

**Factors Associated with the Success of
Participants in the National Future Farmers
of America Livestock Judging Contest**

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Almost since the inception of FFA contests, concern has been expressed over their use. As far back as 1948, the national contests were criticized because they "failed to satisfy all sections of the country" (Johnson, 1948). Deyoe (1948) expressed the concern that winning contests was the chief criterion for determining the success of a teacher. More recently, Key (1977) wrote that sometimes a "monster" is created of competition. Mayfield (1978) contended that contests were designed as "educational experiences with winning as a secondary objective." In his opinion, these priorities may now be reversing. Schumann (1977) expressed the concern that "many teachers make the mistake of arbitrarily selecting team members without giving all students the opportunity to participate in the competition." Recent studies by Damann (1980), Kim (1979), and Swanson (1979) have dealt with FFA, but none of these studies have dealt directly with determining why teams and individuals are successful in contests. A close examination of the characteristics of those teams that are successful in national FFA contests would help determine whether or not the concerns previously mentioned about FFA contests are well founded. The National FFA Livestock Judging Contest was chosen as the focal point of the study for three reasons.

1. The National Livestock Judging Contest is one of the most widely participated in of all the national contests. FFA members from almost every state participate in the contest.
2. The livestock judging contest is one of the oldest of the national contests.
3. The National Livestock Judging Contest is considered by many to be the most prestigious of all the contests.

Purpose of the Study

The purpose of the study was to determine the factors associated with the success of those teams that participated in the 1981 National Future Farmers of America Livestock Judging Contest.

Methodology

The study (Herren, 1982) was conducted using an ex post facto design examining a population consisting of the 135 contestants who competed in the 1981 National FFA Livestock Judging Contest and their 45 advisors. Data were collected by an instrument developed utilizing a panel of experts who formulated the instrument. Validity and reliability were checked through field test use on selected high school vocational agriculture students and teachers. The instrument was developed to obtain information regarding personal and situational data such as sex, age, and size of school, and also to elicit data concerning the backgrounds of the contestants and the advisors regarding preparation and training for the National FFA Livestock Judging Contest. The instrument was distributed, completed, and collected during the contest orientation meeting the day preceding the contest. Those advisors and students absent from the meeting completed the questionnaire the morning of the contest.

Success as a contestant or as a team was determined by the number of points scored by the contestant or by the team in the National FFA Livestock Judging Contest. Contestant scores and team scores were used as the dependent variables for the study. Research questions were answered using analysis of differences in group means and Pearson product-moment correlations. Since the statistical procedures were not used to infer the data to a population, but were used to describe the entire population, the following standards as presented by Best (1981, p. 255) were used to interpret the correlation coefficients.

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

Results and Discussion

Factors that were related to success can be grouped into four general categories: (a) extent of team preparation, (b) advisor expertise, (c) geographic location of the team, and (d) method of team selection.

Extent of Team Preparation

Predictably, those teams which spent more time preparing for the contest scored higher. Advisors were asked to indicate what percent of the total time spent working with students after school was spent preparing for the National FFA Livestock Judging Contest. As data in Table 1 indicate, team scores were positively correlated with the percent of after school time spent preparing for the contest, with a mean of 23.65% of all after school time spent on preparation

for the National FFA Livestock Judging Contest. This factor was further reinforced by the positive correlation between the number of livestock judging practice sessions ($\bar{x} = 48.50$) and contest scores and also by the number of livestock judging contests entered ($\bar{x} = 9.34$) and team contest score (Table 1).

Table 1

Demographic Data, Means, Standard Deviation, Range, and Correlation with Contest Team Scores

Variables	n	Mean	Standard deviation	r	Range
Percent of curriculum composed of animal science	43	37.14	25.60	.08	0-100
Percent of after school time spent preparing for the contest	40	23.65	26.18	.23	0-100
Years of advisor teaching experience	38	8.21	6.71	-.23	1-34
State cattle population	44	2462.45*	2527.52	.40	9-13900
State sheep population	44	299.16*	458.25	.22	0-2415
State hog population	44	1762.18*	3837.70	.20	1.1-15100
Number of practice sessions	42	48.50	99.39	.40	1-200
Number of livestock judging contests participated in	44	9.34	10.86	.40	1-42
Size of school	43	654.23	528.93	-.17	27-2267
Student population in departments	44	111.43	137.01	0.04	16-364

*1,000 head

Advisor Expertise

The teams with advisors having fewer years of advisor experience tended to score higher. This factor is indicated by the $-.23$ correlation between years of vocational agriculture teaching experience and contest team score (note Table 1). While the opposite result would have been expected, this factor could be due to the more recent training received by the less experienced advisors. Those advisors who listed "undergraduate courses," "collegiate livestock judging team," or "FFA Livestock Judging Team" as being extremely important sources of their expertise, advised teams who tended to score higher than did teams whose advisors listed "self-taught" or "farm or ranch work" as being extremely important sources (note Table 2).

Data in Table 3 indicate that over half of the teams participating in the contest were from single teacher departments. When computed as a group, the average score of teams from multi-teacher departments was lower than that of teams from single teacher departments.

Table 2

Mean Scores of Teams Whose Advisors Indicated Sources of Expertise as "Extremely Important"

Source of expertise	n	Mean score
Self-taught	12	1943.92
Undergraduate Courses	3	2112.00
Graduate Courses	0	--
Workshops	5	2054.00
Farm or Ranch Work	17	1969.82
FFA Livestock Judging Team	14	2037.00
Collegiate Livestock Judging Team	9	2078.00
Other Source	0	--

Table 3

*Mean Scores and Standard Deviations of Teams
from Single and Multiple Teacher Departments*

Number of advisors in department	n	Mean score	Standard deviation
1	24	2007.83	135.22
2	13	1965.69	164.48
3	3	2008.00	150.56
4	2	1967.50	137.89
5	1	1698.00	0.0
8	1	2076.00	0.0
All multiple-teacher departments	20	1964.35	
All teams	44	1988.07	146.22

Geographic Area

Teams from the Central and Western regions scored higher than did teams from the Southern and Eastern regions (note Table 4). It is interesting to note that the Central and Western regions have larger populations of livestock than do the Eastern and Southern regions; also, state populations of livestock were positively correlated with team score (note Table 1).

Method of Team Selection

Over half (27) of the advisors chose the members of the team by means of a chapter livestock judging contest (note Table 5). The teams of the eight advisors who personally selected the team members scored higher than did teams that were chosen by the use of a contest or any other method. It should also be noted that the mean score of the three teams from states that allow the three high scoring individuals at the state contest to comprise the judging team for the national contest, scored lower than the team score of teams where the members were from the same chapter.

Among factors not found to be associated with success were: (a) school characteristics and (b) contestant characteristics.

Table 4*Mean Team Scores and Standard Deviations by Region*

Region	n	Mean team scores	Standard deviation
Central	12	2065.50	99.53
Western	14	2019.93	135.00
Southern	8	1969.50	111.20
Eastern	10	1865.40	165.81
All teams	44	1988.07	146.22

Table 5*Method of Team Selection and Mean Team Score*

Method	N	Mean team scores	Standard deviation
Chapter contest	27	1950.30	151.23
Written exam	0	0.0	0.0
Picked by advisor	8	2097.35	115.22
High scoring individuals at state contest	3	1960.00	85.44
Other methods	6	2026.33	119.90
All teams	44	1988.07	146.22

School Characteristics

As displayed in Table 1, a negligible correlation existed between the size of school and team score. Also, the relationship between size of the student population within the vocational agriculture departments and team scores was found to be negligible.

Student Characteristics

The age of the contestant, the number of years the contestant had been on the livestock judging team, and the number of years the contestant had been enrolled in vocational agriculture were all found to have a negligible relationship to individual score (note Table 6). Seventy-nine males and 30 females competed in the contest. As Table 7 indicates, the mean scores of males and females were almost equal.

Table 6

*Contestant Data Means, Standard Deviations,
and Correlations with Individual Contest Score*

Category	n	Mean	Standard deviation	r
Age	108	17.38	5.33	.03
Years of Enrollment	108	3.52	.93	.16
Years on Team	108	2.47	1.29	.15
Number of Contestants Entered (Other than Livestock Judging)	105	1.9	3.08	.11

Table 7

*Mean Scores and Corresponding Standard Deviations
for Male and Female Contestants*

Sex of Contestants	n	Mean	Standard deviation
Male	79	665.53	54.77
Female	30	668.50	40.95
Total	109	666.35	51.17

Conclusions/Implications

1. In some instances, winning may indeed be overpowering educational value as the primary objective of the contest. While it may be argued that a mean of only 23.65% of after school time spent with students was used in preparing for the National Livestock Judging Contest, the standard deviation was 26.1, and the range of the percentages ran from 0 to 100%. Those who spent the extreme high amount of time were those who ranked in the top 10 places of the contest. Also, the mean number of livestock practice sessions was 48, with a standard deviation of 99.39 (note Table 1). Obviously, those who spend all of their after school time preparing for the contest or who held 200 practice sessions may have difficulty carrying out a well-rounded program. However, most teams did not spend this extreme amount of time.

2. Those teams whose advisors had more recent and formal training scored higher. This factor points to the need for inservice training dealing with livestock selection to update teachers on the type of animal selected for today's livestock industry.

3. Teams from small schools can compete effectively with teams from large schools. The number of students in the vocational agriculture program does not affect success at a national contest. Teachers at small schools should not feel at a disadvantage merely because of school size.

4. Contestants can compete effectively regardless of sex, age, years of experience, or team experience. No student should feel at a disadvantage in a national contest because of sex, age, or experience in vocational agriculture.

References

- Best, J. W. (1981). *Research in education*. Englewood Cliffs: Prentice-Hall.
- Damann, A. (1980). *Role of the national FFA organization in assisting local FFA chapters*. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University.
- Deyoe, G. P. (1948). Suggested activity in livestock selection for group instruction and contests. *Agricultural Education Magazine*, 20, 208.
- Herren, R. V. (1982). *Factors associated with the success of participants in the 1981 national FFA livestock judging contest*. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University.