SELF-PERCEIVED YOUTH LEADERSHIP AND LIFE SKILLS OF IOWA FFA MEMBERS

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Abstract

Iowa FFA members were surveyed to determine if a significant relationship existed between their self-perceived youth leadership and life skills development scores and their participation in youth leadership activities. This study was patterned after research done by Dormody and Seevers (1994) of New Mexico State University. Responses were received from 316 Iowa FFA members. Iowa FFA members’ Youth Leadership And Life Skill Development Scale (YLLSDS) scores ranged from 0 to 90 with a composite mean of 62.6. The three highest skill means were observed for the YLLSDS items “getting along with others,” “respect others,” and “Show a responsible attitude.” FFA members participated most actively in chapter meetings, fund-raising and chapter banquets. Respondents indicated the highest leadership opportunities for nonFFA activities occurred through participation in sports, church groups, and after school jobs. The strongest relationship existed between YLLSDS scores and FFA leadership activities followed by years of membership in FFA, age, jobs, achievement expectancy, club officer, church groups, and class officer. A total of 22.26% of the variance in YLLSDS scores was explained by a combination of participation in FFA leadership activities, after school jobs, years in the FFA, self-reported cumulative grades, and gender.

The development of agricultural leadership skills has been one of the primary aims of the National FFA Organization since its inception in 1928. Among the primary purposes of this agricultural youth organization is the development of skills in communications, human relations, social abilities, citizenship, cooperation, and resource management (Official FFA Manual, 1993). As an intracurricular tool, the National FFA has had a successful and lasting impact for most youth in an agricultural education program.

William Brock, Chairman of the Labor Secretary’s Commission on Achieving Necessary Skills (SCANS, 1992), passionately wrote about the urgency for all educational programs to address the needs (other than academic) of students and society. Brock (1992) wrote, “there is much more to life than earning a living, and we want more from education than productive workers. We want citizens who can discharge the responsibilities that go with living in a democratic society and with becoming parents” (p. 4). In essence, the SCANS Report addressed the need for leadership training and the development of life skills needed by responsible, trustworthy adults.

The 1992 SCANS Report identified workplace competencies needed by all workers, such as the ability to manage resources, work productively with others, acquire and use information, understand complex systems, and work comfortably with a variety of technologies (Brock, 1992). Competent workers will be characterized by their basic skills (reading, writing, speaking, listening), thinking skills (ability to learn, creative thinking, decision making, problem solving) and personal qualities (responsibility, self-esteem, self-management, sociability, integrity) (Brock, 1992).
Conceptual Framework

There are many striking similarities between the SCANS Report and the primary purposes of the National FFA Organization. Those similarities could be described as the development of leadership and life skills. With this framework in mind, one may question, does participation in FFA leadership activities provide agricultural education students with life skills and personal qualities as defined by the 1992 SCANS Report? Is participation in FFA leadership activities solely responsible for youth leadership and life skills development, or are other factors contributing to the development of these skills?

Several investigators have explored the phenomenon, “leadership development and life skills gained,” through participation in the FFA. Among earlier studies is one completed by Townsend and Carter (1983). They found the total FFA activity participation score had a positive correlation with the leadership trait for 12th-grade agricultural education students in Iowa. Ricketts and Newcomb (1984) gathered data from 12th-grade senior males in middle Tennessee. Their study revealed “vocational agriculture students/FFA members from both superior and non-superior chapters possessed significantly more leadership and personal development abilities than nonvocational agriculture students” (p. 58).

McKinley, Birkenholz, and Stewart (1993) investigated participation in organizations and activities that was related to the perceived leadership abilities of students enrolled in the College of Agriculture at the University of Missouri-Columbia. They found “significant relationships between these four factors--interpersonal relations, administration, self management, and communications--and participation in athletics, National Honor Society, FFA, student council, language club, departmental clubs, social fraternity or sorority, intramurals, church groups, 4-H, and livestock association” (p. 81).

The most definitive study to date was conducted by Dormody and Seevers (1994). These researchers investigated variables that predicted youth leadership life skills development among FFA members in Arizona, Colorado, and New Mexico. Dormody and Seevers (1994) attempted to determine the predictors of youth leadership life skills development (YLLSD) from among participation in FFA leadership activities, achievement expectancy, self-esteem, years in the FFA, age, ethnicity, gender, and place of residence.

The major findings of their study were: three variables--achievement expectancy, participation in FFA leadership activities, and gender--explained significant amounts of the variance in YLLSD scores; the three variables explained a total of 16.7% of the variance in YLLSD scores; and leadership life skills development was not related to self-esteem, years in the FFA, age, ethnicity, nor place of residence (Dormody and Seevers, 1994). Considering the review of literature, the author of this research determined that a distinction should be made between the concepts “youth leadership” and “life skills development.” As such, the original terminology used by Dormody and Seevers (1994) was modified appropriately for this study.

The development of leadership and life skills through participation in FFA activities is not an outcome exclusively enjoyed by the National FFA Organization. Clark (1978) laid the groundwork for organization-specific research studies when he explored the benefits of club membership and leadership development within the Distributive Education Clubs of America (DECA). Among the major findings was that leadership ability of students increased with participation in the DECA chapter. Other researchers found similar results when examining comparable organizations, such as Future Homemakers of America, Office Education Association, and Vocational Industrial Clubs of
Other researchers have concluded that positive associations exist between leadership development and cumulative grades (Pope, 1983) and extracurricular school activities (Holland and Andre, 1987).

No study was found which had investigated relationships between youth leadership and life skills development and participation in agricultural youth organizations, or other youth organizations. Likewise, no research was found where comparisons were made between youth leadership and life skills development and school- or community-based leadership activities, for agricultural students in grades nine to twelve.

Purpose and Objectives

The central problem of this investigation was to determine if a significant relationship existed between Iowa FFA members’ self-perceived youth leadership and life skills development scores and their participation in youth leadership activities.

The objectives for this study were:

1. To describe Iowa FFA members by their self-perceived youth leadership and life skills development scores, participation in FFA leadership activities, participation in nonFFA leadership activities, achievement expectancy, years in the FFA, age, gender, self-reported cumulative grades, and place of residence;

2. To determine if significant relationships exist between self-perceived leadership and life skills development and selected independent variables; and,

3. To determine if a significant difference existed in the YLLSDS grand mean scores from this study and the study by Dormody and Seevers (1994) in Arizona, Colorado and New Mexico.

Procedures

Descriptive survey methodology and a correlational design were used in this study. The dependent variable was youth leadership and life skills development. The independent variables were participation in FFA leadership activities, participation in nonFFA leadership activities, achievement expectancy, years in the FFA, age, gender, self-reported cumulative grades, and place of residence. Both the dependent and independent variables were ascertained after their natural occurrence. The instrument used was The Iowa FFA Youth Leadership Life Skills Development Questionnaire, developed by the researcher, contained individual sections for measuring the dependent and independent variables. Cronbach’s Alpha was calculated for each section and the total instrument. The coefficient of reliability for the total instrument in this study, excluding demographics, was .93.

The YLLSD was developed to measure self-assessed scores of youth leadership skills gained through participation in 4-H and/or FFA activities. The Youth Leadership Life Skills Development Scale (YLLSDS) is a 30-indicator, unidimensional instrument (Seevers, Dormody & Clason, 1995). For the purposes of this study, selected Iowa FFA members indicated their perception of “gain” acquired through their experiences in the Iowa FFA Association. The YLLSDS used a four-point sub-scale with scores from zero to three (0 = no gain, 1 = slight gain, 2 = moderate gain, 3 = a lot of gain) and summated scores ranging from 0 to 90. Cronbach’s alpha for the YLLSDS section in this study was .97.

Participation in FFA leadership activities was measured by a 25-indicator index adapted from Dormody and Seevers (1994). The index listed various FFA leadership activities that included individual and group experiences. In this study, an effort was made to group local activities near the beginning of the index so the majority of FFA
members could indicate their participation. FFA members scored the index by indicating participation, ranging from zero to five (0 = no participation, 1 = local, 2 = district, 3 = state, 4 = regional, and 5 = national). Summated scores could range from 0 to 77. Cronbach’s alpha for the FFA index in this study was .86.

Based on the literature review, a separate section was developed by the researcher to assess the level of selected Iowa FFA members’ participation in youth leadership activities other than those offered by the National FFA Organization. This section was validated by a panel of six experts in agricultural education and the National FFA Organization. Iowa FFA members were asked to indicate their membership in other youth organizations and to compare their perceived “leadership development gain” to that of the National FFA Organization. Specific categories (school and community activities) were designed to assist the respondent in recording his/her responses. Each of the 20 nonFFA leadership activities was scored using the scale: 0 = No Participation, 1 = No Comparison to FFA, 2 = Some Comparison to FFA, 3 = Much Comparison to FFA, 4 = Very Much Comparison to FFA. Summated scores could range from 0 to 80. Cronbach’s alpha for the nonFFA index was .67.

Achievement expectancy was assessed using a two-indicator summated scale adapted from Dormody and Seevers (1994). The first indicator asked Iowa FFA members to record the level of evaluation they expected to receive in their FFA activities and/or projects. The second indicator asked FFA members to record the level of performance they expected from themselves while participating in FFA activities and/or projects. Both indicators had levels that ranged from outstanding to poor. Both indicators were summed, with scale scores ranging from zero to eight. Cronbach’s alpha for the achievement expectancy scale in this study was .80.

The demographics’ section included questions asking FFA members to record their years of membership in the FFA, age, current place of residence, gender, and average grades received in high school.

The target population for this study was all Iowa FFA members registered in the 1994-1995 Iowa FFA membership roster. From this roster, the population of Iowa FFA members was 10,186; a sample size of 371 was needed to represent this population (Krejcie & Morgan, 1970). For ease of questionnaire administration, the sample was increased to 400.

Data were collected from February to April 1995, via a mailed questionnaire which was sent directly to each randomly selected Iowa FFA member. A total of 282 usable questionnaires (70.5%) was received during the data collection period that included two-week postcard reminders and two additional instrument mailings. To check for nonresponse bias, a random sample of the remaining nonrespondents was drawn, totaling 100 Iowa FFA members. A total of 34 valid questionnaires was returned. Nonrespondents were compared statistically to respondents by YLLSDS scores, age, and gender. There were no statistical differences between nonrespondents and respondents. Borg and Gall (1989) recommend that if no significant differences are found when the responses of the initial respondents are compared with those of the nonrespondent sample, then the researcher can reasonably assume that the respondents represent an unbiased sample of all who receive the questionnaire. Nonrespondents’ data were compiled with respondents’ data, yielding a total response rate of 79% (N = 316).

Means, frequencies, modes, standard deviations, percentages, reliability, bivariate and multivariate analyses were performed on the data to accomplish the objectives of this study. The significance level of .05 was set apriori for all inferential statistics.

Findings

Objective One: Iowa FFA members’ YLLSDS scores ranged from 0 to 90 with a median of 65. The FFA youth had a composite mean of 62.65, with a standard deviation of 17.83 (Table 1). Using a scale of 0 to 3, analysis of individual survey items revealed the top three grand item means were: “get along with others” (M = 2.37, SD = .79); “respect others” (M = 2.34, SD = .77); and “show a responsible attitude” (M = 2.28, SD = .79). The statements receiving lowest grand item means were: “can determine needs” (M = 1.78, SD = .73); “can express feelings” (M = 1.82, SD = .94); and “am sensitive to others” (M = 1.89, SD = .90).

Summated scores on the participation in FFA leadership activities index ranged from 0 to 60 (M = 19.94, SD = 12.62) with a median of 17.5 (Table 1). Among all FFA activities listed, FFA members participated most actively in chapter meetings (n = 301), fundraising (n = 280), and chapter banquet (n = 269). They were least active in the Washington conference program (n = 26), agriscience recognition program (n = 41), and summer leadership camp (n = 68).

Summated scores for the participation in nonFFA leadership activities index resulted in an overall range of 0 to 45 (M = 10.25, SD = 6.73) with a median of 9.0 (Table 1). Among all school and community activities listed, Iowa FFA members indicated highest comparative leadership opportunities from participation in sports (n = 245), church groups (n = 235), and after school jobs (n = 206). The least amount of comparative leadership opportunities occurred in VICA Clubs (n = 8), DECA Clubs (n = 9), and FHA-HERO Clubs (n = 10).

Summated scores for the achievement expectancy scale ranged from 0 to 8 (M = 6.06, SD = 1.47) with a median of 6.0 (Table 1). Iowa FFA members’ cumulative years in the FFA ranged from 1 to 7 (M = 2.62, SD = 1.48) with a median of 2 years. FFA members’ reported ages ranged from 14 to 21 (M = 16.6, SD = 1.56 with a median of 16 years of age.

Table 1. Descriptive Statistics for Interval and Ratio Data Variables (N = 316)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>SD”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth leadership and life skills development</td>
<td>62.65 ²</td>
<td>65.00</td>
<td>17.83</td>
</tr>
<tr>
<td>Participation in FFA leadership activities</td>
<td>19.94 ³</td>
<td>17.50</td>
<td>12.62</td>
</tr>
<tr>
<td>Participation in nonFFA leadership activities</td>
<td>10.25 ⁴</td>
<td>9.00</td>
<td>6.73</td>
</tr>
<tr>
<td>Achievement expectancy</td>
<td>6.06 ⁵</td>
<td>6.00</td>
<td>1.47</td>
</tr>
<tr>
<td>Years in the FFA</td>
<td>2.62 ⁶</td>
<td>2.00</td>
<td>1.48</td>
</tr>
<tr>
<td>Age</td>
<td>16.60</td>
<td>16.00</td>
<td>1.56</td>
</tr>
</tbody>
</table>

¹ Standard deviation.  
² Summated scale values of 0 to 90.  
³ Summated scale values of 0 to 77.  
⁴ Summated scale values of 0 to 80.  
⁵ Summated scale values of 0 to 8.  
⁶ Scale values of 1 to 11 or more.
More than half of Iowa FFA members (n = 192) were from a farm (Table 2). Exactly one-half (n = 158) of the selected Iowa FFA members indicated the cumulative grade averages they had received during high school was a 3.0, on a scale of 1.0 to 4.0. The majority of Iowa FFA members (n = 237) responding to this survey were male. The variable gender was dummy coded, with males coded as 1 and females coded as 0. To put categorical variables such as gender into a regression equation, they need to be recoded as binary variables (Ary, Jacobs, & Razavieh, 1996).

Objective Two: The magnitude of relationships reported is based on the recommendations of Hinkle, Wiersma, and Jurs (1994, p. 119). The strongest statistically significant relationship existed between YLLSDS and FFA leadership activities (r= .37, p. < .05). This association was followed by years of membership in the FFA (r= .31), age (r = .27), jobs (r = .17), achievement expectancy (r= .17), club officer (r = .17), church groups ( r = .16) and class officer (r = .15). The independent variable “gender” had a low negative relationship (r= -.15) with the dependent variable. This result illustrates that although Iowa FFA members numbered 7 males to 3 females (A. O’Neal, personal communication, May 18, 1995), indicating a representative sample, female FFA members responding to this study significantly outscored their male counterparts on the YLLSDS section of the Iowa FFA YLLSDS Questionnaire.

To complete objective two, multivariate analyses of data were performed using the “forced entry multiple regression” procedure. This method was chosen because it allows all independent variables to be entered into, and remain in, the multiple linear equation (Pedhazur, 1982). In the first analysis, a total of 23 explanatory variables was entered into the equation to determine the best fit for the multiple regression model. The amount of variance explained in youth leadership and life skills development scores was attributed to all the statistically significant independent variables within the multiple regression equation.

Table 2. Descriptive Statistics for Nominal & Ordinal Data Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place of residence</td>
<td>Farm</td>
<td>192</td>
<td>60.8</td>
</tr>
<tr>
<td></td>
<td>Rural nonfarm or town &lt;10,000</td>
<td>99</td>
<td>31.3</td>
</tr>
<tr>
<td></td>
<td>Town or city 10,000 to 50,000</td>
<td>21</td>
<td>6.6</td>
</tr>
<tr>
<td></td>
<td>Suburb or city &gt;50,000</td>
<td>4</td>
<td>1.3</td>
</tr>
<tr>
<td>Cumulative grades</td>
<td>Mostly A’s</td>
<td>92</td>
<td>29.1</td>
</tr>
<tr>
<td></td>
<td>Mostly B’s</td>
<td>158</td>
<td>50.0</td>
</tr>
<tr>
<td></td>
<td>Mostly C’s</td>
<td>62</td>
<td>19.6</td>
</tr>
<tr>
<td></td>
<td>Mostly D’s</td>
<td>3</td>
<td>0.9</td>
</tr>
<tr>
<td>Gender</td>
<td>Female</td>
<td>79</td>
<td>25.0</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>237</td>
<td>75.0</td>
</tr>
</tbody>
</table>
The findings from the first multivariate analysis of data revealed the independent variable, “FFA leadership activity,” was statistically significant ($t = 4.562$) for the explanation of variance in YLLSDS scores. Other statistically significant independent variables accounting for the explanation of variance in the dependent variable included gender, self-reported cumulative grades, after school jobs, and years in the FFA (Table 3).

The results from the first analysis revealed a total of 25.4% of the variance in youth leadership and life skills development scores was accounted for by a combination of significant independent variables. Upon elimination of independent variables with high intercorrelations, a total of 22.3% of the variance in YLLSDS scores was accounted for by the statistically significant independent variables (Table 4).

**Objective Three:** To complete this objective, the grand mean YLLSDS score in this study ($N = 316$, $M = 62.65$) was compared statistically with the score in the study by Dormody and Seevers (1994).

### Table 3. Summary of Forced Entry Regression on the Dependent and Independent Variables

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>sum of Squares</th>
<th>Mean Square</th>
<th>$F$ Ratio</th>
<th>$F$ Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>6</td>
<td>22211.819</td>
<td>3701.969</td>
<td>14.702</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>308</td>
<td>77556.158</td>
<td>251.806</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>SE $B$</th>
<th>Beta</th>
<th>$T$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(YLLSDS)</td>
<td>59.379</td>
<td>4.895</td>
<td></td>
<td>12.130</td>
<td>0.000*</td>
</tr>
<tr>
<td>FFA Activity</td>
<td>0.401</td>
<td>0.088</td>
<td>0.284</td>
<td>4.562</td>
<td>0.000*</td>
</tr>
<tr>
<td>Club Officer</td>
<td>1.225</td>
<td>0.719</td>
<td>0.090</td>
<td>1.702</td>
<td>0.089</td>
</tr>
<tr>
<td>Jobs</td>
<td>2.036</td>
<td>0.605</td>
<td>0.169</td>
<td>3.362</td>
<td>0.001*</td>
</tr>
<tr>
<td>Years in the FFA</td>
<td>2.049</td>
<td>0.723</td>
<td>0.170</td>
<td>2.832</td>
<td>0.005***</td>
</tr>
<tr>
<td>Cumulative Grades</td>
<td>-3.241</td>
<td>1.333</td>
<td>-0.131</td>
<td>-2.431</td>
<td>0.016*</td>
</tr>
<tr>
<td>Gender</td>
<td>-5.887</td>
<td>2.162</td>
<td>-0.143</td>
<td>-2.723</td>
<td>0.007*</td>
</tr>
</tbody>
</table>

*p<.05

### Table 4. $R$ Square Comparison Between Multiple Regression Models

<table>
<thead>
<tr>
<th>Forced Entry Multiple Regression Equation</th>
<th>$R$</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>First multiple regression model</td>
<td>0.5037</td>
<td>0.2537</td>
<td>0.1945</td>
<td>15.9977</td>
</tr>
<tr>
<td>Second multiple regression model</td>
<td>0.4718</td>
<td>0.2226</td>
<td>0.2075</td>
<td>15.8684</td>
</tr>
</tbody>
</table>
in Arizona, Colorado and New Mexico (N = 255, M = 64.2). The test failed to verify that a significant difference existed between the study by Dormody and Seevers (1994) and this study.

Conclusions

The construct of youth leadership and life skills development is a complex arrangement of experiences, backgrounds, and attitudes, when measured by the perceptions of secondary agricultural education students. Leadership and life skill development were defined as skills in communications, decision making, interpersonal relationships, learning, resource management, understanding self, and working with groups.

Positive relationships existed between YLLSDS scores and FFA leadership activities (chapter meetings, fundraising events, chapter banquets, SAE projects, being an FFA committee member) and membership in the FFA. NonFFA youth leadership activities included participation in sports, church groups, after school jobs, and 4-H clubs, however “after school jobs” was the only statistically significant nonFFA activity in the multiple regression model. The variable gender had a low negative relationship with YLLSDS scores, based on the binary coding of males = 1 and females = 0. Greater cooperation among agricultural educators, business and industry representatives, and other youth organization advisors is needed to foster an environment that is conducive to building leadership and life skill development for all youth at the secondary level.

Participation in FFA leadership activities, in combination with the variables after school jobs, years in the FFA, self-reported cumulative grades, and gender, accounted for 22.3% of the variance in youth leadership and life skills development scores. When comparing YLLSDS grand mean scores, no statistical difference existed between this study and the study by Dormody and Seevers (1994). Dormody and Seevers (1994) found achievement expectancy, FFA activities, and gender accounted for 16.7% of the variance in YLLSDS scores. As an addition to the body of knowledge surrounding youth leadership and life skills development, this study has revealed an increase in the overall amount of variance explained for this concept. With less than 25% of the variance explained in the phenomenon known as leadership development, the Agricultural Education profession has much to discover.

Implications and Recommendations

Agricultural students at the secondary level could increase their leadership skills in communications, decision making, getting along with others, learning, management of self, understanding self, and working with groups. By participating in a combination of youth leadership organizations in school and/or community activities. Agricultural educators should stress the importance of academic success and the value of becoming involved in a variety of intra- and extracurricular activities that promote youth leadership and life skills development.

FFA advisors and other youth organization advisors should place more emphasis on working collaboratively to improve the total youth leadership program. Additional research is needed in determining which combination of agricultural and nonagricultural youth leadership activities would provide the most gain in youth leadership and life skills development.

More than 75% of the phenomenon known as youth leadership development remains unknown to the Agricultural Education profession. Research studies are needed to further advance the theory of youth leadership and life skills development and its role in preparing youth to become responsible, productive citizens. Additional research is needed in determining other variables that may contribute to the explanation of variance in youth leadership and life skills development scores.
References


