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Parents' Perceptions of Life Skills Gained by Youth Participating in the 4-H Beef Project

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Parents' Perceptions of Life Skills Gained by Youth Participating in the 4-H Beef Project

Abstract

Does participating in the 4-H beef project help develop life skills in youth? Randomly selected parents of youth were mailed a survey asking them to determine if 13 life skills were enhanced as a result of their child participating in the 4-H beef project. The rank order for the top five mean scores were: "accepting responsibility," "setting goals," "develop self-discipline," "self motivation," and "knowledge of the livestock industry." A Pearson product moment correlation coefficient also revealed a low-to-moderate positive relationship for life skill development and years of participating in the 4-H beef project.

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Introduction

What life skills are youth gaining by participating in the 4-H beef project? According to Boyd, Herring, and Briers (1992), the development of life skills through experiential learning is the cornerstone of the 4-H program. Several studies have been conducted to determine benefits youth gain from participating in 4-H livestock projects. Ward's (1996) study of 4-H alumni in New Jersey revealed that 4-H participation built seven life skills, including responsibility, relating to others, spirit of inquiry, decision making, public speaking, maintaining records, and building self esteem. Another study by Rusk, Martin, Talbert, & Balshweid (2002) concluded that the Indiana 4-H livestock judging program has positively affected the lives of its participants.

Purpose and Objectives

The purpose of the discussed here study was to determine the life skills gained by youth participating in the 4-H beef project in Texas by asking parents to address the life skill development of their children. The objectives were more specifically defined as:

1. Determine the life skills gained by youth participating in the 4-H beef project as perceived by their parents;
2. Measure the relationship between individual life skills and days of ownership of the 4-H beef project; and
3. Measure the relationship between individual life skills and years of participation in the 4-H

Methods and Procedures

The study was approved by the Institutional Review Board-Human Subjects in Research, Texas A&M University (project # 2002-307). The study used an ex post facto approach and a correlational design. The purpose of the correlational research was to evaluate the relationships between variables by using correlational statistics (Gall, Borg, & Gall, 1996).

The target population was defined as parents of 4-H youth participating in the 4-H beef project. Texas 4-H (2000) revealed that there were 6,347 youth who completed an enrollment form and said that they had intentions during 2001 to own a beef project. Parents of these 6,347 youth were considered the accessible population for this study. These youth were described as 4-H members ranging in age from 8-19 and were in 3rd to 12th grade in school. Youth names and mailing addresses were generated from the Texas 4-H enrollment report and placed into a data base management system. This database served as the sampling frame for this study.

A simple random sample was used as the sampling procedure for the study. Therefore, a 5% random sample was drawn from these 6,347 names in the database.

A mailed questionnaire was used to collect data. The questionnaire was designed to determine the perceived life skills gained from youth participating in the 4-H beef project. The specific life skills measured are listed below.

- Decision making
- Ability to relate to others
- Develop and maintain records
- Accepting responsibility
- Build positive self esteem
- Self motivation
- Knowledge of the livestock industry
- Develop organizational skills
- Ability to problem solve
- Develop oral communication skills
- Setting goals
- Develop self-discipline
- Work in teams

Respondents were asked to provide their perceptions of the magnitude for life skill development as a result of raising the 4-H beef project. The scale was slightly modified from Rusk et al. (2002) and was defined as 1 = *Not Influential At All*, 2 = *Mildly Influential*, 3 = *Moderately Influential*, 4 = *Highly Influential*, and 5 = *Essential*. A second section was included to ask background information and demographic information.

The questionnaire was developed with input from 14 Texas Cooperative Extension employees at Texas A&M University and one individual from Texas Tech University. More specifically, these individuals included: three faculty members in the Department of Agricultural Education, three faculty members from the Department of Animal Science, one faculty member from the Department of Agricultural Economics, three faculty members from the 4-H & Youth Development Program, four County Extension Agents-Agricultural and Natural Resources, and one faculty from the Department of Agricultural Education and Communications at Texas Tech University. As suggested by Gall et al. (1996), face and content validity were assessed by these 15 individuals.

Twenty-five students from Texas A&M University enrolled in Animal Science 315 (Principles of Livestock Evaluation) were used to pilot the instrument. These respondents evaluated the instrument to assess for face validity. Several noted instructions and wording that were unclear to the reader. These students were also asked to complete the instrument and turn it in to the researcher with only the instructions provided in the document. Reliability (internal consistency) of the life skill development scale was estimated from these data. SPSS 11.0 for Windows was used for analysis. A Cronbach's coefficient alpha was computed to be .87 for the 13 statements in the life skill development section. As a result of this pilot test, final corrections were made, and the instrument was deemed ready for mailing.

Procedures outlined in Dillman's Tailored Design Method were used for mail survey implementation and data collection (Dillman, 2000). A pre-notice letter was mailed to the parents of each youth in

the original database. The purpose of this letter was to alert parents of these youth that a survey would be arriving shortly for them to complete. Also, the Assistant Director-County Programs for Texas Cooperative Extension sent an e-mail message to all County Extension Agents in 4-H and Agricultural and Natural Resources to make them aware of the survey that was being mailed directly to parents of youth participating in the 4-H beef project. Questionnaires, cover letters signed by the researcher and the Assistant Director for 4-H and Youth for the Texas 4-H Program, and business reply envelopes were sent to each parent.

Each questionnaire was identified with an identification number keyed to each of the participants. This number was used to identify and follow-up with nonrespondents. Two follow-up notifications were sent to participants. After 6 weeks, a second complete packet was mailed to each nonrespondent. Throughout survey implementation, returned letters and packets with incorrect addresses were updated, where possible, and re-mailed.

Handling Nonresponse Error

To handle nonresponse error, the researcher used procedures outlined by Lindner, Murphy, and Briers (2001). This encompassed contacting nonrespondents to compare their data to respondents. A phone survey was developed to gather data for comparison. Thirty parents of youth participating in the 4-H beef project were randomly selected from the nonrespondent database for participation. After random selection, the researcher contacted parents to interview using a phone survey. After data collection was complete, comparisons between respondents and nonrespondents were computed. Differences between respondents and nonrespondents were examined using an independent samples t test. No significant differences ($p > .05$) were calculated comparing respondents and nonrespondents.

Data Analysis

SPSS 11.0 for Windows software was used for data analysis. Descriptive statistics were used to summarize data. Frequencies, percentages, central tendency measures, and variability were used to describe the data. To determine the extent of the relationships between parents of youth participating in the 4-H beef projects and the life skills gained, inferential correlational or comparative techniques were used. These techniques included analysis of variance. Confidence intervals and tests for statistical significance were set *a priori* at the 0.05 level.

Results

One-hundred thirty-three of 317 surveys were returned (41.9%) from respondents. However, of these 133, only 89 were used for analysis. Several were returned blank or with a note saying they could not provide responses to the questions asked in the mailed survey.

Demographics

Participants were parents of youth involved in the 4-H beef project. The data that were reported reflect the parents' responses to questions/statements concerning their children's participating in the 4-H beef project. Of the 89 respondents to the gender question, 43 (48.3%) were male, and 46 (51.7%) were female. The mean age of the 4-H youth was 14.92 years of age ($SD = 2.9$), with 53 of the 89 (59.6%) revealing that their child was 15 years or older. The mean for years of participating in the beef project was 5.00 ($SD = 3.0$). Parents indicated that the mean projects purchased by their child was 2.38 ($SD = 1.58$). They also said that their child owned these projects an average of 287.66 days ($SD = 71.4$).

The last demographic-type question asked respondents to estimate the total number of hours per week their child worked with their beef projects. The categories provided were: 0 = 0 hours 1 = 1-4 hours, 2 = 5-8 hours, 3 = 9-12 hours, 4 = 13-16 hours, 5 = 17-20 hours, 6 = 21 or more hours per week. Of the 86 respondents, 44 (51.2%) said their children worked with their beef project either 5-8 hours or 9-12 hours per week. This was an even distribution, with each of these categories having a frequency of 22.

Objective 1

To determine the perceived life skills gained from youth participating in the 4-H beef project, 13 life skills were developed from previous studies by McCann and McCann (1992) and Rusk et al. (2002). The scale used for analysis was also used by McCann and McCann (1992) and Rusk et al. (2002). It was defined as: 1 = *Not Influential At All*, 2 = *Mildly Influential*, 3 = *Moderately Influential*, 4 = *Highly Influential*, 5 = *Essential* to the ultimate development of this attribute. Each of the projects was analyzed separately for life skill development.

The 13 life skills were analyzed individually to reveal mean values and standard deviations (Table 1). Parents were asked to determine if participating in the 4-H beef project influenced the development of these attributes in their children. The rank order for the top five mean scores was: "accepting responsibility" (4.48, $SD = .62$), followed by "setting goals" (4.28, $SD = .82$), "develop self-discipline" (4.24, $SD = .72$), "self motivation" (4.17, $SD = .69$), and "knowledge of the livestock industry" (4.16, $SD = .86$). In addition, 54% of the respondents of the beef project survey said that

the beef project was essential in the development of "accepting responsibility" for their children. These results for the life skill "accepting responsibility" are supported by similar findings noted by Ward (1996).

Also, 47.8% of these respondents said that participating in the 4-H beef project was essential in teaching the life skill of "setting goals." An additional 38% said that participating in the 4-H beef project was essential in their children's "knowledge of the livestock industry." Rusk et al. (2002) found similar results in relation to the "knowledge of the livestock industry" life skill.

However, Ward's (1996) conclusions pertaining to "ability to relate to others" were not consistent with this study. This study revealed a mean score of 3.84 ($SD=.84$) for the life skill, "ability to relate to others," ranking this life skill 10th among the 13 life skill statements.

Different results were noted between this study and studies conducted by Ward (1996) and Vondy Wacker and Boyd (1992) for the life skill "develop and maintain records." This life skill revealed the second lowest mean response and the highest frequency for the "not influential at all" category.

Table 1.
Rank Means and Standard Deviations for Life Skill Development from Parents
of Youth Participating in the 4-H Beef Project

Life Skills	Mean Scores		
	N	Mean	SD
Accepting Responsibility	89	4.48	.62
Setting Goals	89	4.28	.82
Develop Self-Discipline	89	4.24	.72
Self Motivation	89	4.17	.69
Knowledge of Livestock Industry	89	4.16	.86
Build Positive Self Esteem	89	4.12	.78
Decision Making	89	4.01	.90
Develop Organizational Skills	89	3.84	.92
Develop Oral Communication Skills	89	3.84	1.02
Ability to Relate to Others	89	3.84	.84
Ability to Problem Solve	89	3.80	.89
Develop and Maintain Records	89	3.74	1.06
Work in Teams	89	3.66	1.14
Overall Life Skills	89	4.01	.53

1Scale: 1 = Not Influential At All, 2 = Mildly Influential, 3 = Moderately Influential, 4 = Highly Influential, and 5 = Essential.

Objective 2

A Pearson product moment correlation was used to measure the relationship between life skill development and days of ownership of the 4-H beef project. No life skill yielded a significant relationship ($p < .05$) with ownership days.

Objective 3

A Pearson product moment correlation was used to measure the relationship between life skill development and years of participation in the 4-H beef project. Low, positive relationships were noted for all 13 life skills (Table 2). Seven of the 13 life skills yielded ($p < .05$) significant relationships. These included: "Developing self discipline" = .348, "self motivation" = .300, "develop and maintain records" = .296, "accepting responsibility" = .292, "work in teams" = .283, "ability to relate to others", and "setting goals" = .267.

Davis (1971) provided adjectives to describe these magnitudes. Developing self discipline" = .348 and "self motivation" = .300 can be described as moderate, positive relationships, while "develop and maintain records" = .296, "accepting responsibility" = .292, "work in teams" = .283, "ability to relate to others", and "setting goals" = .267 are best described as low, positive relationships.

The summed mean values and years of participation in the 4-H beef project were also measured for correlation. The Pearson product moment correlation coefficient for this analysis revealed a low, ($p < .05$) positive relationship of .295.

Table 2.
Pearson Product Moment Correlation Coefficients Between Years of Participating in the 4-H Livestock Projects and Life Skills Among All Respondents (n = 87)

Life Skills	Years of Exhibition	
	r	p
Decision Making	.204	.06
Ability to Relate to Others	.277	<.01*
Develop and Maintain Records	.296	<.01*
Accepting Responsibility	.292	<.01*
Building Positive Self Esteem	.175	.10
Self Motivation	.300	<.01*
Knowledge of Livestock Industry	.196	.07
Develop Organizational Skills	.176	.10
Ability to Problem Solve	.195	.07
Develop Oral Communication Skills	.205	.06
Setting Goals	.267	.01*

Develop Self-Discipline	.348	<.01*
Work in Teams	.283	<.01*
*Significant at the .05 level.		

Conclusions

Parents of youth participating in the 4-H beef project did suggest that life skills are being enhanced. They also indicated that there is indeed a low to moderate, positive relationship between years of participation and life skill development. This suggests that the longer children actively engage in the project, the more likely they are developing life skills that will hopefully make them more productive as adults.

Extension employees often say that life skills of youth are being developed because these youth actively participate in livestock projects. However, when asked which life skills or how much development of life skills is truly taking place, employees are not adequately equipped with research-based findings that reveal answers to these questions. This study reveals that at least seven of these life skills are being developed. According to parents of these youth, the seven life skills that revealed mean values of greater than 4.0 included:

- Accepting responsibility,
- Setting goals,
- Develop self-discipline,
- Self motivation,
- Knowledge of the livestock industry,
- Build positive self esteem, and
- Decision making.

Today, all of us in Cooperative Extension and the 4-H & Youth Development Program are asked to be accountable for the programs that we do. This includes a measurable impact educational programs have on youth participants. It is important that we answer these questions using reliable and valid data. In order to do this, specific studies on youth programs provide answers to these questions. This study measured the beef project. Additional studies should measure other projects to see what life skills are being developed as a result of active participation in that specific 4-H project.

References

- Boyd, B. L., Herring, D. R., & Briers, G. E. (1992). Developing life skills in youth. *Journal of Extension* [On-line], 30(4). Available at: <http://www.joe.org/joe/1992winter/a4.html>
- Davis, J. A. (1971). *Elementary of survey analysis*. Englewood Cliffs, NJ: Prentice-Hall.
- Dillman, D. A. (2000). *Mail and Internet surveys: The tailored design method* (2nd ed.). New York: John Wiley & Sons, Inc.
- Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research: An introduction* (6th ed.). White Plains, NY: Longman Publishers USA.
- Lindner, J. R., Murphy, T. H., & Briers, G. E. (2001). Handling nonresponse in social science research. *Journal of Agricultural Education*, 42(4), 43-53.
- McCann, J. S., & McCann M. A. (1992). Judging team members reflection on the value of livestock, horse, meats, and wool judging programs. *Professional Animal Scientist*, 8:3, 7-11.
- Rusk, C. P., Martin, C. A., Talbert, B. A., & Balshweid, M. A. (2002). Attributes of Indiana's 4- H livestock judging program. *Journal of Extension* [On-line], 40(2). Available at: <http://www.joe.org/joe/2002april/rb5.html>
- Vondy Wacker, D. A., & Boyd, G. W. (1992). Livestock projects for urban youth. *Journal of Extension* [On-line], 30(2). Available at: <http://www.joe.org/joe/1992summer/iw1.html>
- Ward, C. K. (1996). Life skill development related to participation in 4-H animal science projects. *Journal of Extension* [On-line], 34(2). Available at: <http://www.joe.org/joe/1996april/rb2.html>

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