



August 2011
Volume 49 Number 4
Article Number 4RIB2

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Relationships Between 4-H Volunteer Leader Competencies and Skills Youth Learn in 4-H Programs

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Abstract: This article examined the relationships between 4-H volunteer leader competencies and skills youth learn in 4-H. Using a descriptive-correlational research, the study reported found significant relationships between leadership competencies and skills youth learn in 4-H. Regression analysis revealed that two variables—skills and belonging—explained 28.1% of the variance in youth life skills, suggesting that when volunteer leaders make kids feel welcome and important to the 4-H program and demonstrate importance of life skills, then youth learn life skills relative to communications, decision making, goal setting, and relationship building.

Introduction

Volunteer leaders play a major role in 4-H programs and are the heart and soul of 4-H programs. They perform a variety of roles, functions, and tasks to coordinate the 4-H program at the county level and come from all walks of life, bringing varied and rich experience to the 4-H program.

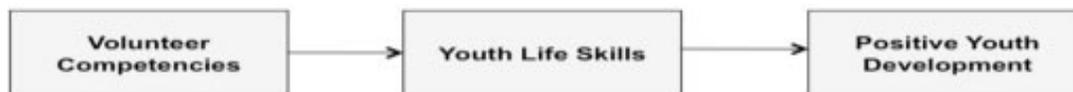
A number of studies have been reported in literature relative to volunteer competencies: volunteer competencies and management (Culp, McKee & Nestor, 2007); volunteer leadership competencies and their relations to skills youth learn in 4-H (Singletary, Smith, & Evans, 2006); volunteer administration (Boyd, 2004); volunteer leader skills and training (Seevers, Baca, & Van Leeuwen, 2005); and effectiveness of program delivery by volunteer leaders for positive youth development (Arnold, Dolenc, & Rennekamp, 2009). Consensus from these studies suggests that volunteer leaders play an essential role in the delivery of 4-H programs and that they need training in certain competency areas.

Theoretical underpinnings for the study reported here came from studies of Blyth (2000), Eccles and Appleton-Gootman (2002), Singletary, Smith, and Evans (2006), and Boleman, Cummings, and Briers (2004). Blyth identified six outcomes (6 Cs) of successful youth development programs, which include:

Confidence, Competence, Caring, Connection, Contributing, and Character. 4-H volunteer leaders provide opportunities for youth and teach skills relative to these 6 Cs to promote positive youth development (Singletary, Smith, & Evans, 2006; Walker, 2003; & Yohalem, 2003).

Critical precursors for positive youth development (PYD) were developed by Eccles & Appleton-Gootman (2002). These included: 1) support for efficacy and mattering, 2) physical and psychological safety, 3) opportunities for skill building, 4) appropriate structure, 5) positive social norms, 6) opportunities to belong, and 7) supportive relationships. Singletary, Smith, and Evans (2006) in their study in Nevada found that 4-H volunteers provide opportunities and teach skills relative to these 6 Cs to promote positive youth development. Two of the seven precursors (physical and psychological safety and efficacy and mattering) of PYD explained 17% of the variance in skills that youth learn in 4-H. Based on the synthesis of literature relative to volunteer competencies, a model for PYD could be developed as follows (Figure 1).

Figure 1.
A Model for Positive Youth Development



Purpose and Objectives

The overall purpose of the study reported here was to assess volunteer leader competencies and their relationships with life skills youth learn in 4-H. The following objectives guided the study:

1. Describe the demographic profile of volunteer leaders,
2. Determine volunteer leader perceptions of life skills youth learn in 4-H,
3. Determine volunteer leaders perceptions of competencies they possess to promote youth life skills development, and
4. Determine contribution of perceived volunteer leader competencies on the perceived life skills youth learn in 4-H.

Methods and Procedures

Population and Sample

The study used a descriptive-correlation design. The population for the study consisted of all 4-H volunteers (N=8,500) in the state of Pennsylvania. A random sample of 378 volunteer leaders was selected using the procedures suggested by Krejcie and Morgan (1970). This sample size of 378 reflected a 5% sampling error.

Instrumentation, Data Collection, and Analysis

A three-section instrument suitable for a mail survey was developed to collect data. This instrument was developed based on a study by Singletary, Smith, and Evans (2006). Section one contained 15 statements relative to youth life skills measured on a five-point Likert scale that ranged from 1=Very little to 5=Very much. Section two of the instrument contained 21 statements relative to volunteer leader competencies, measured on five-point scale ranging from 1= I need a lot of improvement at this to 5 = I am very good at this. These 21 statements were further grouped into subscales (safety, relationship, belonging, norm, skill, mattering, and structure) to reflect the seven precursors of PYD (Eccles & Appleton-Gootman, 2002; Singletary, Smith, & Evans, 2006). The final section of the instrument elicited demographic information such as gender, residence, education, age, and other program characteristics.

The instrument was validated for content and face validity by a panel of experts consisting of 4-H faculty and staff, program leaders, Extension educators, and a graduate student. The study was approved by the Institutional Review Board of Penn State University. A post-hoc reliability analysis was conducted to estimate the reliability of the instrument. Cronbach's alpha for sections one and two of the instrument were found to be acceptable and in similar range to those reported by Singletary, Smith, and Evans (2006). Reliability coefficients (alpha) for the seven precursors of PYD ranged from a low of .69 (structure) to a high of .88 (skill). Similarly, the reliability coefficient for the youth life skill section (15 items) of the instrument was very good (Cronbach's alpha=.93).

Dillman's total design method was used to collect data for the study (Dillman, 2000). An initial pre-notification card was sent to all 378 volunteer leaders, followed by an instrument, and another copy of the instrument to those who did not respond to the initial mailing. Another post card follow-up was also conducted to enhance response. After two follow-ups and a post card, a total of 162 volunteer leaders responded for a return rate of 43%. Complete and usable data were provided by 148 volunteer leaders, for a response rate of 39%.

Non-response bias was addressed by comparing early, late, and non-respondents as per procedures suggested by Miller and Smith (1983). No significant differences were found among the three groups on the items in sections one and two of the instrument. Therefore, it was determined that the findings are generalizable to the population of volunteer leaders.

Data were analyzed using descriptive statistics. Step-wise regression was used to identify perceived volunteer leader competencies on the perceived life skills youth learn in 4-H. SPSS, version 17 was used to analyze data.

Findings

Objective Oneâ— Demographic Profile

Seventy-seven percent of the volunteer leaders were female. Fifty-two percent had a bachelor's degree, 9% had graduate degrees, while 39% reported high school as their highest education level. Over 53% of the leaders were in the age group of 41-55 years, 26% under 40 years, and 21% over 55 years. Fifty-seven percent were 4-H members when they were young. Two-thirds of the volunteers reported 10 years or more of volunteer experience. Sixty-seven percent were project leaders, followed by organizational leaders (33%) and activity leaders (28%). Approximately 84% of the leaders resided in rural areas, including farms and ranches, while the remaining 16% lived in towns, cities, and suburbs.

Objective Two— Life Skills Learned by Youth in 4-H

Volunteer leaders were asked to indicate, on a five-point scale (1 = very little to 5 = very much), the life skills learned by youth as a result of participating in 4-H. Results are shown in Table 1. Volunteer leaders perceived that youth participating in 4-H programs learned "much" to "very much" skills relative to acquiring greater self-esteem (M=4.29), learning about 4-H projects (M=4.20), achieving greater self-confidence around others (M=4.19, learning self-responsibility (M=4.13), communication skills, and relationship-building skills (M=4.12 each). The statement "skills useful in dealing with conflicts" was perceived as "neutral" (M=3.30) by volunteer leaders. Overall, volunteer leaders perceived that youth learned "much" to "very much" life skills (Table 1).

Table 1.
Volunteer Leaders' Perceptions of Life Skills Learned in 4-H by Youth

Statement	Mean*	SD
<i>As a result of participating in 4-H, youth are learning:</i>		
skills useful in dealing with conflicts	3.30	0.95
communication skills	4.12	0.80
relationship-building skills	4.12	0.75
to acquire greater self-esteem	4.29	0.67
organizational skills	3.95	0.73
decision-making ability	3.97	0.76
to achieve greater self-confidence around others	4.19	0.68
public-speaking skills	3.96	0.81
skills to lead peers	3.93	0.81
about future career choices	3.63	0.93
self-responsibility	4.13	0.67
to trust others and be trustworthy	3.95	0.69
about the project(s) in which s/he participates	4.20	0.64
to set and reach goals	4.06	0.70
to value service to the community	3.99	0.82
*Mean computed on a scale: 1=Very little to 5=Very much		

Objective Three— Self-perceived Volunteer Leader Competencies

Table 2 depicts the self-perceived 4-H volunteer leader competencies. The 21 leader competencies were grouped into seven subscales to reflect the critical precursors of PYD. Volunteer leaders perceived

themselves as "good to very good" in teaching competencies relative to "supportive relationships" (mean scores ranged from 3.69 to 4.47), followed by "opportunities to belong" (mean scores ranged from 4.09 to 4.41), "providing appropriate structure" (mean scores ranged from 3.96 to 4.11), and "opportunities for skill development" (mean scores ranged from 3.59 to 4.02). The item, "making sure that the facility where we have 4-H is safe" received the highest mean score of 4.56 (Table 2).

Table 2.
Self-Perceived Volunteer Leader Competencies

Statement	Mean*	SD
<i>How good do you think you are at:</i>		
<i>Safety(4)</i>		
keeping youth from hurting each others' feelings	3.82	0.79
keeping youth from bullying each other	4.00	0.78
managing conflict between youth	3.71	0.80
making sure that the facility where we have 4-H is safe	4.56	1.36
<i>Relationship(4)</i>		
listening to youth	4.47	1.24
making sure I'm easy to approach if a youth has a problem	4.40	1.39
understanding a "youth" point of view	4.00	0.82
relating well to youth from different cultures/backgrounds	3.69	0.91
<i>Belonging(2)</i>		
helping youth to feel like they belong to a part of a special group	4.09	0.76
helping youth to feel they are an important part of the 4-H program	4.11	0.71
<i>Norm(2)</i>		
letting youth know I have high expectations of them	4.29	1.42
ensuring that youth act appropriately in the 4-H program	4.41	1.37
<i>Skill (5)</i>		
demonstrating activities that are designed to help other youth learn life skills such as healthy life-styles	4.02	0.53
demonstrating activities that are designed to help other youth learn life skills such as goal setting	3.59	0.79
demonstrating activities that are designed to help other youth learn life skills such as decision making	3.64	0.79
demonstrating activities designed to help other youth learn social skills such as relationship building	3.63	0.81

demonstrating activities that are designed to help other youth learn social skills such as communication	3.63	0.81
<i>Matting (1)</i>		
encouraging youth to take on leadership roles	3.80	0.82
<i>Structure (3)</i>		
making sure youth are occupied during 4-H meetings & activities	3.96	0.89
providing youth with age-appropriate learning activities	4.14	1.33
conducting activities that are challenging to youth	4.00	1.45
*Mean computed on a scale: 1=I need a lot of improvement to 5=I am very good at this		

Objective Four— Contribution of Volunteer Leader Competencies on Life Skills Youth Learn in 4-H

A stepwise regression analysis was conducted to determine the contribution of perceived volunteer leader competencies on the life skills youth learn in 4-H program. The dependent variable (15-item youth life skills) was regressed on the independent variables (21-item volunteer leader competencies grouped into seven subscales). Significant positive relationships existed between all seven volunteer leader competencies and life skills youth learn in 4-H. Relationships were highest for: skill ($r=.501$), belonging ($r=.456$), and matting ($r=.426$), followed by structure ($r=.373$), relationship ($r=.283$), safety ($r=.264$), and norm ($r=.210$). Although significant, positive correlations existed between the seven variables, none of the intercorrelations were high ($>.70$), and, as such, multicollinearity was not a problem. The first variable to enter the regression equation was skills ($B=.355$, $t(148) = 4.116$, $p <.001$), followed by belonging ($B=.248$, $t(148) = 2.875$, $p <.005$). These two variables explained 28.1% of the total variance (adjusted $R=.281$) in youth life skills.

Conclusions and Recommendations

Overall, Pennsylvania 4-H volunteer leaders perceive that 4-H participants learn valuable life skills. These include: achieving greater self-confidence and self-responsibility, learning skills through 4-H projects, and learning relationship building. These findings mirror the findings achieved by the Singletary, Smith, and Evans (2006) study of volunteer leaders in Nevada. Further, a recent report from the University of California (Heck, Dogan, Barnett, Borba, & Conklin-Ginop, 2009) found that youth in 4-H had significantly higher values on PYD measures than other young people.

4-H volunteer leaders also perceived that they are "ok to good" in teaching the following life skills to youth:

- Making sure 4-H facilities are safe
- Approachable when a kid has a problem
- Act appropriately in the 4-H program

- Listening to youth

This suggests that 4-H volunteer leaders in Pennsylvania are competent in teaching life skills to youth. However, a need exists for providing up-to-date training and/or information resources in areas of goal setting, relationship building, communication, and decision making to volunteer leaders.

Significant relationships existed between seven volunteer leader competencies and life skills youth learn in 4-H. Relationships were highest for: skills, belonging, mattering, and structure. Regression analysis revealed that two skills— skills and belonging— explained 28.1% of the variance in youth life skills. This suggests that when volunteer leaders make kids feel welcome and important to the 4-H program and demonstrate importance of life skills, then youth learn life skills relative to communications, decision making, goal setting, and relationship building.

Based on the findings of the study, the following recommendations are offered for 4-H programming in Pennsylvania, for Extension administration and for further research.

For 4-H Programming

Findings of the study reported here should be shared with volunteer leaders to make informed decisions about their role and need of training and/or resources to teach youth life skills. As indicated earlier, opportunities for training should be provided in areas that predict youth life skills— relationship building, goal setting, communication, decision making, and belonging. Further, training and/or information should be offered/provided to volunteer leaders on topics such as dealing with conflicts, future career choices, etc.

For Extension Administration

Training needs for volunteer leaders based on findings from the study should be identified. A comprehensive training program should be developed for volunteer leaders that incorporates the six outcomes of PYD (6 Cs). In addition, resources should be committed to recruit, train, and reward volunteers.

For Further Research

The study reported here should be replicated using Extension educators, parents, and youth to identify convergence/divergence in their perceptions of youth life skills. Such a study would help identify critical areas of need for training volunteer leaders, Extension educators, and parents. In addition, such a study would also help in developing common training programs for all three groups, thereby saving time, money, and resources.

Periodic review of 4-H projects should be undertaken to determine specific training needs of volunteer leaders. A matrix of 4-H projects should be developed to identify specific competencies that youth have to learn in these projects. Such a matrix will help identify gaps to provide training for volunteer leaders, parents, and Extension educators.

A review and synthesis of research relative to volunteer leader competencies should be undertaken. Such a review using a meta analysis methodology will assist in developing a common competency set for 4-H volunteer leaders to teach life skills to youth.

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