and Western Regions tended to score higher than did teams from the East and South. This is probably due to the correlation between livestock population and team score since the Central and Western Regions have a higher population of livestock. Although sheep populations were almost non-existent in parts of the South, only two advisors felt that sheep should be dropped from the contest.

6. Source of Advisor Expertise

Those teams with advisors who rated "undergraduate courses," "collegiate livestock judging team," and "FFA or 4-H livestock judging team" as being extremely important sources of their expertise tended to score higher than those teams whose advisors rated "farm or ranch work" or "self taught" as being extremely important. This finding, in conjunction with the negative correlation between the number of years of advisor experience and team scores, indicates that those advisors who have had more recent and more formal training tend to coach higher scoring teams.
7. **Number of Teachers in the Department**

Teams from single teacher vocational agriculture departments scored higher than those teams from multiple teacher departments. This finding could be due to more freedom in selecting curriculum and work hours in the single teacher departments.

8. **Method of Team Member Selection**

Those teams selected by the advisors tended to score higher than those teams selected by some other method. Advisors who picked their team probably did so on the basis of each individual's past performance. Those who were chosen as the basis of a chapter contest were chosen on the basis of one success rather than a series of successes.

A secondary purpose of the study was to determine the attitudes of the advisors and the contestants toward the contest. Both contestants and advisors tended to have a positive attitude toward the contest. No relationship was detected between contest team score and advisor attitude, individual score and contestant attitude, and contestant attitude and advisor attitude.

**RECOMMENDATIONS**

Based on the findings of the study, the following activities are recommended to enhance success at the
National FFA Livestock Judging Contest.

1. Additional after school time should be spent in preparing the livestock judging team.
2. Advisors should obtain current technical training in livestock judging.
3. An attempt should be made to expose teams to the maximum number and variety of livestock. For teams from states with low livestock populations, one approach is to travel through states with larger populations of livestock.
4. Teams should participate in as many livestock judging contests as possible.
5. Future advisors should become involved in FFA or 4-H livestock judging and should participate on collegiate livestock judging teams whenever possible.
6. Agriculture teacher education programs should advise undergraduates in the agricultural education program to take courses related to livestock judging.
7. Advisors should select the members of the livestock judging team.

The following recommendations are made for the conduct of the National FFA Livestock Judging Contest.

1. The placing and grading rings for the National FFA Livestock Judging Contest should not be changed.
2. The results of the study should be made available
to vocational agriculture teachers, agriculture teacher educators, and state agricultural education supervisors.

3. The National FFA Board of Directors should be informed of the results of the study.

4. The study should be conducted on a yearly basis to provide longitudinal data for determining trends in the contest.

5. A similar study should be conducted for the other National FFA Contests.

CHAPTER SUMMARY

This chapter presented a summary including the purpose of the study and investigative procedure. Based on the data analysis, twenty-seven findings were presented. From these findings, eight factors were determined to be associated with success in the National FFA Livestock Judging Contest. Recommendations to enhance success in the contest were made along with recommendations for the conduct of the contest. Attitudes of the contestants and their advisors toward the contest were discussed.
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APPENDIX A

STATE POPULATIONS OF

CATTLE, SHEEP, AND HOGS
## APPENDIX A

### LIVESTOCK CENSUS - U.S. - 1979

1000 Head

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<thead>
<tr>
<th>STATE</th>
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* 1978 figures
APPENDIX B

STATES COMPOSING THE
FOUR FFA REGIONS
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<td>West Virginia</td>
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APPENDIX C

MEANS AND STANDARD DEVIATIONS

OF ATTITUDES OF ADVISORS

AND STUDENTS
The basic purpose of the livestock judging contest is to provide motivation for students to learn livestock evaluation. *Advisor Mean: 4.36, Standard Deviation: .68; Student Mean: 4.22, Standard Deviation: .59*

Our livestock program will not be considered a good program unless we win livestock judging contests. *Advisor Mean: 1.84, Standard Deviation: .89; Student Mean: 1.79, Standard Deviation: .83*

I would favor separate contests, one for cattle judging, one for hog judging and one for sheep judging. *Advisor Mean: 1.70, Standard Deviation: 1.13; Student Mean: 2.06, Standard Deviation: 1.15*

The people back home will be disappointed in our team if we don't win this contest. *Advisor Mean: 2.02, Standard Deviation: 1.07; Student Mean: 1.93, Standard Deviation: .92*

I consider animal grading to be the most important part of the national livestock judging contest. *Advisor Mean: 2.78, Standard Deviation: 1.03; Student Mean: 2.76, Standard Deviation: 1.00*

Our school administrators view the livestock judging contest unfavorably. *Advisor Mean: 1.93, Standard Deviation: 1.11; Student Mean: 2.26, Standard Deviation: 1.14*

The livestock judging contest helps teach skills that will make students more employable. *Advisor Mean: 4.39, Standard Deviation: .69; Student Mean: 4.08, Standard Deviation: .73*

The national livestock judging contest has too many classes of livestock to judge. *Advisor Mean: 1.79, Standard Deviation: .79; Student Mean: 1.95, Standard Deviation: .76*

The classes of livestock in the national contest were a good representation of the type of livestock grown in our school area. *Advisor Mean: 2.56, Standard Deviation: .87; Student Mean: 4.16, Standard Deviation: .91*

The livestock contest motivated most of the students in my livestock classes to work harder to learn about livestock. *Advisor Mean: 3.82, Standard Deviation: .84; Student Mean: 3.58, Standard Deviation: .87*

I consider animal placing to be the most important part of the national livestock judging contest. *Advisor Mean: 3.14, Standard Deviation: 1.00; Student Mean: 3.12, Standard Deviation: 1.09*
12. When I came to Kansas City, I felt that our team had a very good chance to win the livestock judging contest. 3.70 1.03 3.90 .96
13. Only those students who make good grades in all their courses make good livestock judges. 2.39 1.15 1.69 .80
14. The students who are on the livestock judging team learned much more about livestock evaluation than those students who were not on the team. 4.23 1.15 4.19 .88
15. The skills learned from the livestock judging contest are not relevant to today's livestock industry. 1.54 .59 1.43 .63
16. I consider giving oral reasons to be the most important part of the national livestock judging contest. 3.18 1.15 3.23 1.09
17. The livestock judging contest is the worst contest in the FFA. 1.16 .43 1.15 .45
18. The livestock judging contest only appeals to students who come from farms or ranches. 1.86 .88 1.87 .75
19. The livestock judging contest helps to motivate those students who make poor grades. 3.39 1.25 2.99 .89
20. Winning is not important as long as students have learned to evaluate livestock. 3.88 .98 3.74 1.13
21. I would rather use the money spent on breakfasts for contest participants to help pay for our expenses at the National Convention. 2.63 1.17 2.73 1.04
22. Students are motivated to do a better job in class because of the livestock judging contest. 3.91 .74 3.41 .85
23. Training a team to compete in the national livestock judging contest really takes too much time.

<table>
<thead>
<tr>
<th>Advisor Mean</th>
<th>S.D.</th>
<th>Student Mean</th>
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<td>.80</td>
<td>1.94</td>
<td>.75</td>
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24. Preparing for the national livestock judging contest took more time than it was worth.

<table>
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<th>Advisor Mean</th>
<th>S.D.</th>
<th>Student Mean</th>
<th>S.D.</th>
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<tbody>
<tr>
<td>1.70</td>
<td>.76</td>
<td>1.56</td>
<td>.74</td>
</tr>
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* Based on 5 point scale:  
1 = strongly disagree  
2 = disagree  
3 = undecided  
4 = agree  
5 = strongly agree
NATIONAL FFA LIVESTOCK JUDGING CONTEST EVALUATION FORM

1. State ____________________________ 3. Sex ____________________________
2. Name ____________________________ 4. Age ____________________________
5. Years of agriculture teaching experience (including this one) ____________________________
6. Education
   - Less Than Bachelors ____________________________
   - Bachelors ____________________________
   - Masters ____________________________
   - Post Masters ____________________________
   - Major ____________________________

For questions 7-9 use the following scale: NA = Not Applicable, 1 = of no importance, and 5 = of extreme importance.

7. How important were each of the following methods in obtaining your skill in livestock judging?
   - Self taught
   - Undergraduate course(s)
   - Graduate course(s)
   - In service workshops
   - Working on farm or ranch
   - FFA or 4-H judging team
   - Collegiate judging team
   - Other (specify) ____________________________

8. How important to your students is each of the following benefits for participating in the National FFA Livestock Judging Contest?
   - Meeting students from other states
   - Learning to win or lose graciously
   - Prestige of winning
   - Learning about livestock evaluation
   - Other specify ____________________________

9. How important were each of the following methods for obtaining funds for your team to attend the National FFA Convention and take part in the National FFA Livestock Judging Contest?
   - Used chapter FFA funds
   - Team members conducted fund raising
   - A sponsor donated the money
   - The school administration paid the expense
   - Team members paid their own expenses
   - State support
   - National FFA Foundation support
   - Other (please specify) ____________________________

10. Which of the following best describes the type of school where you teach?
    - (A) Comprehensive (both vocational and academic) high school
    - (B) Vocational School
    - (C) Other (please specify) ____________________________

11. Circle the numbers representing the lowest and the highest grade in your school.
    K 1 2 3 4 5 6 7 8 9 10 11 12

12. What is the total number of students in your school? ____________________________

13. What is the number of students in your vocational agriculture department? ____________________________

14. What is the number of teachers in your vocational agriculture department? ____________________________

PLEASE CONTINUE ON BACK
15. Which of the following best describes the type of agriculture in your school district? Select one.
   ____ Predominantly livestock  ____ Livestock and crop
   ____ Predominantly crop  ____ Other (specify)

16. What percent of the vocational agriculture curriculum that you personally teach is composed of animal science units? ______%

17. What percent of the units that you teach in animal science consists of units in livestock evaluation? ______%

18. During the past year, what percent of the time you spent working with students after school hours was devoted to training the three members of this judging team? ______%

19. How many livestock judging practice sessions did your team have after the state contest, in preparation for the national contest? ______

20. How many total livestock judging practice sessions did your team have during the past year? ______

21. How many livestock judging contests did your chapter participate in before reaching the national contest? ______

22. During the past year, how many FFA Contests (other than livestock judging) did your chapter complete in above the chapter level? ______

23. Including this one, how many state winning livestock judging teams have you coached? ______

24. Other than livestock judging teams, how many state winning judging teams have you coached? ______

25. In your opinion, which of the following aspects of livestock evaluation was the most difficult to teach? Please use 1, 2 and 3 where 1 = most difficult and 3 = least difficult.
   ____ (A) Animal placing  ____ (B) Grading  ____ (C) Oral reasons

26. Which of the following best describes the method that was used to select the members for your livestock judging team? Check one.
   ____ (A) The members were chosen on the basis of a chapter contest in livestock judging.
   ____ (B) The members were chosen on the basis of scores on a livestock written exam.
   ____ (C) The members were picked by the advisor.
   ____ (D) The members are not necessarily from one chapter, but represent the high scoring individuals at the state contest.
   ____ (E) Other method (please specify)

27. Check any of the following species which you think should be dropped from the National FFA Livestock Judging Contest.
   Beef  ____  Sheep  ____  Swine  ____

28. How difficult was it to find each of the following species in your school area to use in practicing livestock judging? Please circle the correct response where 1 = could not find; 2 = had some difficulty; 3 = had no difficulty.
   Cattle  1  2  3  Sheep  1  2  3  Swine  1  2  3
Please react to the statements below by circling your response.

SA = Strongly Agree
A = Agree
U = Undecided
D = Disagree
SD = Strongly Disagree

1. The basic purpose of the livestock judging contest is to provide motivation for students to learn livestock evaluation.

2. Our livestock program will not be considered a good program unless we win livestock judging contests.

3. I would favor separate contests, one for cattle judging, one for hog judging and one for sheep judging.

4. The people back home will be disappointed in our team if we don’t win this contest.

5. I consider animal grading to be the most important part of the national livestock judging contest.

6. Our school administrators view the livestock judging contest unfavorably.

7. The livestock judging contest helps teach skills that will make students more employable.

8. The national livestock judging contest has too many classes of livestock to judge.

9. The classes of livestock in the national contest were a good representation of the type of livestock grown in our school area.

10. The livestock contest motivated most of the students in my livestock classes to work harder to learn about livestock.

11. I consider animal placing to be the most important part of the national livestock judging contest.

12. When I came to Kansas City, I felt that our team had a very good chance to win the livestock judging contest.

13. Only those students who make good grades in all their courses make good livestock judges.

14. The students who are on the livestock judging team learned much more about livestock evaluation than those students who were not on the team.

15. The skills learned from the livestock judging contest are not relevant to today’s livestock industry.

16. I consider giving oral reasons to be the most important part of the national livestock judging contest.

17. The livestock judging contest is the worst contest in the FFA.

18. The livestock judging contest only appeals to students who come from farms or ranches.

19. The livestock judging contest helps to motivate those students who make poor grades.

20. Winning is not important as long as students have learned to evaluate livestock.

21. I would rather use the money spent on breakfasts for contest participants to help pay for our expenses at the National Convention.

22. Students are motivated to do a better job in class because of the livestock judging contest.

23. Training a team to compete in the national livestock judging contest really takes too much time.

24. Preparing for the national livestock judging contest took more time than it was worth.
APPENDIX E

INSTRUMENT FOR STUDENTS
NATIONAL FFA LIVESTOCK JUDGING CONTEST EVALUATION FORM

1. State __________________________ 3. Sex __________________________

2. Name’s Contest Number __________________________ 4. Age ____________

5. Years of enrollment in vocational agriculture (including this one) ____________

For question 6 use the following scale: NA = Not Applicable, 1 = of little importance, and 5 = of extreme importance.

6. How important to you is each of the following benefits for participating in the national livestock judging contest?

- Meeting students from other states NA 1 2 3 4 5
- Learning to win or lose graciously NA 1 2 3 4 5
- Prestige of winning NA 1 2 3 4 5
- Learning about livestock evaluation NA 1 2 3 4 5
- Other (specify) NA 1 2 3 4 5

7. How many livestock judging practice sessions did your team have after winning the state contest in preparation for the national contest? __________________________

8. What was the total number of livestock judging practice sessions your team had during the past year? __________________________

9. How many FFA Contests (other than livestock judging) did you compete in above the chapter level (during the past year)? __________________________

10. Including this one, how many years have you been on an FFA livestock judging team? __________________________

11. Which of the following aspects of livestock evaluation was the most difficult to learn? Please use 1, 2 and 3 where 1 = most difficult and 3 = least difficult.

   _____ (A) Animal placing _____ (B) Grading _____ (C) Oral reasons

12. Which of the following best describes the method that was used to select the members of your livestock judging team? Check one.

   _____ (A) The members were chosen on the basis of a chapter contest in livestock judging.
   _____ (B) The members were chosen on the basis of scores on a livestock written exam.
   _____ (C) The members were chosen by the advisor.
   _____ (D) The members are not necessarily from one chapter, but represent the high scoring individuals at the state contest.
   _____ (E) Other method (please specify) __________________________

13. Check any of the following species which you think should be dropped from the national livestock judging contest.

   _____ Beef _____ Sheep _____ Swine

PLEASE CONTINUE ON BACK
Please react to the statements below by circling your response

SA = Strongly Agree
A = Agree
U = Undecided
D = Disagree
SD = Strongly Disagree

1. The basic purpose of the livestock judging contest is to provide motivation for students to learn livestock evaluation.  
   SA A U D SD

2. Our livestock program will not be considered a good program unless we win livestock judging contests.  
   SA A U D SD

3. I would favor separate contests, one for cattle judging, one for hog judging and one for sheep judging.  
   SA A U D SD

4. The people back home will be disappointed in our team if we don't win this contest.  
   SA A U D SD

5. I consider animal grading to be the most important part of the national livestock judging contest.  
   SA A U D SD

6. Our school administrators view the livestock judging contest unfavorably.  
   SA A U D SD

7. The livestock judging contest helps teach skills that will make students more employable.  
   SA A U D SD

8. The national livestock judging contest has too many classes of livestock to judge.  
   SA A U D SD

9. The classes of livestock in the national contest were a good representation of the type of livestock grown in our school area.  
   SA A U D SD

10. The livestock contest motivated most of the students in my livestock classes to work harder to learn about livestock.  
    SA A U D SD

11. I consider animal placing to be the most important part of the national livestock judging contest.  
    SA A U D SD

12. When I came to Kansas City, I felt that our team had a very good chance to win the livestock judging contest.  
    SA A U D SD

13. Only those students who make good grades in all their courses make good livestock judges.  
    SA A U D SD

14. The students who are on the livestock judging team learned much more about livestock evaluation than those students who were not on the team.  
    SA A U D SD

15. The skills learned from the livestock judging contest are not relevant to today's livestock industry.  
    SA A U D SD

16. I consider giving oral reasons to be the most important part of the national livestock judging contest.  
    SA A U D SD

17. The livestock judging contest is the worst contest in the FFA.  
    SA A U D SD

18. The livestock judging contest only appeals to students who come from farms or ranches.  
    SA A U D SD

19. The livestock judging contest helps to motivate those students who make poor grades.  
    SA A U D SD

20. Winning is not important as long as students have learned to evaluate livestock.  
    SA A U D SD

21. I would rather use the money spent on breakfasts for contest participants to help pay for our expenses at the National Convention.  
    SA A U D SD

22. Students are motivated to do a better job in class because of the livestock judging contest.  
    SA A U D SD

23. Training a team to compete in the national livestock judging contest really takes too much time.  
    SA A U D SD

24. Preparing for the national livestock judging contest took more time than it was worth.  
    SA A U D SD
APPENDIX F

PANEL OF EXPERTS
Undergraduate Student
Agricultural Education
Virginia Tech

Graduate Student
Agricultural Education
Virginia Tech

Graduate Student
Agricultural Education
Virginia Tech

Graduate Student
Agricultural Education
Virginia Tech

Graduate Student
Agricultural Education
Virginia Tech
APPENDIX G

CONTEST TEAM SCORES BY STATE
## APPENDIX G

CONTEST TEAM SCORES BY STATE

<table>
<thead>
<tr>
<th>STATE</th>
<th>BEEF SCORE</th>
<th>SHEEP SCORE</th>
<th>SWINE SCORE</th>
<th>TOTAL TEAM SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minnesota</td>
<td>1042</td>
<td>398</td>
<td>777</td>
<td>2217</td>
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<tr>
<td>Oklahoma</td>
<td>1071</td>
<td>388</td>
<td>748</td>
<td>2207</td>
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<tr>
<td>New Mexico</td>
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<td>401</td>
<td>755</td>
<td>2205</td>
</tr>
<tr>
<td>Missouri</td>
<td>1060</td>
<td>401</td>
<td>738</td>
<td>2199</td>
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<td>Virginia</td>
<td>1077</td>
<td>376</td>
<td>716</td>
<td>2169</td>
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<tr>
<td>North Dakota</td>
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<td>374</td>
<td>776</td>
<td>2161</td>
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<tr>
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<td>378</td>
<td>716</td>
<td>2166</td>
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<tr>
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<td>769</td>
<td>2156</td>
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<td>715</td>
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<td>348</td>
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<td>2076</td>
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<td>359</td>
<td>684</td>
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<td>1001</td>
<td>391</td>
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<tr>
<td>Georgia</td>
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<td>339</td>
<td>702</td>
<td>2045</td>
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<tr>
<td>Indiana</td>
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<td>398</td>
<td>643</td>
<td>2041</td>
</tr>
<tr>
<td>Ohio</td>
<td>982</td>
<td>395</td>
<td>664</td>
<td>2041</td>
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<tr>
<td>Washington</td>
<td>989</td>
<td>364</td>
<td>687</td>
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<td>392</td>
<td>668</td>
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<td>359</td>
<td>698</td>
<td>2032</td>
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<tr>
<td>STATE</td>
<td>BEEF SCORE</td>
<td>SHEEP SCORE</td>
<td>SWINE SCORE</td>
<td>TOTAL TEAM SCORE</td>
</tr>
<tr>
<td>----------------</td>
<td>------------</td>
<td>-------------</td>
<td>-------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Iowa</td>
<td>955</td>
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<td>669</td>
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<tr>
<td>Wisconsin</td>
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<td>375</td>
<td>669</td>
<td>2016</td>
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<tr>
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<td>370</td>
<td>678</td>
<td>2013</td>
</tr>
<tr>
<td>Alabama</td>
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<td>670</td>
<td>2012</td>
</tr>
<tr>
<td>Arizona</td>
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<td>363</td>
<td>679</td>
<td>1992</td>
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<tr>
<td>Idaho</td>
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<td>360</td>
<td>671</td>
<td>1981</td>
</tr>
<tr>
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<td>936</td>
<td>371</td>
<td>663</td>
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</tr>
<tr>
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<td>921</td>
<td>377</td>
<td>646</td>
<td>1944</td>
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<tr>
<td>South Dakota</td>
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<td>356</td>
<td>623</td>
<td>1942</td>
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<tr>
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<td>1914</td>
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<tr>
<td>Louisiana</td>
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<td>379</td>
<td>626</td>
<td>1900</td>
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<td>Michigan</td>
<td>903</td>
<td>354</td>
<td>642</td>
<td>1899</td>
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<tr>
<td>Maryland</td>
<td>909</td>
<td>337</td>
<td>652</td>
<td>1898</td>
</tr>
<tr>
<td>North Carolina</td>
<td>890</td>
<td>342</td>
<td>645</td>
<td>1877</td>
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<tr>
<td>Connecticut</td>
<td>883</td>
<td>374</td>
<td>613</td>
<td>1870</td>
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<tr>
<td>Montana</td>
<td>923</td>
<td>353</td>
<td>592</td>
<td>1868</td>
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<tr>
<td>New York</td>
<td>883</td>
<td>344</td>
<td>632</td>
<td>1859</td>
</tr>
<tr>
<td>Nevada</td>
<td>897</td>
<td>376</td>
<td>582</td>
<td>1855</td>
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<tr>
<td>West Virginia</td>
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<td>Alaska</td>
<td>833</td>
<td>352</td>
<td>568</td>
<td>1753</td>
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<tr>
<td>Mississippi</td>
<td>897</td>
<td>291</td>
<td>543</td>
<td>1731</td>
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<td>New Hampshire</td>
<td>811</td>
<td>331</td>
<td>574</td>
<td>1716</td>
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<tr>
<td>Delaware</td>
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<td>351</td>
<td>560</td>
<td>1698</td>
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<tr>
<td>New Jersey</td>
<td>799</td>
<td>347</td>
<td>470</td>
<td>1616</td>
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</tbody>
</table>
APPENDIX H

PRESENTATION OF DATA NOT DIRECTLY RELATED TO RESEARCH QUESTIONS
APPENDIX H

Table 1

ADVISOR AND CONTESTANT PERCEPTIONS OF
THE IMPORTANCE OF BENEFITS OF THE
NATIONAL FFA LIVESTOCK JUDGING CONTEST

<table>
<thead>
<tr>
<th>BENEFIT</th>
<th>ADVISOR* MEAN</th>
<th>STANDARD DEVIATION</th>
<th>CONTESTANT* MEAN</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting students from other states</td>
<td>3.07</td>
<td>1.26</td>
<td>3.45</td>
<td>.11</td>
</tr>
<tr>
<td>Learning to win or lose graciously</td>
<td>3.79</td>
<td>1.12</td>
<td>4.20</td>
<td>.93</td>
</tr>
<tr>
<td>Prestige of winning</td>
<td>3.74</td>
<td>1.11</td>
<td>3.73</td>
<td>1.33</td>
</tr>
<tr>
<td>Learning about livestock evaluation</td>
<td>4.38</td>
<td>.94</td>
<td>4.67</td>
<td>.68</td>
</tr>
<tr>
<td>Other</td>
<td>1.84</td>
<td>2.316</td>
<td>3.87</td>
<td>1.96</td>
</tr>
</tbody>
</table>

*1 = of no importance  5 = of extreme importance
APPENDIX H

Table 2

ADVISOR PERCEPTIONS OF THE IMPORTANCE OF CERTAIN METHODS FOR OBTAINING FUNDS FOR THE TEAM TO TRAVEL TO KANSAS CITY

<table>
<thead>
<tr>
<th>METHOD</th>
<th>MEAN*</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter funds</td>
<td>3.19</td>
<td>1.76</td>
</tr>
<tr>
<td>Team members conducted fund raising</td>
<td>2.19</td>
<td>1.95</td>
</tr>
<tr>
<td>Sponsor donated money</td>
<td>1.71</td>
<td>1.93</td>
</tr>
<tr>
<td>School administration paid expense</td>
<td>1.64</td>
<td>.29</td>
</tr>
<tr>
<td>Team members paid own expense</td>
<td>1.90</td>
<td>1.62</td>
</tr>
<tr>
<td>State support</td>
<td>3.00</td>
<td>1.73</td>
</tr>
<tr>
<td>National FFA Foundation support</td>
<td>2.46</td>
<td>1.77</td>
</tr>
<tr>
<td>Other</td>
<td>1.17</td>
<td>2.12</td>
</tr>
</tbody>
</table>

*1 = of no importance
5 = of extreme importance
APPENDIX H

Table 3

ADVISOR PERCEPTIONS OF DIFFICULTY OF TEACHING
LIVESTOCK JUDGING AND FINDING ANIMALS

<table>
<thead>
<tr>
<th></th>
<th>MEAN</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty in teaching</td>
<td></td>
<td></td>
</tr>
<tr>
<td>animal placing</td>
<td>2.67*</td>
<td>.62</td>
</tr>
<tr>
<td>Difficulty in teaching</td>
<td></td>
<td></td>
</tr>
<tr>
<td>grading</td>
<td>1.67*</td>
<td>.72</td>
</tr>
<tr>
<td>Difficulty in teaching</td>
<td></td>
<td></td>
</tr>
<tr>
<td>oral reasons</td>
<td>1.63*</td>
<td>.70</td>
</tr>
<tr>
<td>Difficulty in finding sheep</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in school area</td>
<td>2.25**</td>
<td></td>
</tr>
<tr>
<td>Difficulty in finding cattle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in school area</td>
<td>2.73**</td>
<td>.54</td>
</tr>
<tr>
<td>Difficulty in finding swine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in school area</td>
<td>2.64**</td>
<td>.57</td>
</tr>
</tbody>
</table>

*Based on a scale where 1 = most difficult and 3 = least difficult
**Based on a scale where 1 = could not find and 3 = had no difficulty
Table 4

MEAN NUMBER OF STATE WINNING JUDGING TEAMS TRAINED BY ADVISORS

<table>
<thead>
<tr>
<th>TEAM</th>
<th>MEAN</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livestock Judging</td>
<td>2.21</td>
<td>4.20</td>
</tr>
<tr>
<td>Other than Livestock Judging</td>
<td>3.30</td>
<td>6.65</td>
</tr>
</tbody>
</table>
APPENDIX H

Table 5

ADVISOR AND CONTESTANT ATTITUDE TOWARD DROPPING SPECIES FROM THE CONTEST

<table>
<thead>
<tr>
<th></th>
<th>ADVISORS</th>
<th>CONTESTANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number wanting sheep dropped</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>Number wanting cattle dropped</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Number wanting swine dropped</td>
<td>0</td>
<td>8</td>
</tr>
</tbody>
</table>
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FACTORS ASSOCIATED WITH THE SUCCESS OF
PARTICIPANTS IN THE 1981 NATIONAL
FUTURE FARMERS OF AMERICA
LIVESTOCK JUDGING CONTEST

by
Ray V. Herren

(ABSTRACT)

The primary purpose of the study was to determine the factors that were associated with the success of those teams that participated in the 1981 National FFA Livestock Judging Contest. A secondary purpose of the study was to determine the attitudes of both the contestants and their advisors regarding the contest.

The population consisted of 135 FFA members who competed in the contest in Kansas City, Missouri and their 45 advisors. The study was conducted using the entire population. A questionnaire was developed to obtain data regarding factors that could relate to success of participants in the contest. The instruments were distributed to students and advisors during a meeting the day before the contest. Forty-four advisors and 109 contestants completed the questionnaire.

Twenty-seven research questions were answered based on data analysis using the Pearson Product Moment Correlation and differences in group means. The study
concluded that the factors associated with success of participants in the 1981 FFA National Livestock Judging Contest were as follows.

1. Those teams who spent more time preparing for the contest tended to score higher.

2. Teams with advisors who had fewer years of vocational agriculture teaching experience tended to score higher.

3. Teams from states with high populations of cattle, hogs, and sheep tended to score higher.

4. Those teams who entered more livestock judging contests tended to score higher.

5. Teams from the Central and Western Regions tended to score higher.

6. Those teams with advisors who rated "undergraduate courses," "collegiate livestock judging team," and "FFA or 4-H livestock judging team" as being "extremely important" sources of their experience tended to score higher.

7. Teams from single teacher vocational agriculture departments tended to score higher.

8. Those teams selected by their advisors tended to score higher.

Both students and advisors tended to have a positive overall attitude toward the contest.