

10-1-2006

## A Comparison of 4-H and Other Youth Development Organizations in the Development of Life Skills

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### Recommended Citation

Maass, S. E., Wilken, C. S., Jordan, J., & Culen, G. (2006). A Comparison of 4-H and Other Youth Development Organizations in the Development of Life Skills. *The Journal of Extension*, 44(5), Article 11. <https://tigerprints.clemson.edu/joe/vol44/iss5/11>

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October 2006 // Volume 44 // Number 5 // Research in Brief // 5RIB2



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## A Comparison of 4-H and Other Youth Development Organizations in the Development of Life Skills

### Abstract

The article briefly describes the results of a study on the influence of 4-H and other youth development programs on the development of 36 life skills including critical thinking, goal setting, communication, decision-making and community service. Respondents (n=223) were high achieving 4-H alumni who participated in the Oklahoma 4-H Program between the years 1969 and 1998. Results suggest that while respondents credited 4-H with influencing the development of the majority of the identified life skills, other youth organizations were also identified as having some influence on the development in different life skills. Recommendations for 4-H programming are offered.

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## Introduction

During the last two decades, numerous studies have been conducted with current 4-H members or alumni exploring life skill development associated with 4-H (e.g., Ladewig & Thomas, 1987; McKinley, 1999a, 1999b; Seevers & Dormody, 1995). Life skills are learned competencies known to assist individuals with leading constructive and rewarding lives and include decision-making, accepting differences, teamwork, self-responsibility, cooperation, and communication (Hendricks, 1998). 4-H has been quite successful in the development of life skills of its members (Ladewig & Thomas, 1987; McKinley, 1999a, 1999b; Mustian, 1988). Yet 4-H members concurrently participate

in a variety of youth development organizations (i.e., vocational, church youth groups) that share a similar mission of life skill development (Maass, 2004).

The question of how other youth development organizations, in their own programming, also enhance an individual's life skill development remains unclear. Little research has been done to better understand how 4-H alumni perceive the influence of life skill development in dual membership in 4-H and other youth development organizations. With the single exception of Mustian (1988), no research has been identified that asked 4-H alumni to describe the influence of both 4-H and other youth development organizations on life skill development.

This article shares the results of a survey of how high-achieving 4-H alumni who concurrently participated in 4-H and other youth development organizations attribute the development of 36 life skills to 4-H and other youth development programs using the following research question: How do 4-H alumni compare 4-H with other youth organizations in contributing to the development of life skills?

## Methodology

A cross-sectional, quasi-experimental research design was used for the study. A survey was originally mailed to 444 alumni of the Oklahoma 4-H Program. Following Dillman's (2000) recommendations, a thank you/reminder postcard was mailed 2 weeks following the initial mailing; 2 weeks later non-responders were sent a replacement survey. Fifty surveys were returned undeliverable, and nine were unusable (i.e., excessive missing data, mother completed survey), yielding 223 usable responses resulting in a 58% response rate.

Life skills, the dependent variable, were measured using the Life Skills Inventory (LSI) (Maass, 2004), comprised of 36 items drawn from the Indiana 4-H Impact Study (McKinley, 1999A), the National 4-H Impact Study (Ladewig & Thomas, 1987), the Targeting Life Skills Model (Hendricks, 1998), the Washington State University Cooperative Extension Life Skills Evaluation System (2001), and public speaking (Seevers & Dormody, 1995). An expert panel of eight state and district 4-H specialists reviewed the survey for face and content validity. The panel's suggestions and recommendations to improve the clarity, readability, content, and layout of the questionnaire were incorporated into the final questionnaire.

The survey asked the 4-H alumni to respond to questions regarding the following aspects of their 4-H careers:

- 4-H experiences;
- Influential aspects of 4-H;
- Participation in other youth development organizations;
- Life skill development attained through participation in 4-H and other youth development organizations;
- Current community involvement; and
- Demographics.

This article reports specifically on the comparison of perceived life skill development attained through participation in 4-H and other youth development organizations (OYDO).

Figure 1 displays the items that comprise the Life Skill Inventory (LSI) used to assess the respondents' attribution of life skills. The respondents were asked the following: "Reflect back on your organizational experiences. In the first column answer the following question, 'Through 4-H I learned to ♦'. In the second column, use the strongest influence according to question 5 (other than 4-H) to answer the following question, 'Through \_\_\_\_\_ I learned to ♦' (Maass, 2004).

**Figure 1**  
Life Skills Developed Through 4-H and Other Youth Development Organizations

*Through _____ I learned to...*	4-H					OYDO				
	Not at All	Some	Great Deal	Not at All	Some	Great Deal	Not at All	Some	Great Deal	
Treat people who are different from me with respect	1	2	3	4	5	1	2	3	4	5
Do the right thing in difficult situations	1	2	3	4	5	1	2	3	4	5
Clearly state my thoughts, feelings, and ideas to others	1	2	3	4	5	1	2	3	4	5
Give back to the community as a volunteer	1	2	3	4	5	1	2	3	4	5
Express concern for others	1	2	3	4	5	1	2	3	4	5
Settle disagreements in ways that are not harmful to others	1	2	3	4	5	1	2	3	4	5
Make any possible contributions I can when working with a group	1	2	3	4	5	1	2	3	4	5
Cooperate while working with others towards a goal	1	2	3	4	5	1	2	3	4	5
Think critically in any situation	1	2	3	4	5	1	2	3	4	5
List my options before making a decision	1	2	3	4	5	1	2	3	4	5
Take necessary steps to prevent any diseases	1	2	3	4	5	1	2	3	4	5
Understand feelings of others	1	2	3	4	5	1	2	3	4	5
Maintain control over my own personal goals/future	1	2	3	4	5	1	2	3	4	5
Make healthy food choices	1	2	3	4	5	1	2	3	4	5
Keep accurate and useful records	1	2	3	4	5	1	2	3	4	5
Organize a group to reach its goal	1	2	3	4	5	1	2	3	4	5
Explore the world and have curiosity about new things	1	2	3	4	5	1	2	3	4	5
Manage my feelings in uncomfortable situations	1	2	3	4	5	1	2	3	4	5
Skills needed that an employer would value	1	2	3	4	5	1	2	3	4	5
Make contributions to growing relationship	1	2	3	4	5	1	2	3	4	5
Avoid risky behaviors	1	2	3	4	5	1	2	3	4	5
Make a plan and arrangements before taking action	1	2	3	4	5	1	2	3	4	5
Work out problems that are presented to me	1	2	3	4	5	1	2	3	4	5
Plan and deliver presentations to groups	1	2	3	4	5	1	2	3	4	5
Bounce back after a challenging life experience	1	2	3	4	5	1	2	3	4	5
Accept the responsibility that comes with being a good citizen	1	2	3	4	5	1	2	3	4	5
Follow through on the commitments I have made	1	2	3	4	5	1	2	3	4	5
Have confidence to do any job necessary	1	2	3	4	5	1	2	3	4	5
Be self-motivated	1	2	3	4	5	1	2	3	4	5
Accept responsibility for doing a job	1	2	3	4	5	1	2	3	4	5
Use practical, applied experiences to better understand the real world	1	2	3	4	5	1	2	3	4	5
Share my talents with those who need them	1	2	3	4	5	1	2	3	4	5
Relate to others socially	1	2	3	4	5	1	2	3	4	5
Deal with daily stressors	1	2	3	4	5	1	2	3	4	5
Contribute as a member of a team	1	2	3	4	5	1	2	3	4	5
Use the resources I have readily available to me	1	2	3	4	5	1	2	3	4	5

The LSI was created by summing the scores for each of the 36 life skills included in Figure 1. The LSI yielded a Chronbach's alpha of 0.96 suggesting that these items measured a single unidimensional latent construct (i.e., life skills).

## Sample

Oklahoma 4-H Alumni (4-H members between 1969 and 1998) were identified as high achieving and included in this study if they had participated in one or more of the following activities:

- National 4-H Congress;
- National 4-H Conference;
- Oklahoma 4-H Key Club;
- State officer; District officer;
- State 4-H ambassador;
- State Hall of Fame winner;
- State project winner;
- and State scholarship winner.

SPSS (2001) was used to run all data analysis. Table 1 summarizes the demographic make-up of the sample. The average age of respondents was 37.5 years ( $SD = 8.43$  years). More than 90% of the respondents had participated in 4-H for 8 years or more (range 4 to 10 years,  $M = 9.08$ ;  $SD = 1.057$ ). The majority of respondents had multiple 4-H offices at the local, county, and state levels and participated in 4-H activities, events, and competitions from the local to the national levels. Almost 90% of respondents identified themselves as Caucasian and 10.5% as Native American; nearly 62% of the respondents identified themselves as rural (living on a farm while in 4-H); and 67.3% were female, 32.7% male. More than 90% had completed some education beyond high school.

**Table 1.**  
Sociodemographic Characteristics of Sample\*

Gender	n	%
Male	72	32.7
Female	148	67.3
Ethnicity		
White, not of Hispanic Origin	198	89.6
American Indian or Alaskan Native	23	10.4

<b>Education Level</b>		
GED/High School	3	1,4
Technical School	4	1.8
Some College	28	12.6
Associate Degree	11	5.0
Bachelor Degree	102	45.9
Master Degree	61	27.5
Doctor Degree	13	5.9
<b>Residence while in 4-H</b>		
Farm	134	61.5
Rural, non-farm	34	15.6
< 5,000	23	10.6
5,000 - 20,000	13	6.0
> 20,000	14	6.4
* Total number in each category varies from 218-221 due to missing data		

## Findings

The positive influence of 4-H programs on the development of life skills has been well documented. This project sought to better understand how 4-H alumni attribute their life skills to membership in 4-H and OYDO. Participants were asked to reflect on experiences in 4-H and OYDO and describe the influence each had on 36 life skills. Nearly all respondents (92.6%, or n = 206) reported that they had been a member of an OYDO in addition to 4-H. Among this sample, participation in religious organizations was most frequently identified (65.9%), followed by athletics (58.3%), student council (45.7%), Future Homemakers of America (34.5%), and Future Farmers of America (21.1%).

### Ranking of Life Skills

Table 2 displays the mean, standard deviation, and rank for each of the 36 life skills as attributed to 4-H and OYDO.

**Table 2.**  
Development of Life Skills Taught by the 4-H Program & Other Youth Organizations (n = 223)

<b>Life Skill</b>	<b>4-H Program</b>			<b>Other Organizations</b>		

	0	SD	Rank	0	SD	Rank
Public Speaking	4.79	0.56	1	3.16	1.27	33
Community Service Volunteering	4.65	0.65	2	3.77	1.20	24
Self-discipline	4.58	0.70	3	4.24	0.93	2
Self-responsibility	4.58	0.67	3	4.11	0.97	6
Teamwork	4.58	0.69	3	4.01	1.00	10
Cooperation	4.57	0.60	6	4.15	0.89	4
Marketable Skills	4.56	0.75	7	3.77	1.16	24
Self-esteem	4.55	0.66	8	4.00	1.01	13
Social Skills	4.53	0.66	9	4.13	0.93	5
Responsible Citizenship	4.52	0.64	10	4.01	1.03	10
Self-motivation	4.52	0.74	10	3.96	1.07	15
Contributions to Group Effort	4.47	0.71	12	4.03	0.90	7
Wise Use of Resources	4.46	0.72	13	3.78	1.05	23
Keeping Records	4.44	0.78	14	2.62	1.30	35
Sharing	4.44	0.73	14	3.98	1.02	14
Leadership	4.43	0.71	16	3.49	1.23	29
Goal Setting	4.39	0.79	17	3.87	1.05	20
Communication	4.39	0.77	17	3.53	1.01	28
Learning to Learn	4.28	0.91	19	3.24	1.19	32
Problem Solving	4.24	0.75	20	3.88	0.98	19
Service Learning	4.24	0.83	20	3.58	1.10	27
Character	4.22	0.80	22	4.42	0.82	1

Planning/Organizing	4.20	0.83	23	3.35	1.17	30
Accepting Differences	4.14	0.88	24	4.23	0.88	3
Critical Thinking	4.12	0.87	25	3.59	1.05	26
Concern for Others	4.12	0.85	25	4.03	1.12	7
Nurturing Relationships	4.02	0.89	27	3.96	1.02	15
Resiliency	3.96	0.98	28	4.01	1.10	10
Decision Making	3.83	1.02	29	3.34	1.17	31
Managing Feelings	3.82	1.00	30	3.79	1.10	22
Empathy	3.79	0.98	31	3.90	1.02	18
Stress Management	3.77	1.02	32	4.03	1.02	7
Healthy Lifestyle Choices	3.76	1.21	33	2.57	1.32	36
Conflict Resolution	3.73	0.98	34	3.87	1.07	20
Personal Safety	3.73	1.15	34	3.93	1.22	17
Disease Prevention	3.09	1.34	36	2.82	1.35	34
Note: On a Likert Scale 5 = a great deal to 1 = not at all						

The top five life skills most influenced by participation in 4-H were public speaking, community service volunteering, self-discipline, self-responsibility, and teamwork. The five life skills least influenced by 4-H participation were identified by the respondents as stress management, healthy lifestyle choices, conflict resolution, personal safety, and disease prevention. The top five life skills most influenced by participation in OYDO included character, self-discipline, accepting differences, cooperation, and social skills. The five life skills least influenced by OYDO were healthy lifestyle choices, keeping records, disease prevention, public speaking, learning to learn, and decision-making.

### Comparison of 4-H and Other Youth Organizations on Individual Life Skills

Results of paired t-tests that compare the influence of 4-H with the influence of OYDO for each life skill and are displayed in Table 3.

Significant differences were seen between the influence of 4-H and the OYDO in 30 of the 36 life skills. Based on the size of the t-score, respondents attributed the *greatest* influence to 4-H (compared to OYDO) on the following life skills: keeping records ( $t=17.30, p \leq .001$ ), public speaking ( $t=17.08, p \leq .001$ ), healthy lifestyle choices ( $t=11.99, p \leq .001$ ), learning to learn ( $t=10.80, p \leq .001$ ), and leadership ( $t=10.46, p \leq .001$ ). Although the t-scores were significantly smaller, respondents more strongly attributed OYDO with influencing the life skills related to stress management ( $t=-3.46, p \leq .001$ ), character ( $t=-2.5, p \leq .05$ ), personal safety ( $t=-2.12, p \leq .01$ ), and resiliency ( $t=-0.76, p \leq .05$ ).

A paired t-test was used to compare respondents' 4-H LSI summary score with their Other Youth Organizations LIS summary score. Results of this analysis suggest significantly higher attribution of life skill development to 4-H than to OYDO ( $t = 9.925; p \leq .001$ ).

**Table 3.**

Comparison of 4-H and Other Youth Organizations on Individual Life Skills (n = 223)

<b>Life Skill</b>	<b>M</b>	<b>SD</b>	<b>t</b>
Public Speaking	1.64	1.33	17.08***
Community Service Volunteering	0.86	1.24	9.62***
Self-discipline	0.36	0.91	5.47***
Self-responsibility	0.47	0.95	6.88***
Teamwork	0.56	0.97	8.07***
Cooperation	0.41	0.88	6.36***
Marketable Skills	0.81	1.17	9.57***
Self-esteem	0.55	1.03	7.41***
Social Skills	0.40	0.95	5.92***
Responsible Citizenship	0.51	1.17	6.01***
Self-motivation	0.53	1.01	7.33***
Contributions to Group Effort	0.43	0.98	5.98***
Wise Use of Resources	0.72	1.05	9.48***
Keeping Records	1.87	1.49	17.39***
Sharing	0.46	1.10	5.73***
Leadership	0.90	1.19	10.46***
Goal Setting	0.54	1.07	6.90***
Communication	0.82	1.19	9.59***
Learning to Learn	1.07	1.37	10.80***
Problem Solving	0.38	1.01	5.24***
Service Learning	0.67	1.22	7.60***



Character	-0.20	1.10	-2.50*
Planning/Organizing	0.85	1.21	9.75***
Accepting Differences	-0.13	1.05	-1.65
Critical Thinking	0.50	1.21	5.65***
Concern for Others	0.08	1.22	0.95
Nurturing Relationships	0.03	1.08	0.41
Resiliency	-0.07	1.32	-0.76*
Decision Making	0.49	1.23	5.46***
Managing Feelings	0.03	1.16	0.37
Empathy	-0.12	1.18	-1.43
Stress Management	-0.28	1.13	-3.46***
Healthy Lifestyle Choices	1.25	1.43	11.99***
Conflict Resolution	-0.15	1.15	-1.77
Personal Safety	-0.21	1.37	-2.12**
Disease Prevention	0.22	1.35	2.22*
* p ≤ 0.05 ** p ≤ 0.01 *** p ≤ 0.001			

## Discussion and Implications

The purpose of the study reported here was to assess the long-term effects of 4-H participation on the development of life-skill competencies among 4-H alumni. These findings reinforce previous research that has established a link between participation in 4-H programs and the development of life skills (Ladewig & Thomas, 1987; McKinley, 1999a, 1999b; Mustian, 1988). The study also asked respondents to compare the influence of 4-H and OYDO on the development of life skills.

Triangulation of the data from the perspectives of: 1) ranking within 4-H and within OYDO, 2) between group comparisons of each of the 36 life skills, and 3) a between-group comparison of the sum score for the LSI strengthens and deepens our understanding of the data.

Youth development organizations share a mission of helping youth develop into society-ready adults. Professionals and parents will be pleased to learn that the respondents in this sample ranked self-responsibility and self-discipline as life skills strongly influenced both by 4-H and OYDO. Teamwork and cooperation were among the highest ranked life skills influenced by 4-H; character, accepting differences, cooperation, and social skills were among the top five life skills respondents attributed to OYDO. Given the fact that 92% of 4-H alumni participated simultaneously in multiple youth organizations (Maass, 2004), it is clear that youth develop life skills through participation in a number of youth programs.

While the missions are similar, the approaches taken are often different. Four-H programming uses

activities and events as formats for the development of life skills. Respondents identified public speaking as the life skill most highly influenced by 4-H participation. Community service volunteering was also highly ranked (2nd) as influenced by 4-H; 45% of the respondents reported that they presently volunteer with 4-H; more than half volunteer with church; and others report volunteering in a variety of community service activities.

Because all 36 life skills have been identified as important (Hendricks, 1998; Seevers & Dormody, 1995), it is critical to know which life skills respondents ranked as being least influenced by 4-H. Each of the bottom five, stress management, healthy lifestyle choices, conflict resolution, personal safety, and disease prevention have a wellness component that seemed to be missing in the programs participated in by the respondents. This ranking could be a result of the historical period in which the respondents were 4-H members or could be a sign that wellness, although very highly emphasized in today's society, needs additional programming by 4-H leaders, volunteers, and state specialists.

These results suggest that alumni of the Oklahoma 4-H program attributed the development of 26 of 36 identified life skills to 4-H and 4 of 36 to OYDO to which they belonged. It is also important to note that there was no significant difference between 4-H and OYDO in the attribution of several emotional and interpersonal life skills such as conflict resolution, empathy, managing feelings, nurturing relationships, concern for others, and accepting differences. The statistical lack of difference can be interpreted in two different ways: both 4-H and OYDO are doing well in this area or neither type of organization is addressing the emotional and interpersonal life skills identified in the research as critical to youth development. These findings suggest that 4-H promotional materials should emphasize the value of 4-H programming and the development of key life skills of adolescents.

Overall, respondents attributed their total life skill development, measured using the LSI to the Oklahoma 4-H program rather than to the OYDO in which they participated. These findings support the work of Boyd, Herring, and Briers (1992), who found that teen 4-H members had significantly higher perceptions of their development of leadership life skills when compared to non 4-H members. Miller and Bowen (1993) also found that the participation in 4-H or other clubs had a solid influence in regard to the development of competency, coping, and contributory life skills.

Limitations to this research include generalizability beyond the 4-H Oklahoma program, particularly to more non-traditional or urban 4-H programs. The use of retrospective data puts a period of time between respondents' 4-H experience and current lives yet provides the benefit of time and maturity not allowed when interviewing current 4-H'ers. Memories may become blurred over time, and in this sample of high achieving 4-H'ers, there may also be a halo effect for 4-H.

## Recommendations

Additional research comparing 4-H and OYDO is important to 4-H programming. Two earlier studies (Ladewig & Thomas, 1987; Morris, 1997) evaluating 4-H programming, but not directly comparing 4-H and OYDO, have suggested that OYDO may be more effective than 4-H in the development of leadership life skills.

The following recommendations for 4-H programming are offered.

1. Program for the full range of life skills as shown in Table 3.
2. Recognize that OYDO have different strengths in the development of life skills. Therefore, 4-H and OYDO enhance one another. Acknowledge that youth today are more involved than they were in the past; collaboration among youth organizations is vital.
3. Add public speaking to the Targeting Life Skills Model.
4. Develop 4-H promotional materials that emphasize the development of life skills.
5. Inform state and federal policy makers about the high correlation between long-term 4-H participation and entering into higher education.

This research compared the influence of 4-H and other youth organizations on the development of 36 life skills. Results suggested that while respondents credited 4-H with influencing the development of most of the identified life skills, they credited other youth organizations with influencing development in different life skills. 4-H programming can be enhanced by developing collaborations with other youth organizations.

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