The Impact of Livestock Exhibition on Youth Leadership Life Skill Development: Youth Agricultural Organizations

Abstract
A quantitative ex post facto survey design was used to determine what, if any, difference exists in youth leadership life skill development between livestock exhibitors who participated in youth organizations and those who have not. Findings include a lack of statistical difference between those exhibitors who had participated in 4-H and FFA compared to those who had not. Recommendations include youth programs evaluating livestock programs to ensure the ultimate goal of life skill development is occurring and made known to the public.

Introduction
The National FFA Organization and the 4-H Youth Development program have spent considerable time developing, implementing, and evaluating activities whose specific intent was to develop and improve leadership skills in youth (Wingenbach, 1995). They incorporate livestock projects into their programming to reach youth with those interests in the hopes of achieving their ultimate vision of positive youth development, providing young people with skills necessary to become successful adults. A North Carolina Cooperative Extension Service publication states, "The purpose of 4-H and FFA youth livestock projects is to teach young people how to feed, fit, and show their animals. The more important purpose is to provide an opportunity for personal growth and development of the young person." (Adapted from Hammat, 1995, pg. 2).

Many studies have been conducted regarding youth leadership life skill development in organizations (Seevers & Dormody, 1994; Wingenbach & Kahler, 1997; Boyd, Herring, & Briers, 1992). These studies have cumulatively concluded that youth do develop youth leadership life skills through participation in agricultural youth organizations. However, little research has been done to assess the impact livestock project exhibition has on youth leadership life skill development (YLLSDS).
project described here sought to look specifically at the exhibition piece of the livestock project experience, distinguishing it from other work.

**Literature Review/Conceptual Framework**

To better understand the role of activities in the life skills development of young people, positive youth development as a standalone concept and within the realms of youth organizations were explored as the frames for the project.

**Youth Development Theories**

Kohlberg's theory of moral development consists of three stages used to assess an individual's choices in moral conflict (Hayes, 1982). The first stage, preconventional, is when moral judgment is based on fear of punishment. Those in this stage do not consider the effects of their behavior on others, only discerning right from wrong based on the consequences to them. In the next stage, conventional, individuals desire conformity and approval, while maintaining a respect for authority. In the last stage, postconventional, individuals consider moral judgments based on a reflective view of society and begin the process of self-actualization. It is only in this last stage that youth make decisions based on universal ethics and with the thought of all people in mind.

**Positive Youth Development**

Youth are influenced by their environment, and positive activities give them a way to be successful by allowing them to positively contribute to their family, out-of-school activities, neighborhoods, and communities (Lerner, 2007). When the strengths of youth are nurtured, they can develop life skills and apply the life skills to other contexts (Lerner et al., 2008). The path to positive youth development is the Five C's: competence, confidence, connection, character, and caring. If all five of these skills of youth development are met in an individual then a sixth C will develop—contribution (Lerner, 2007).

According to Lerner (2007), there are three ways to promote the Five C's of positive youth development within adolescents. Youth must be: given the opportunity to have sustained, positive interactions with adults, involved in structured activities that nurture the development of life skills, and given the opportunity to become leaders in their local communities.

**Youth Life Skill Development**

The number of our nation's youth exhibiting at-risk behavior points to a lack of skills necessary for adulthood (Boyd, Herring, & Briers, 1992). These skills that required by adults for everyday living are often called "leadership life skills" (Boyd, Herring, & Briers, 1992). Leffert, Saito, Blyth, and Kroenke (1996) found the experiences young people have during early adolescence provide the foundation on which they develop their personalities and life skills. Early adolescence is a time of rapid change in young people; hence, this is often an excellent opportunity to make a positive impact upon their development (Fox, Schroeder, & Lodl, 2003). The development of life skills is said to allow youth to cope with their environment by making responsible decisions, having a better understanding of their
values, and being better able to communicate and get along with others (Boyd, Herring, & Briers, 1992). One of the instruments of life skill development is participation in youth-serving organizations, including 4-H and FFA.

Youth Leadership Life Skill Development Through 4-H and FFA

A study focusing on leadership development through the 4-H program conducted by Seevers & Dormody (1995) found that participation in 4-H activities had a positive relationship with youth leadership skill development. They also found that most 4-H members participated in many different leadership activities (Seevers & Dormody, 1995). Boyd, Herring, and Briers (1992) found that participation in the 4-H program positively relates to perceived leadership skill development. As expected, the level of leadership life skill development was found to increase as the level of 4-H participation increased (Boyd, Herring, & Briers, 1992).

Dormody & Seevers (1994), in another study, attempted to determine the predictors of youth leadership and life skills development from among participation in FFA leadership activities. The major findings were that three variables—achievement expectancy, participation in FFA leadership activities, and gender—explained significant amounts of the variance in YLLSDS (Seevers & Dormody, 1994). Wingenbach (1995) conducted a study to determine if meaningful relationships existed between Iowa FFA members’ self-perceived youth leadership skills development scores and their participation in youth leadership activities. Wingenbach (1995) concluded that members’ self-perceived leadership skills development levels gained as a result of FFA experiences should be considered only a moderate gain. The researcher even goes so far as to caution agriculture educators to not be overzealous in their generalizations about the total impact of the FFA program in developing leadership skills.

Youth Leadership Life Skill Development Related to Participation in Livestock Exhibition

Walker (2006) found that self-perceived leadership skill development of National Junior Angus Association members as a result of exhibiting a beef project was significantly high. Using the Youth Leadership Life Skill Development Scale by Seevers, Dormody, & Clason (1995), all National Junior Angus Association members surveyed showed at least a "Moderate Gain" in overall life skill acquisition. The life skills found to have the highest mean scores included "show a responsible attitude," "can set goals," and "can set priorities."

As young people move through their lives and through the stages of development toward actualization or understanding of self, discerning the impact or role of activities in which they participate is key. Are these activities moving them positively toward understanding themselves and moving them toward a more holistic worldview? The project described here sought to do that by focusing on the exhibition piece of livestock projects—a piece heretofore not yet deeply studied.

Purpose

There is increasing pressure from concerned stakeholders that agricultural youth organizations provide youth with leadership skills needed to function as contributing, caring, responsible members of society.
(Wingenbach, 1995). Agricultural educators and Extension agents have taken for granted that participation in organizational activities have resulted in leadership skills.

There is evidence that 4-H and FFA promote leadership life skill development (Wingenbach, 1995; Walker, 2006; Boleman, 2003). However, there is little research to support that specific activities of the program, like livestock exhibition, actually promote the development of leadership life skills. As part of a larger query into livestock exhibition, one purpose of the project was to determine the impact of livestock exhibition on youth leadership life skill development from the participants' perspective. Another purpose was to determine if there is a difference in youth leadership life skill development between those who have participated in youth agricultural organizations and those who have not. To accomplish this, the following objectives were developed:

1. Describe the self-perceived youth leadership life skill development of livestock exhibitors at the fair using the Youth Leadership Life Skill Development Scale.

2. Compare the leadership life skill development level of 4-H and FFA participants to exhibitors who do not participate in 4-H.

**Methods**

The design of the survey research project was descriptive in nature. It used an ex post facto design approach to gather the perception of leadership life skill development of livestock exhibitors who were members of 4-H and FFA at the 2010 North Carolina State Fair and how those individuals may have differed from exhibitors who had not participated in 4-H and FFA (Diem, 2002).

The population consisted of youth, ages 16-21, who exhibited livestock in a Jr. Show at the 2010 Fair. The Fair Livestock Office provided an exhibitor list for all Junior Shows. From this list, 201 exhibitors were found to meet the age requirements established by the researchers. Because the entire population of youth ages 16-21 who participated in a livestock exhibition at the 2010 Fair was included, selection was not considered to be a threat to the validity of the study.

The data collection instrument was a two-part survey. The first part was demographic data. The second part was the Youth Leadership Life Skills Development Scale (YLLSDS), developed by Seevers, Dormody, and Clason (1995) after they recognized the importance of youth organizations to assess the programmatic impacts on youth leadership life skill development. The YLLSDS is an evaluation tool to measure youth leadership life skills as a result of an experience. The Chronbach's alpha reliability coefficient for the 30-item scale was .98. The questionnaire was assessed originally for face and content validity by a panel of seven experts in the field (Seevers, Dormody, & Clason, 1995).

Data collection for the livestock exhibition participants was conducted throughout the course of the 2010 North Carolina State Fair. From 201 possible livestock exhibitors, 139 surveys were obtained, for a response rate of 69%. According to Gall, Borg, and Gall (1996), if after appropriate follow up procedures have been carried out and a response rate of less than 80% has been achieved, then a random sample of 20 non-respondents should be contacted. Twenty non-respondents of the possible livestock exhibitors were contacted. Statistical comparisons were then conducted between respondents and non-respondents. There was no statistically significant difference between
respondents and non-respondents.

Data were analyzed using the Statistical Package for Social Sciences (SPSS) Program 17.0 for Windows. Data were summarized using frequencies, percentages, means, and standard deviations. Independent t-tests were used to determine the differences, if any, of the YLLSDS scores between those who participated in 4-H and FFA and those who had not with significance of $p < .05$.

**Findings**

Results of the data analysis are represented in the following areas: 1) self-perceived level of youth leadership life skill development by livestock exhibitors and 2) how the YLLSD scores of those who participated in 4-H and FFA compared to those who had not. Findings are presented by research objective.

The majority of the participants were female (60.9%). Most participants (42%) were between 17-18 years of age; however, close behind was the 19-21 age bracket (37%). The majority of respondents (66.7%) described their place of residence as a farm. Almost all (89.1%) of the participants reported currently participating in 4-H or FFA.

**Objective 1: Describe the self-perceived youth leadership life skill development of livestock exhibitors at the fair using the Youth Leadership Life Skill Development Scale.**

The composite mean Youth Leadership Life Skills Development Scale (YLLSDS) score was $M = 73.68$, $SD = 13.14$ (Table 1). Youth Leadership Life Skill Development Scale scores ranged from a low score of 35 to a maximum of 90.

<table>
<thead>
<tr>
<th>YLLSDS Scores</th>
<th>M</th>
<th>SD</th>
<th>Min. Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>73.68</td>
<td>13.14</td>
<td>35 90</td>
</tr>
</tbody>
</table>

The participants reported on skills, each one skill a line on the instrument. The possible scores are based on "gain of a skill through an experience," in this case livestock exhibition. Individual survey items were analyzed revealing the top three items as: "can set goals" ($M = 2.77$, $SD = 0.54$); "show a responsible attitude" ($M = 2.76$, $SD = 0.48$); and "can set priorities" ($M = 2.67$, $SD = 0.54$) (Table 2). The items receiving the lowest mean scores were: "am sensitive to others" ($M = 1.83$, $SD = 0.99$); "can express feelings" ($M = 2.06$, $SD = 0.96$); and "trust other people" ($M = 2.20$, $SD = 0.83$).

**Table 2.**

Ratings of Individual Life Skills Items (n=138)
<table>
<thead>
<tr>
<th>Life Skills</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can set goals</td>
<td>138</td>
<td>2.77</td>
<td>0.54</td>
</tr>
<tr>
<td>Show a responsible attitude</td>
<td>138</td>
<td>2.76</td>
<td>0.48</td>
</tr>
<tr>
<td>Can set priorities</td>
<td>138</td>
<td>2.67</td>
<td>0.54</td>
</tr>
<tr>
<td>Respect others</td>
<td>138</td>
<td>2.65</td>
<td>0.69</td>
</tr>
<tr>
<td>Can delegate responsibility</td>
<td>138</td>
<td>2.62</td>
<td>0.65</td>
</tr>
<tr>
<td>Get along with others</td>
<td>138</td>
<td>2.59</td>
<td>0.67</td>
</tr>
<tr>
<td>Use rational thinking</td>
<td>138</td>
<td>2.59</td>
<td>0.60</td>
</tr>
<tr>
<td>Have a friendly personality</td>
<td>138</td>
<td>2.59</td>
<td>0.71</td>
</tr>
<tr>
<td>Can solve problems</td>
<td>138</td>
<td>2.56</td>
<td>0.63</td>
</tr>
<tr>
<td>Have a positive self-concept</td>
<td>138</td>
<td>2.55</td>
<td>0.59</td>
</tr>
<tr>
<td>Have good manners</td>
<td>138</td>
<td>2.54</td>
<td>0.72</td>
</tr>
<tr>
<td>Can handle mistakes</td>
<td>138</td>
<td>2.53</td>
<td>0.63</td>
</tr>
<tr>
<td>Can be flexible</td>
<td>138</td>
<td>2.53</td>
<td>0.65</td>
</tr>
<tr>
<td>Can be tactful</td>
<td>138</td>
<td>2.49</td>
<td>0.68</td>
</tr>
<tr>
<td>Can clarify my values</td>
<td>138</td>
<td>2.48</td>
<td>0.71</td>
</tr>
<tr>
<td>Recognize the worth of others</td>
<td>138</td>
<td>2.48</td>
<td>0.64</td>
</tr>
<tr>
<td>Can use information to solve problems</td>
<td>138</td>
<td>2.46</td>
<td>0.67</td>
</tr>
<tr>
<td>Can listen effectively</td>
<td>138</td>
<td>2.45</td>
<td>0.64</td>
</tr>
<tr>
<td>Consider input from all group members</td>
<td>138</td>
<td>2.44</td>
<td>0.73</td>
</tr>
<tr>
<td>Can determine needs</td>
<td>138</td>
<td>2.43</td>
<td>0.64</td>
</tr>
<tr>
<td>Can be honest with others</td>
<td>138</td>
<td>2.40</td>
<td>0.81</td>
</tr>
<tr>
<td>Consider the needs of others</td>
<td>138</td>
<td>2.38</td>
<td>0.73</td>
</tr>
<tr>
<td>Am open to change</td>
<td>138</td>
<td>2.37</td>
<td>0.76</td>
</tr>
<tr>
<td>Create an atmosphere of acceptance</td>
<td>138</td>
<td>2.36</td>
<td>0.75</td>
</tr>
<tr>
<td>Can consider alternatives</td>
<td>138</td>
<td>2.33</td>
<td>0.74</td>
</tr>
<tr>
<td>Am open-minded</td>
<td>138</td>
<td>2.30</td>
<td>0.79</td>
</tr>
<tr>
<td>Can select alternatives</td>
<td>138</td>
<td>2.26</td>
<td>0.74</td>
</tr>
<tr>
<td>Trust other people</td>
<td>138</td>
<td>2.20</td>
<td>0.83</td>
</tr>
<tr>
<td>Can express feelings</td>
<td>138</td>
<td>2.06</td>
<td>0.96</td>
</tr>
</tbody>
</table>
Objective 2: Compare the leadership life skill development level of 4-H and FFA participants to exhibitors who do not participate in 4-H and FFA.

An independent t-test was used to determine if any differences occurred between the YLLSDS scores of the livestock exhibition participants who have been involved in 4-H and FFA compared to those who have not. Mean scores for livestock exhibitors who had participated in 4-H or FFA were only slightly higher than those who did not, 73.94 compared to 71.60, which was not statistically significant (Table 3).

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-H or FFA Participants</td>
<td>123</td>
<td>73.94</td>
<td>13.12</td>
<td>136</td>
<td>0.651</td>
<td>0.516</td>
</tr>
<tr>
<td>Neither</td>
<td>15</td>
<td>71.60</td>
<td>13.55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Conclusions/Implications

The population of livestock exhibitor’s at the North Carolina fair was predominantly female. The majority of participants were 17 years of age, closely followed by the 18-year-old age group. Worthy of note is that North Carolina allows exhibitors of livestock up to 21 years of age in junior breeding classes, while 4-H and FFA shows only allow exhibitors up to 18 as of January 1 that year. The age bracket 19-21 accounts for 37% of participants, which is a significant proportion of the population. This leads the researchers to believe that young people participating in livestock exhibition activities like the one discussed here see value in the experiences they continue to have and would like to continue the experience past a traditional programmatic participation age.

Objective One

The composite Youth Leadership Life Skills Development Scale (YLLSDS) scores of livestock exhibitors at the 2010 North Carolina State Fair were relatively high, indicating to the researchers that livestock exhibition may in fact increase the leadership life skill development in the participants. The outcome of the project revealed higher YLLSDS mean scores from the livestock exhibitors (M= 73.68, SD= 13.14) than did three similar studies. Walker (2006) used the YLLSDS instrument on National Junior Angus Association members and reported an overall mean score of M= 73.02, SD= 13.77). A study performed by Wingenbach and Kahler (1997) of Iowa FFA members using the YLLSDS instrument found an overall mean score of M= 62.65, SD= 17.83. In comparison, a study by Seevers and
Dormody (1994) reported YLLSDS scores from FFA members in a tri-state study (New Mexico, Arizona, and Colorado) with a mean of $M= 64.2$, $SD= 17.7$.

According to Dormody et al. (1993), YLLSDS values from 31-60 may be determined as moderate development and scores ranging from 61-90 as high development. All livestock exhibitors participating in the study scored 35 or higher on the YLLSDS instrument. Previous studies, (Mullins & Weeks, 2003; Bass & Yammarino, 1989), have concluded that in most surveys, leaders tend to give themselves inflated ratings in contrast to other's observations of their performance which may account for the high degree of perception of leadership life skill development. Another possible explanation for participants' responses could simply be the Hawthorne effect, where participants alter their behavior because they know they are being studied (Adair, 1984).

**Objective Two**

Those exhibiting livestock who had participated in 4-H or FFA ($M= 73.94$, $SD= 13.12$) had only slightly higher mean scores than those who did not ($M= 71.60$, $SD= 13.55$). This difference is not statistically significantly different, and therefore, it can be concluded that, with this population, there is no difference in the life skill development of those who have participated in youth agricultural organizations and those who did not, contrary to several previous studies (Seevers & Dormody, 1994; Wingenbach, 1995; Boleman, 2003). Two factors that could have influenced these results: the number of participants and the type of population chosen. There were few participants who did not participate in 4-H or FFA but were exhibiting livestock, which led to a small comparison population, possibly not a true representation of that population. This is a limitation to the study. Also, 4-H and FFA livestock exhibition is not very prevalent in the state of North Carolina. Therefore, this may lead to participants having few opportunities to exhibit livestock as part of the agricultural organization, throughout the year, hence altering the participants' perceptions of where, or how, they develop their skills.

**Recommendations**

Based upon the findings of the research study reported here and the review of the literature, the following recommendations for youth leadership life skill development, livestock exhibition, FFA and 4-H programming, and future research studies have been developed.

**Recommendations for Practice**

- 4-H and FFA should evaluate their livestock programs to make sure the ultimate goal of life skill development is happening and is highlighted in marketing and promotional materials to encourage wider support of, and participation in, the local program.

- 4-H and FFA should continue to assess the activities of both organizations in programs nationwide. Even though we conclude that there is no difference in skill development, there is the opportunity for both programs to enforce their overall mission of creating youth with leadership life skills by ensuring that their activities support their missions. Evaluation should occur continually, providing staff ongoing ways to increase the quality of programming provided.
Because there are many participants over the age of 18 participating in shows as Juniors, 4-H and FFA should consider adding a "Senior-Plus" Division to livestock shows to accommodate the interest.

**Recommendations for Further Research**

- More detailed research on the topic of livestock exhibition and the particular life skills developed should be conducted. Such research could influence the development of programming for livestock exhibition shows and projects.

- Research should be continually performed on the leadership life skill development through 4-H and FFA programs. Research sets out to prove the importance of 4-H and FFA, that the youth are consistently learning and developing through programming. Through continual research, programs can provide stakeholders with data to justify the input of resources into youth agricultural organizations.

- FFA and 4-H members may have developed leadership life skills in other ways other than through the exhibition of livestock. Future research should determine why 4-H and FFA participation was not related to YLLSD.

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