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## Leadership Life Skills Development in 4-H Teen Leadership Programs

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## Leadership Life Skills Development in 4-H Teen Leadership Programs

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**Abstract.** This study introduces a framework for 4-H leadership competencies and explores the relationship between 4-H leadership programs and participant leadership life skills development. Illinois 4-H members aged 15-18 completed an online survey about their 4-H experiences and skills. Participants reported local programs exhibited the characteristics in the leadership competencies framework. Members participating in leadership competency programs reported higher leadership life skills scores than those in other 4-H non-leadership-oriented programs. Females reported higher leadership life skills scores in comparison to males. However, spending more years in leadership programs was only related to a significant change in skills development for some participants.

### INTRODUCTION

4-H programs follow the experiential learning model and operate with the view that members learn leadership skills by practicing leadership behaviors (University of Illinois Extension, 2012). Providing youths with opportunities to learn and practice skills in groups to increase leadership knowledge matches the broader literature of youth leadership (Conner & Strobel, 2007; Redmond & Dolan, 2016; van Linden & Fertman, 1998).

4-H provides many avenues to learn leadership skills. Some studies have documented the self-assessment of leadership life skills in 4-H members who attended leadership conferences and trainings (Leggette et al., 2013; McElravy & Hastings, 2014; Tassin et al., 2010). Other studies have evaluated the perceived leadership skills obtained from 4-H livestock-related events (Anderson et al., 2015; Davis et al., 2016). Scholars have also examined the perceived leadership life skills of 4-H members who completed specific leadership activities (Phelps & Kotrlik, 2007; Real & Harlin, 2006). However, few have studied the leadership skills development of 4-H members in long-term opportunities designed specifically to teach leadership skills.

Among various factors, the amount of time spent in 4-H opportunities has been found to influence leadership life skills development. Phelps and Kotrlik (2007) found that more years of 4-H participation were related to higher leadership skills development. Real and Harlin (2006) reported that 4-H members with additional leadership experience

reported higher leadership skills. Boyd et al. (1992) found that increased participation in 4-H activities led to a slight increase in leadership skills.

Previous research on youth leadership had little consensus around a shared definition of youth leadership (Conner & Strobel, 2007). To provide shared terms and practices, the Illinois 4-H program created a framework that categorizes and defines 4-H leadership programs (Diaz et al., 2015). The framework outlines six competencies, including planning, promoting, teaching, mentoring, advocating, and advising (Diaz et al., 2015). For example, the 4-H ambassador program is defined as promoting competency. The definitions allow each competency to include any 4-H program with similar learning objectives, regardless of the program name. This framework applies to programs lasting for multiple months or longer.

Our study aims to extend the discussion of how participation in 4-H activities influences leadership skills outcomes by answering the following:

1. Do youths in self-identified 4-H leadership competency programs report higher leadership life skills development than do youths in other 4-H programs?
2. Do youths who spend more years in 4-H leadership competency programs report higher leadership life skills development than do youths who spend fewer years in these programs?

## METHODS

We created an online survey to measure the perceived leadership life skills among Illinois 4-H members ages 15 to 18. In 2016, we sent the anonymous survey to all 4-H members in this age group who had a known email address in the state membership database. Local 4-H staff were also asked to provide the survey link to teens in their units. One month later, we sent a follow-up email to the known email addresses to increase the responses. Respondents who completed the survey were entered into a drawing for one of five \$50 Amazon gift cards, funded by the Illinois State 4-H Office.

## MEASURES

To explain the leadership competency framework to respondents, we included a definition of each leadership competency on the survey. Respondents were asked whether they were part of 4-H programs that met one of the six competencies' descriptions.

If members self-identified as part of any 4-H leadership competency program, they were asked to name the program. This allowed us to verify whether the program was affiliated with 4-H. Respondents could identify themselves as belonging to multiple leadership competency programs as well as multiple programs within a particular competency. For each leadership competency, respondents were asked to report the number of years and the number of hours per year spent participating.

Our study adopted the Youth Leadership Life Skills Development (YLLSD) scale (Seevers et al., 1995) to measure perceived leadership life skills. Various research involving 4-H and FFA audiences have used the scale (Davis et al., 2016; Leggette et al., 2013; McElravy & Hastings, 2014). The YLLSD 30-item scale was assessed for face and content reliability by a seven-member panel of experts and has a Cronbach's alpha reliability coefficient of .98 (Seevers et al., 1995).

The YLLSD scale defines leadership life skills by the same seven subdomains as does the 4-H leadership curriculum. These domains include understanding self, communicating, getting along with others, learning to learn, making decisions, managing, and working with groups (University of Illinois Extension, 2012). Each of the 30 YLLSD indicators asks participants to self-report their change in the skill from participating in the program by using a 4-part Likert scale ranging from *no gain*, *slight gain*, or *moderate gain* to *a lot of gain*. Each indicator is worth 0–3 points, for a total score of up to 90 points. Our survey also included demographic questions asking respondents' age, gender, race and ethnicity, and years of 4-H membership.

## RESPONDENTS

Survey collection yielded 595 responses. This represented a 9.4% return rate compared to the total number of 4-H mem-

bers in the 15- to 18-years age group. We reviewed data based on gender, age, county, activities, and drawing entry to check for duplicate completion. We did not confirm any duplication—only two responses identifying FFA as the leadership program were removed.

Our sample included a higher proportion of females: 75% of survey respondents were females, while 60% of the Illinois 4-H member population were females at the time. The sample also contained a slightly higher proportion of minority youths. While 8% of 4-H members reported to be in a minority racial or ethnic group, 14% of survey respondents identified themselves with a minority racial or ethnic group. No attempt was made to oversample female or underrepresented member population. Smith (2008) found that females are more likely to respond to surveys. The relatively high percentage of minority members could be related to the racial composition in counties that promoted the survey.

Youths confirmed the leadership competency framework by reporting that their local programs fit into one or more framework categories. Table 1 compares demographic information of 4-H respondents who reported participation in leadership competency programs and those who did not report participation. Respondents who reported not participating in a leadership competency program are members of all other 4-H programs. These programs are not designed to meet the leadership competency framework's definitions and may include community clubs or special-interest clubs. The two groups reported similar demographic characteristics.

## FINDINGS

To determine whether participating in 4-H leadership competency programs led to an increase in leadership life skills, we used an ordinary least squares (OLS) regression. The YLLSD score was the dependent variable, and participation in any 4-H leadership competency program was the independent variable. The regression model also controlled for respondents' years of membership in 4-H, age, and gender.

As detailed in Table 2, a statistically significant difference was found in leadership life skills scores between leadership competency program participants and all other 4-H program participants ( $F(4,434) = 6.10; p = .000$ ), with an adjusted  $R^2$  of .05. Compared to members in all other 4-H programs, on average, those who participated in one leadership competency program scored 1.55 points higher in leadership life skills.

The variable for gender also showed a significant relationship to leadership life skills ( $p < .05$ ). Females scored 4.11 points higher than males. The additional control variables for years of 4-H membership and age did not project a significant relationship to YLLSD in the model or show significantly different effect sizes.

## Leadership Life Skills Development in 4-H Teen Leadership Programs

**Table 1.** Demographic Comparison of Youths in 4-H Leadership Competency Programs and All Other 4-H Programs

	Youths in 4-H leadership competency programs	Youths in all other 4-H programs
Males	90 (24.9%)	24 (20.3%)
Females	272 (75.1%)	94 (79.7%)
Caucasian	323 (85.4%)	110 (89.4%)
African American	26 (6.9%)	3 (2.4%)
Asian	9 (2.4%)	3 (2.4%)
American Indian or Alaska Native	8 (2.1%)	2 (1.6%)
Some other race	12 (3.2%)	5 (4.1%)
Hispanic	14 (3.7%)	7 (5.7%)
Average age	16.99 years	16.84 years
Average number of years in 4-H	6.86 years	6.41 years

Note. Some respondents chose not to disclose their gender, race, or ethnicity.

**Table 2.** Regression Analysis of YLLSD Scores and Involvement in 4-H Leadership Competency Programs

	B	SE	t
(Constant)	50.92**	5.18	9.83
Participation in leadership competency programs	1.55**	.46	3.39
Years of 4-H involvement	.32	.29	1.08
Age	1.13	.71	1.58
Gender ( <i>Female = 0, Male = 1</i> )	-4.11*	1.91	-2.15
Adjusted R <sup>2</sup> = .05		n = 439	

\*  $p < .05$ , \*\*  $p < .01$

**Table 3.** Mean Values and Correlation Coefficients of YLLSD and Years Spent in 4-H Leadership Competency Programs

Leadership competency	n	YLLSD		Years in programs		r
		Mean	SD	Mean	SD	
Planning	298	71.91	16.70	3.29	1.83	-.03
Promoting	196	72.68	15.93	3.69	1.87	.05
Teaching	216	71.33	17.75	3.01	1.79	.00
Mentoring	106	70.76	19.93	3.74	1.78	.30**
Advocating	79	73.46	17.68	3.47	1.72	.22*
Advising	98	72.51	15.11	3.31	1.73	.06

\*  $p < .05$ , \*\*  $p < .01$

The second research question asked whether the amount of time spent participating in leadership competency programs was related to leadership life skills development. To answer this question, we completed bivariate correlations between YLLSD and years of participation in programs defined by the six Illinois leadership competencies. Because respondents could respond that they participated in multiple

leadership competency programs, each of the six competencies was analyzed individually.

Table 3 includes the mean and standard deviation for YLLSD scores and years spent in each leadership competency program and their correlation coefficients. Leadership competency programs focusing on mentoring ( $r(104) = .30$ ;  $p < .05$ ) and advocating ( $r(77) = .22$ ;  $p < .01$ ) were the only two with significant, yet weak, correlations between participants'

YLLSD scores and time spent in the programs. Regardless, our study shows that longer participation in these two leadership competency programs would increase 4-H members' leadership skills.

## LIMITATIONS

The data presented represents 4-H members' perception of leadership taught in 4-H programs. The survey relied on 4-H members to self-identify their participation in leadership competency programs. While respondents listed names of their programs, we did not crosscheck each program with the competency framework to confirm that the program matched well with the guidelines. However, this study suggests that youths recognized the leadership framework characteristics in their local programs, providing confirmation that the adult-created framework matches experiences perceived by youths.

While the relationship between leadership life skills and participation in leadership competency programs was significant, our model with a low adjusted-R square indicates that in the future, we should also consider other important factors that relate to youth leadership life skills development outside program participation. We did not control for other 4-H leadership experience or experience outside 4-H. Respondents may have had leadership roles, such as serving as 4-H club presidents, but their 4-H clubs were not designed as only leadership competency programs. Respondents might also be part of other organizations promoting leadership.

## CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The results of our study support past findings that participation in leadership programming increases perceived leadership life skills development. The study adds to the conversation by providing evidence that youths recognize the same activities in leadership programming as described in the leadership competency framework, and their participation in these programs leads to higher leadership skills achievement when compared to that of 4-H members in other 4-H activities.

This study described the Illinois leadership competencies framework to 4-H program participants. Those who recognized these leadership competencies in their programs reported higher leadership life skills, providing evidence that 4-H leadership programs modeled from the leadership competency framework include the activities necessary for developing leadership life skills.

For a majority of the study participants in leadership competency programs, the number of years spent in the

program was not related to their leadership life skills development. In other outside school programs, attendance itself is not associated with outcomes (Hirsch et al., 2010). Roth et al. (2010) defined participation as intensity, duration, total exposure, breadth, and engagement. A more detailed and accurate framework of participation could explain the aspects of participation that may lead to developmental outcomes.

In this study, females reported higher leadership life skills development than did males. This same finding is in other studies of leadership life skills (Phelps & Kotrlik, 2007; Real & Harlin, 2006). It is unclear whether this finding is due to program characteristics that foster development in females over males or whether female involvement involves more intensity or engagement, leading to different outcomes. It is important to keep this gender difference in mind when facilitating leadership programs.

4-H will continue to provide youths with opportunities for leadership life skills development. We recommend that program planners:

- use the Illinois leadership competencies framework to design or evaluate local 4-H leadership programs;
- confirm that 4-H members are aware of the outcome and incorporate time to reflect on skill growth, if leadership skills development is a specific program outcome;
- educate 4-H volunteers to create experiences designed to build leadership life skills; and
- recognize that youths learn at different rates and support their individual development.

Lastly, our study only included youths enrolled in Illinois 4-H. It has limited external validity. However, it provides an opportunity to apply the leadership competency framework to other states' 4-H programs and offer comparisons in the future. The framework allows for the local flavor of leadership programs and adds to the discussion of common leadership development program characteristics.

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## Leadership Life Skills Development in 4-H Teen Leadership Programs

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